

Comparative Study on Teenager Winter Sports Education Between China and Finland

Enlightenment to Chinese Teenager Winter
Sports Education

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ABSTRACT

In 2015, Beijing was chosen to host the 2022 Winter Olympics Games. However, the level of Chinese winter sports is relatively lower. Vigorously advancing the development of winter sports has become China's top priority. Teenagers as the main force should be more emphasized in winter sports education. This thesis will analyse the differences and similarities of teenager winter sports education between China and Finland from different angles, and the background and current situation of winter sports education in China and Finland by literature survey such as "China Winter Sports Development Plan". Winter sports management system, faculty, teaching method, and sports' facility in both countries were compared in the thesis by qualitative and quantitative research methods. Interview survey of Finnish Ski Association Head Coach gave deeper support for the study.

This study results show that China should improve the importance of winter sports. Increase funding to improve teaching conditions and enrich teaching methods. The high degree correlation of both countries and complementarity has contributed to the rapid increase of China and Finland exchanges and cooperation in winter sports.

Key Words: China, Finland, Winter Sports Education, Teaching Method,
Management System, Development.

CONTENTS

1	INTRODUCTION	1
1.1	Research Background	1
1.2	Thesis Objectives, Research Questions and Limitations	2
1.3	Theoretical Framework	3
1.4	Research Methodology and Data Collection	4
1.5	Thesis Structure	6
2	ANALYSIS OF WINTER SPORTS' MACRO ENVIRONMENT	7
2.1	Beijing 2022 Winter Olympic Games	7
2.2	Plan: 300 Million Chinese Going on Ice	8
2.3	National Policy Support	9
3	CURRENT SITUATION OF WINTER SPORTS EDUCATION IN CHINA AND FINLAND	10
3.1	Situation of Chinese Winter Sports Education	10
3.2	Situation of Finnish Teenager Winter Sports Education	14
4	MULTI-ANGLE COMPARISON STUDY OF TEENAGE WINTER SPORTS EDUCATION BETWEEN CHINA AND FINLAND	18
4.1	Comparison of Winter Sports Management System	18
4.1.1	Management System in China	18
4.1.2	Management System in Finland	20
4.1.3	Similarities and Differences	21
4.2	Faculty of Winter Sports Education	22
4.2.1	Winter Sports Faculty in China	23
4.2.2	Winter Sports Faculty in Finland	25
4.2.3	Similarities and Differences	27
4.3	Comparison on Winter Sports Teaching Method	29
4.3.1	Chinese Teaching Method	29
4.3.2	Finnish Teaching Method	31
4.3.3	Similarities and Differences	32
4.4	Facility of Winter Sports Education	34
4.4.1	Winter Sports Facility in China	34
4.4.2	Winter Sports Facility in Finland	35
4.4.3	Similarities and Differences	37
4.5	Interview	38

5	DISCUSSION	41
5.1	Answering Research Questions	41
5.2	Suggestions for Futher Research	45
6	CONCLUSION	47
	REFERENCES	
	APPENDICES	

1 INTRODUCTION

Winter sports refer to the sports that takes place in a special environment that includes ice and snow (the temperature is generally below 0°C).

Winter sports can be generally divided into ice sports and snow sports. Ice sports refer to the use of special equipment on natural or artificial ice fields which include speed skating, figure skating, ice dancing, and ice hockey.

Snow sports involve gliding on the snow with snowboards and poles such as cross-country skiing, alpine skiing, ski jumping, freestyle skiing, biathlon and nordic combined.

Winter sports are modern sports which fully challenge and interesting.

Winter sports are an integral part of physical education - there is an irreplaceable effect for other sports in improving the physical and mental health of teenagers (Zhu 2015). Teenagers engaged in winter sports can receive enhanced cold resistance, develop excellent psychological ability, promote healthy, and strengthen the mind (He 2018).

Actively carrying out teenagers' winter sports education has a great significance to inherited winter sports culture, enriching winter sports curriculum content and promoting physical and mental health of teenagers (Worth 2018).

1.1 Research Background

Beijing was selected to host the 24th Winter Olympic Games in 2022 on July 31, 2015 (BBC Sports 2015). This successful bid garnered made a great deal of attention. From Chinese people, more of whom began to participate in winter sports (Sun 2018). The opportunity to participate in the Olympic Games is stimulating teenagers' enthusiasm for winter sports and will promote the rapid development of Chinese teenagers' winter sport education.

The Chinese winter sports started later than other countries (Pertsch 2018). Although China is rich in resources, its distribution is uneven,

insufficiently developed, and lags other countries that have a strong sports industry. Teenager winter sports education also lags developed countries.

Finland is a world leader in winter sports area (ChinaDaily 2017). Finnish teenager winter sports education is also in an advanced position in the world. President Xi Jinping visited Finland in April 2017 and reached an agreement on enriching the form and content of cultural exchange, by enhancing the friendship between the two peoples and strengthening cooperation in the fields of sports, culture, education, tourism, society, and cooperation of pandas as well (Wang 2018). The Beijing 2022 Olympic Winter Games is an opportunity to start cooperation in winter projects and Winter Olympic Games preparations, and establish 2019 as the “China-Finland Winter Sports Year”. Teenagers are the main force of winter sports and the hope of winter sports talent reserve (Xinhua 2017).

Under this background, the author carried out a comparative study of Chinese-Finnish teenager winter sports education by seeking common ground while maintaining differences and learning from each other. China intend to improve the level of winter sports education for teenagers.

1.2 Thesis Objectives, Research Questions and Limitations

This subchapter introduces the thesis objectives and the purpose of the thesis. The research questions are presented.

The thesis aims to find out respective strengths and weaknesses of teenager winter sports education through the comparative study between China and Finland, analyze the reasons for the successful development of Finnish teenager winter sports education, and drawing from that case study, promote the development of Chinese teenager winter sports education.

Before starting other parts of the research project, it is essential to define clear research questions.

In the thesis, the main research question is:

- **What can Finnish winter sports development and experience bring to the development of Chinese teenager winter sports education?**

In addition, there is a sub-question to facilitate the process of searching answers to main questions.

- **Which aspects of teenagers' winter sports education differ most between China and Finland?**

A study has inherent limitations to the research (Saunders, Lewis & Thornhill 2009, 59). The data collection is limited to what information company's representatives provide and what was found from the seminar, workshop, and cooperation of the author's working company. This study mainly focuses only on winter sports education in China and Finland, and especially in the area of education management system, teaching method. Study does not focus on how to completely and fundamentally changing the situation of China's winter sports' development. Because the current situation in China is formed by history, culture, customs and political factors. Chinese traditional culture has a long history and a large population-based. It is impossible to change fundamentally.

1.3 Theoretical Framework

Winter sports have been warming up since Beijing bid for the 2022 Winter Olympics. China promises to the world "300 million on ice". However, the foundation of China's winter sports is weak, and there are obvious shortcomings in popularity and participation. In 2016, the General Administration of Sport of China revealed three concurrent plans for winter sports continuously.

- Sports Development Plan (2016-2025)

- National Winter Sports Facilities Construction Plan (2016-2022)
- Mass Winter Sports Promotion Plan (2016-2025)

To honor the promise, form a huge market for the winter sports industry and improve the industrial chain, it is necessary to lay a good foundation for the masses, such as bringing winter sports into campuses and making sure every student take a winter sports course. However, it doesn't mean that every school must build ice rinks or snow fields. This is unrealistic. Instead, school sports culture and education are incorporated into Olympic sports education. In this process, lack of teachers, incorrect education methods and incomplete facilities will all hinder the development of winter sports (Yang 2016).

China and Finland agreed to cooperate more in winter sports as they prepare for the Winter Olympics (China.o.c 2017). The purpose of this thesis is to find out the similarities and differences of winter sports education between China and Finland. Learning strong points from Finland and drawing lessons from the development of Finnish winter sports. This study will help and accelerate China achieves the “300 million people on ice” plan which is put forward by Chinese President Xi

1.4 Research Methodology and Data Collection

There are several different ways to conduct research. The first step is to decide which research approach to use. There are two different approach options: deductive reasoning and inductive reasoning. With deductive reasoning, a researcher tests a theory by collecting and examining empirical evidence to see if it is true. With inductive reasoning, a researcher first gathers and analyzes data, then constructs a theory to explain her findings (Crossman.A 2010). In this thesis, the author has decided to use deductive reasoning. Figure 1 shows the research methodology.

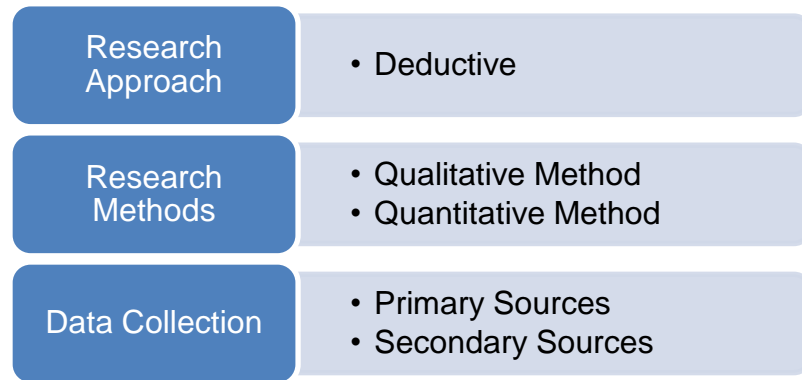


Figure 1. Research Methodology Outline

After this, the author aims to study the differences in teenager winter sports education between China and Finland. The research of the thesis adopts a combination of qualitative and quantitative methods from the perspective of personal gains (including visits, interview, seminars, and questionnaires). This thesis is an empirical study based on the support of multidisciplinary theories.

Qualitative research is a kind of social science research that collects and works with non-numerical data, and then seek to interpret meaning from these data that helps understand social life through the study of targeted populations or places (Crossman 2018). Quantitative research is used to quantify the problem by way of generating numerical data or data that can be transformed into usable statistics. It is used to quantify attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population (DeFranzo 2011). Qualitative research data will be implemented in the study and the information will be gathered from primary and secondary sources. Obtained through interviews and research, the Lahti Winter Know How project leader, the Lahti Ski Association coach, and related scholars allowed the author to explore objects and methods of analysis and provided valuable experience to determine research methods and theoretical innovation. Information and data from the international and domestic disciplines played an essential role in the study of the subject. Conducted interviews will be presented and analyzed in the research.

1.5 Thesis Structure

This thesis is divided into two parts: theoretical and empirical.

In addition to this chapter, the thesis includes five chapters. Chapter two analyses the macro environment of winter sports education development in China and clarifies national policy support. Chapter three illustrates the current situation of Chinese and Finnish teenager winter sports education. Chapter 4 studies the comparison of teenage winter sports education between China and Finland in multiple aspects. Chapter 5 discusses the differences and similarities of both countries' winter sports education and gives important answers to the main question. Chapter 6 gives the conclusion of the thesis. The structure of the thesis can be seen in Figure 2 as follows:

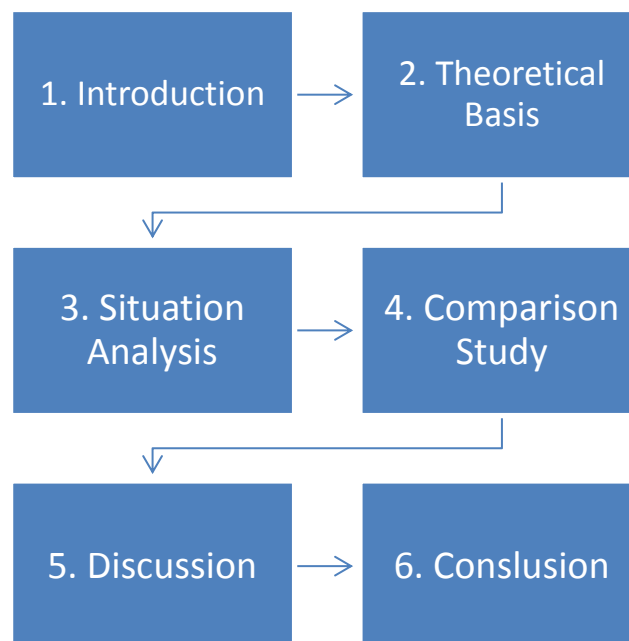


Figure 2. Thesis Structure

2 ANALYSIS OF WINTER SPORTS' MACRO ENVIRONMENT

In this chapter, the author will elaborate the current environment and policy support of teenager winter sports' sustainable development. At the same time, the author analyzes the measures which China has already taken to develop winter sports.

2.1 Beijing 2022 Winter Olympic Games

Beijing 2022 Winter Olympic Games is an international winter multi-sport event that is scheduled to take place from 4 to 20 February 2022, in Beijing and towns in the neighboring Hebei province, People's Republic of China. Having hosted the 2008 Olympics, the Chinese capital will be the first city to host both summer and winter games (BBC, 2015).

That 300 million Chinese will be inspired to take part in winter sports will be the greatest legacy of the Winter Olympics. "Beijing's success in winning the bid for hosting the 2022 Winter Olympics will motivate 300 million Chinese to participate in winter sports, which will bring unprecedented opportunities for the Olympic movement and the sustainable development of winter sports in China," said Liu Peng, president of the Chinese Olympic Committee (Zhang 2017)

During the winter season of 2014 to 2015, due to the rising enthusiasm associated with China's bid for the 2022 Winter Olympics, ski resorts in Zhangjiakou witnessed 80% growth in the number of visitors compared to that of the previous year. China's second alliance with the Olympic Games will serve to increase the availability of fitness activities for the nation (Zhang 2017)

When talking about winter sports, Yao Ming, a former NBA superstar, compared it to a bonfire, "Everything is in place and all we need is a spark to light the fire. Basketball went through the same process a long time ago and the time has come for winter sports." Chinese people have never lacked enthusiasm for ice and snow and have always been interested in

winter sports. The successful bid to host the 2022 Winter Olympic Games has ignited the people's interest and this glamorous sporting event has become the most popular topic in China today (Zhang 2017).

2.2 Plan: 300 Million Chinese Going on Ice

The plan 300 Million Chinese Going on Ice was put forward by the Chinese President Xi Jinping. On February 17, 2014, just before the opening of the Sochi Winter Olympic Games, President Xi who was working hard for Beijing to bid for the 2022 Winter Olympic Games, met with IOC President Bach. During the talks, President Xi said that the 2022 Winter Olympic Games will further stimulate the Chinese people's enthusiasm for the Olympic movement. The Winter Olympics will lead China's "300 Million Chinese Going on Ice" (CCTV 2018)

In fact, China has devoted great energy to the winter sports movement for many years. Several winter sports projects have persisted for many years and have achieved some results. Teenagers are increasingly interested in winter sports.

As of now, the population of winter sports participants in the world is less than 300 million. As China contributes to this figure, the population will be doubled (Sun, 2017) Teenagers are the future. If China wants to achieve the grand goal of "300 million Chinese on the Ice", then teenager winter sports training is an important basis, said the Shenyang Ski Winter Camp Leader. A challenge to this plan is the lack of participants in China's winter sports, which is still far from other developed countries.

Promoting "300 Million People on Ice" is a goal that China has clearly put forward. Its significance is to convey such a message to the world. China's bid to host the Winter Olympics is not only to compete for gold but more importantly, it is hoped that more normal citizens will benefit from practicing in winter sports programs, especially among young people. Through winter sports, the mind and body can be more fully developed.

2.3 National Policy Support

Finnish teenager winter sports education is supported by national laws and stable policies so that its development is relatively stable (Finnish National Agency for Education 2018). However, the development of Chinese teenager winter sports education is obviously constrained by political, economic and social conditions, and it presents a non-linear development trend. If the country publishes a corresponding teenager winter sports education policy, teenager winter sports education will develop very quickly; otherwise, it will develop slowly or even pause.

To increase the number of people participating in the winter sports, from the 1990s onwards, the State Sports General Administration launched the “Millions of Young People on the Ice and Snow Movement”, promoting the “Ice and Snow Sports Corridor Plan” and “Sunshine in Ice and Snow”. The main objective was to promote winter sports activities to young people over a wider area and enable many children to experience the fun of winter sports. With the opportunity of the Beijing 2022 Winter Olympics, China revealed three concurrent plans for the development of winter sports: Sports Development Plan (2016-2025), National Winter Sports Facilities Construction Plan (2016-2022) and Mass Winter Sports Promotion Plan (2016-2025) (Basic Education Curriculum Textbooks Expert Work Committee 2011, 5). Regardless of which part of the population China wants to promote, it is necessary to be supported by national policies, sports department, and joint actions of multiple departments and industries.

3 CURRENT SITUATION OF WINTER SPORTS EDUCATION IN CHINA AND FINLAND

3.1 Situation of Chinese Winter Sports Education

Teenager sport is an important support for a country on the pathway to building a world sports power. A world sports power needs to develop a nationwide fitness campaign, and there is no doubt that teenager sport is the importance since the founding of the People's Republic of China, modern winter sports began under the guidance of the principle of "developing sports and enhancing people's physique" (Cao 2008). Winter sports have begun to take place in northeastern, north, and northwestern regions where conditions are appropriate (Chen 2017). Winter sports events and mass activities have been held in various regions. After more than half a century of development, Chinese winter sports has gone through three stages: start, growth, and development. At present, it has entered a stage of rapid development.

Start stage was from 1952 to 1978, during this period, China successfully hosted the Winter Games and individual national championships and tournaments, which laid the foundation for winter sports in China (Yang 2016).

In the growth stage from 1979 to 2001, China participated in the World Winter Olympics for the first time, successfully hosted the Asian Winter Games and the winter session, and the enthusiasm of the masses to participate in the snow and ice movement continued to rise. In 1993, China promulgated the "Cultivation of the sports market to speed up the process of sports industrialization" (Yang 2016) These laid the foundation for the development of the industrialization of winter sports in China.

During the development stage from 2002 to 2014, the industry gradually matured; in particular, the Winter Olympics stadium continued to create good results, "Millions of young people on the ice", "Millions of people on winter sports", and other mass winter sports activities flourished.

Standouts include the Changchun- Vaasa Skiing festivals, and winter sports culture brands such as the Harbin International Ice and Snow Festival in Heilongjiang Province have become more and more influential (Yang 2016)

The rapid development stage began in 2015. From the city to rural, from the north to the south, from winter to summer, from business to individual, unprecedented propaganda, rich and varied winter activities, and unprecedented enthusiasm for mass participation has characterized the sports industry (Winter Sports Management Center 2017) In the coming period, the winter sports will be popularized and developed at an unprecedented speed, depth, and breadth, in response to the nationwide fitness campaign.

The aforementioned "Millions of young people on the ice" movement was founded in 1978. It involved unique, traditional, and iconic sports activities in Heilongjiang Province. The 20th century was the heyday of the winter sports in China. But before long, the sense of young people on the ice gradually disappeared. Due to a long period of implementation, insufficient space and funds, campus security risks became the biggest problem. People's enthusiasm for winter sports has seen a declining. The disappearance of the ice rink in schools restricted young people's enthusiasm for winter sports (Sun 2017)

In 2016, the National Development and Reform Commission, Ministry of Education and General Administration of Sports of China issued the "Winter Sports Development Plan (2015-2025)" and "National Winter Sports Facilities Construction Plan (2016-2022)". These two documents provide powerful guarantees for the healthy development of the winter sports industry in many aspects such as policy support, education promotion, infrastructure construction, mechanism and system reform (Yang 2016) In the popularization of teenager winter sports, primary and secondary schools in northern China should include winter sports equipment in their physical education curriculum. At the same time, the

government encourages primary and secondary schools in southern cities to establish cooperation with sports stadiums or clubs to set winter sports courses. The government carried out the campaign "Millions of Teenager on the Ice and Snow" and "School Winter Sports Plan" to push teenager winter sports development (Qi 2017). In the same year, the General Administration of Sports of China published the "13th Five-Year Plan for Teenager Sports" and emphasized the development of teenager sports should set up a fundamental goal to enhance teenagers' physique (Xinhua 2016). At present, the guiding ideology of Chinese teenager sports education is starting from strengthening students' physique, make the basic knowledge, techniques, and skills of sports integrate with physical exercise. In addition, push ideological and moral education throughout the whole process of physical education. In addition, the government cooperated with social institutions to carry out winter sports teaching by purchasing services.

The national primary and secondary schools which have a winter sports curriculum are expected to reach 2,000 by the year 2020 and 5,000 by the year 2025(Liu 2016). In the aspect of teacher training, the government encouraged the establishment of vocational schools or colleges for winter sports-related majors and training winter sports teachers for primary and secondary schools. By the year 2020, the goal of training 5,000 full-time or part-time winter sports teachers will be completed (Sina Sports 2016).

In general, China's current reform of physical education curriculum presents a shift from emphasizing the social value of education to paying attention to the personal value of students. The target system of physical education has developed in the direction of diversification and multi-goal, teaching materials adhere to the goal of enhancing students' physical fitness. Constantly explore the value of competition, entertainment, and fitness. Pay more attention to the potential value of students' physical education at the same time.

However, the current situation of teenager winter sports education is still not satisfactory. So far, the participation rate of winter sports is only 0.8%, and only 3% people turned into ski enthusiasts after participating in winter sports. The participation rate and conversion rate are far below the developed countries which are strong at winter sports. According to a survey of more than 80 primary and secondary schools in the Heilongjiang Province in the winter of 2016, only 11.3% schools poured standard rinks, 25% poured small rinks and 58.7% had no ice rinks at all. 42% schools have ice sports classes in winter, 38.3% schools had winter activities, 37% hold ice sports competitions, and only 33.3% adhered to amateur winter sports training (Sun, C.&Yang, Z. 2017, 25)

Winter sports such as ice hockey and curling are not popular among students; only 13.17% of them have participated before. In a survey of Beijing primary and secondary schools in 2017, the number of participants in the winter sports competition was 212, or 28.92% of the surveyed students, including that up to 71.08% of them have never participated in any winter sports competition (Sun 2017, 25)

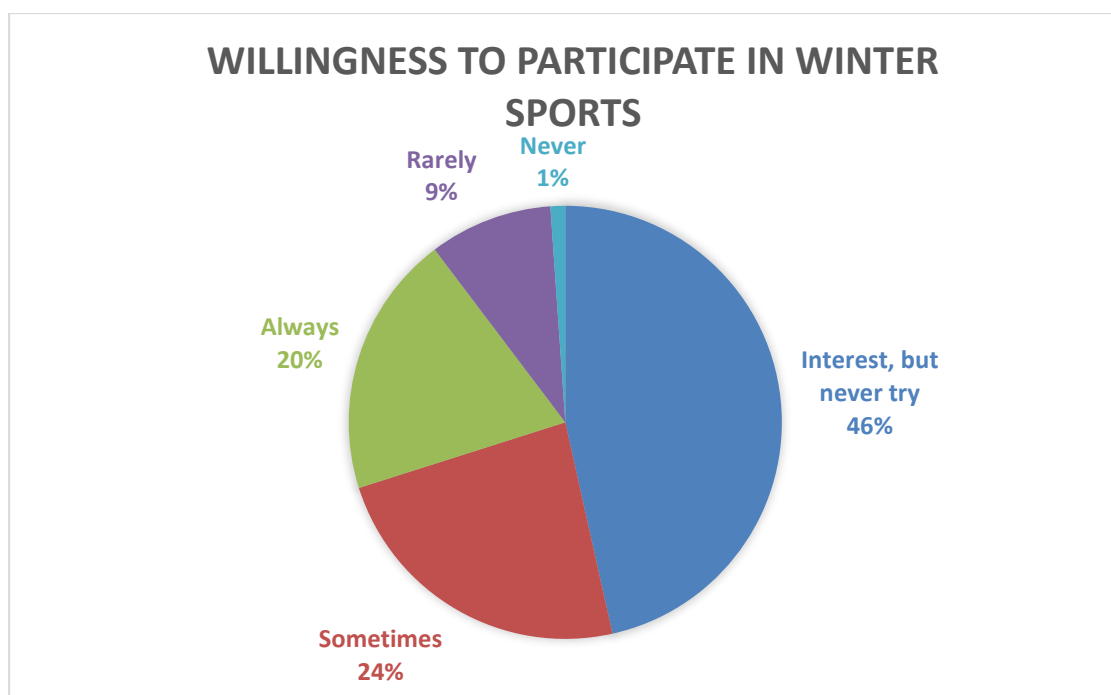


Figure 3. Willingness to Participate in Winter Sports (Penguin Intelligence 2016)

Figure 3 shows the willingness of Chinese people to participate in winter sports. It's obvious to see that 46% are in interests in winter sports but have never try. 24% of them will participate for sometimes. Only 20% Chinese always do winter sports and 9% join in winter sports rarely, 1% of them never participate in winter sports (Penguin Intelligence 2016)

3.2 Situation of Finnish Teenager Winter Sports Education

Finland, a country with thousands of lakes, is in the northern part of Europe. It has a land area of 338,000 square kilometers and a population of 5.41 million (Li 1989) The participation rate of mass sports has ranked first in Europe since 2008 (Scheerder 2011) Finland has always attached importance to sports. As early as 160 years ago, it has realized that sports have important social value for promoting healthy development (This is Finland 2011)

In 1843, it was the first time that sport has taken as a compulsory part of Finnish school curriculum, aimed to strengthen the physical fitness of young people. After the independence of Finland, military objectives were added to the school's physical education curriculum (Zeng & Wang 2017). This lasted for nearly 30 years and it was gradually disappeared after the World War II. After the World War II, Finland's transition from an agricultural society to an urbanized society further improved the status of school sports. Improving student health and preventing static lifestyles have become the purport of Finnish school sports education. Since the 1970s, Finland has started to revise school physical education curriculum on a regular basis and gradually forming a distinctive "Finland model". Until 2009, the Finnish government established an expert group to analyze the current advantages and future development of Finnish basic education. In "Basic Education 2020", the expert group put forward specific proposals for the new round of physical education curriculum reform. Attraction, autonomy, communication, and innovation have become the core of school physical curriculum reform. In 2012, the Ministry of Education and Culture of Finland promulgated a decree on basic

education reforms and developed new core courses. These courses include education goals, class assignments, national core courses, and local courses. These have been fully implemented in the fall semester in 2016 (Korpela 2017)

The point for school physical education curriculum revision is to answer what kind of abilities students should have in the future society, and the revised physical education curriculum emphasizes: From first grade to sixth grade, school physical education curriculum focused on a variety of sports skills learning; From grade 7 to grade 9, it emphasis on cultivating students' healthy sports lifestyle to make students understand how physical activity affects their physical health, social cognition, mental activity and happiness (Xie 2018).

According to a recent survey, 66% of males and 72% of females in Finland participate in physical activity at least 30 minutes per week. 92% of children and teenagers (ages 3-18) participate in sports as a hobby. In a competitive sports number of people who participate in more than two sports activities per week is 62% of the total population and 92% of teenagers participate in sports activities. 10% of Finnish people participate in various competitions, but only a minority of these people aim to participate in the world-class competition. There are more than 7,800 registered sports clubs, more than 130 non-governmental sports organizations, 500,000 sports volunteers, and 97% of sports clubs are non-profit. Altogether there are more than 1.1 million club members. (Harala 2014)

Figure 4 shows the bar of how often European do exercise or play a sport. It's easy to see, 17% of Finnish do exercise regularly and 55% with some regularity. 21% of them will be seldom to do sport and only 7% never do sport (European Commission 2010).

QF1. How often do you exercise or play sport?

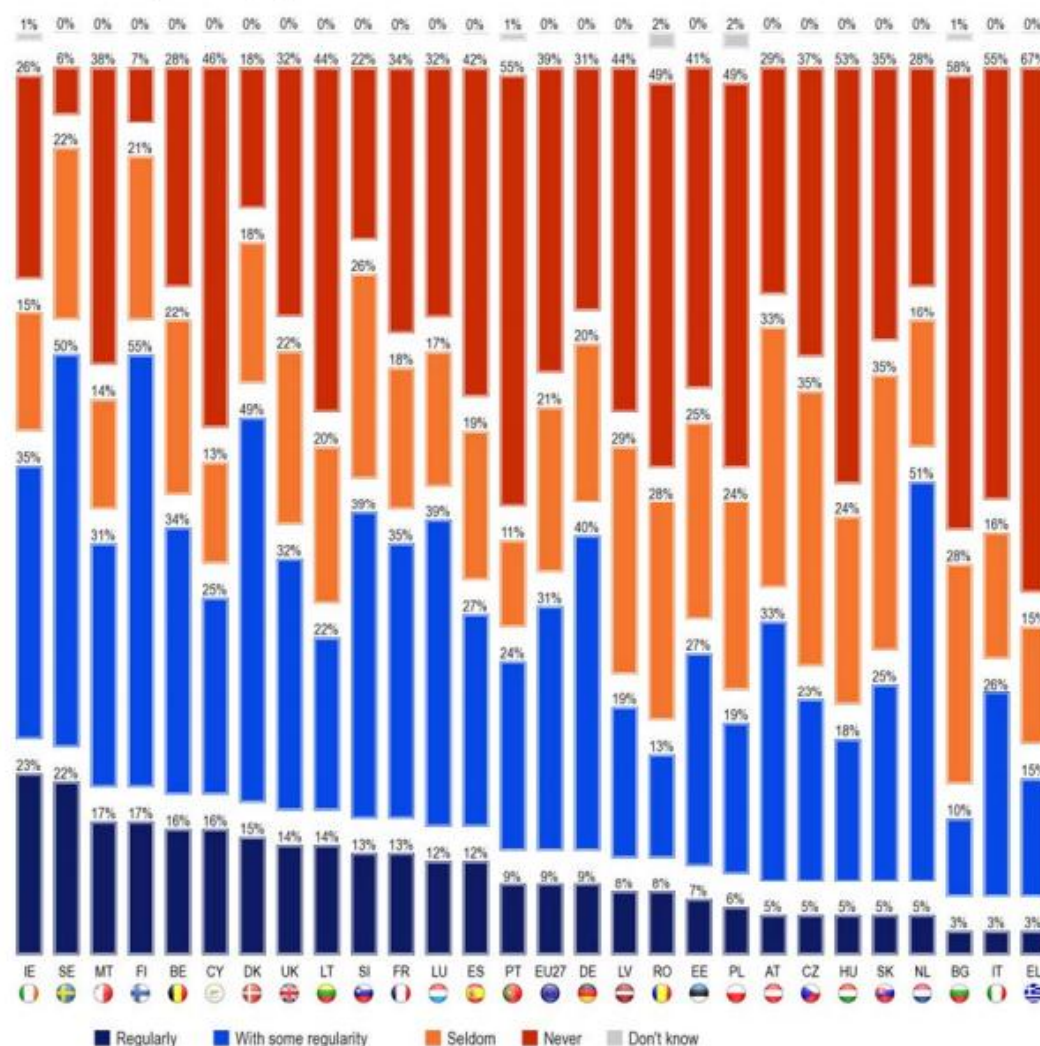


Figure 4. How often do you exercise or play sport (European Commission 2010)

The Finnish government has specifically issued targeted policies and regulations and has accumulated a great deal of experience through carrying out various projects. Policies and projects related to teenager sports include: the first law "Physical Culture and Sports (1980)", second law "Physical Culture and Sports (1999)", Finnish Government Children and Adolescent Policy Project (2007-2011), Child and Adolescent Policy Project (2012-2015), "Activity of Finnish Schools" project (2010-2014), "Exploration Sports-Clubs" project (2006) (Klinga 2018)

These efforts indicate, first, that the Finnish teenager sports policy is in development, and the Finnish government attaches importance to the development of teenager sports at the same time. Second, "multidimensional leadership" formed the backbone of the project. Third, the operation and development of Finnish teenager sports activities heavily rely on the participation of sports clubs and sports volunteers. There are more than 7,800 sports clubs in Finland. Every year, over 350,000 children and young people and 500,000 adults enjoy the services of sports clubs or individual sports associations (Ministry of Education 2014).

4 MULTI-ANGLE COMPARISON STUDY OF TEENAGE WINTER SPORTS EDUCATION BETWEEN CHINA AND FINLAND

4.1 Comparison of Winter Sports Management System

4.1.1 Management System in China

The system of administrative leadership of school sports in China is a government-led system by the dual leadership of the national education administrative department and the sports administrative department. Mainly divided into the following four main departments, General Administration of Sport, Ministry of Education, Educational administrative departments at all levels and Sports administrative department. School sports education is also guided and assisted by other social-related groups at the same time (Chen, Liu& Liu 2015, 26)

At the current stage, China has issued several related documents on school physical education, such as “Working Regulations on School Physical Education” in 1990. “Law of the People's Republic of China on Physical Culture and Sports” in 1995, “Chinese Standards for Students Constitutional Fitness” and “Basic Standard of National School Sports Sanitary Condition” (ChinaNews 2016). Teenager Sports Division which is a part of General Administration of Sport of China was established in the May of 2015. The aim is to cooperate with the education department to carry out teenager sports work based on full implementation of “National Fitness Ordinance” (Shen 2015) After the Teenager Sports Division established, China has successively formulated a plan for the development of teenager sports. Supervise the implementation and guide the construction of all levels’ sports schools and teenager sports clubs.

Chinese sports industry has gradually formed management system which combined hierarchical system and function-type system.

The hierarchical system means it is divided into several levels from top to bottom. The higher the level, the bigger jurisdiction. The content and nature of each management level are basically the same. Upper-level command lower levels. The General Administration of Sport of China is the highest leadership in sports management. Leading by formulating sports management guidelines, policies, related laws, and regulations. The sports departments of all provinces, autonomous regions, and municipalities directly under the central government belong to the second level (Shi 2015). While implementing the sports management policy formulated by General Administration of Sport of China, it's also necessary to consider the local situation, formulate corresponding sports management laws and regulations, to control local sports development. Cities and counties belong to the third level.

The function-type system means to set up several parallel functional departments horizontally and each performs one's own functions. The scope of jurisdiction of different departments at the same level is the same. General Administration of Sport of China and Ministry of Education of China together with China Sports Federation, the Chinese Olympic Committee, and China Sports Science Society should manage Chinese sports training competitions, school sports, mass sports, sports science research and so on (Shi 2015).

One specific characteristic of Chinese Sports Management is centralized management system. The government almost exercise all the powers of sports management. General Administration of Sport of China, Olympic Committee, and affiliated sports association, they are all attached to the administrative agency. All levels business units exercise sports management rights in the name of the sports association (Qian 2015). Although China has gradually strengthened social sports organizations in recent years and transfer some of the rights. It strengthened the functions of the General Administration of Sport of China and the Chinese Olympic Committee to some extent, there are still many deficiencies and big room for improvement.

Another one is whether it is mass sports or competitive sports funds, basically, they all depend on national finances. The government is responsible for all sports resources invest, management and distribution.

In general, the management system of Chinese teenager winter sports education is the combination of hierarchical system and function-type system and both are affiliated with the Chinese sports management system.

4.1.2 Management System in Finland

Finnish sports system formed gradually over a long period of history, to meet the cultural and sports needs of the country and society (Hancock 2011). For example, through the sports policy and financial issues which formulated and coordinated by the Ministry of Education of Finland to promote health education development, improve competitiveness and promote related charitable activities, in order to achieve the aim of promoting the development of social welfare and the growth of young people (Virta 2018). Finnish physical education is mainly administered by the Ministry of Education. The cultural and sports sectors which are a part of Ministry of Education are mainly composed of three departments: culture, sports, and youth policies. From the aspect of existence and development characteristics of Finnish Sports Institutional, Finnish sports system is a combination system which combined national administrative coordination and social self-coordination (Niemi-Nikkola 2018)

Sports policy, national owned sports organization and international cooperation, they are all managed by the national administrative department. The Ministry of Education is responsible for guiding the implementation of sports policies through legislation and fiscal policy. The focus is on developing teenager sports skills education, and supervision ethical behaviors in sports competition activities, especially anti-doping activities (Peltonen 2016)

Sports volunteering activities, sports activities from sports club, organization and participation of sports and fitness activities, they are managed by the " social self-coordination " system. Sports services are mainly come from sports clubs and encourage teenagers to participate in physical exercise actively (Li&Zhang 2016)

The characteristics of the Finnish sports system is taking responsibility through legal regulations. Leading, developing and coordinating sports policies through fiscal policy. Emphasize sports activities could promote physical health and get benefits. Encourage and support young people to participate in physical exercise and carry out fair international cooperation. Under the macro control of the country, the society regulates and manages the development of social sports with the help of standardized laws. Through the horizontal and parallel information flows of sports associations and clubs, the power of enterprises, institutions and civil organizations to coordinate the operation and development of sports.

4.1.3 Similarities and Differences

China and Finland share a common point in the management system of teenager winter sports education, that is they all have specific government agencies to manage sports education (SouhuEducation 2018). Such as General Administration of Sport of China, Ministry of Education and Finnish Ministry of Education. As compared, they all have the functions of formulating and regulating various teenager winter sports education programs and sports regulations. But the difference is that Finnish sports education system already became a socially-oriented management system (Pajulahti 2018). While under the impact of the nationwide system, China is changing to the socially-oriented management system gradually. Because of the centralized system of General Administration of Sport and the Ministry of Education, their role in the national sports industry and teenager winter sports education is much greater than Finnish Ministry of Education manages winter sports education (Wang&Wang 2018). They participated in more sports affairs.

In the management of social sports, Finnish social sports management is dominated by clubs or organizations, and the government helps social sports development through regulations and policies or funding. Although China has now begun to develop in this direction, it still needs to be further strengthened.

Teenager winter sports education and management in China, the hierarchical system is characterized by vertical and distinct leadership, and consistency from top to bottom. There are also disadvantages such as slow information feedback and low efficiency. Characteristic of the function-type system is the detailed division of labor and the simplicity of the business (Luo & Zhang 2009). It will help improve the professionalism of management personnel. However, it is easy to cause multiple leaders of government between the functional departments. Finland does not have these problems due to teenager winter sports education management is unified under the management of the Ministry of Education of Finland. Following Figure 5 shows the main similarity and difference.

	China	Finland
Similarity	Have specific government agencies to manage sports education.	
Differences	Government-Led System	Socially-oriented management system

Figure 5. Comparison Table of Winter Sports Management System

4.2 Faculty of Winter Sports Education

Winter sports education teachers are the main force in implementing winter sports teaching. It's the basis of teenager winter sports implementation. They play a leading and decisive role throughout the

process. Their professional quality, knowledge structure, theoretical level and sports skills levels determined the level of teenager winter sports education. They provide the "soft environment" for teenager winter sports education.

4.2.1 Winter Sports Faculty in China

Professional sports instruction is an important condition for cultivating teenager to participate in sports. Get strong support from coaches and teachers helps create a suitable sports environment for the teenager (Xinhua 2017). Manpower as an important component is also one of the important factors constraining the development of the industry in winter sports education (Sohu 2017).

One-time mode and university-based training mode are always used in the training mode of sports education talents in China. Selection of Teacher Majors' students is basically the same as the selection of higher education institutions, they all need to participate in the unified college entrance examination. The difference is that sports professional need to test professional skills. Most of the Normal Universities, especially local colleges or institutions, they have a lower admission score than other comprehensive colleges and universities which are at the same level. Normal fields even have a lower score. In addition, most of these students who have entered the teacher training majors do not have strong professional thinking, and they will change study fields when they accepted by university. Some colleges and universities set restrictions on the transfer of professional conditions to limited Normal Students. Although those students who wish to transfer majors remain in the teacher majors, their learning enthusiasm is greatly reduced (Lin 2008, 2).

China lacks higher education schools to cultivate professional winter sports personnel. There are fewer winter sports courses in colleges and universities and fewer venues. It is challenging to develop winter sports. Most of the Chinese universities that training winter sports teachers are

concentrated in the three northeastern provinces, such as Shenyang Institute of Physical Education, Jilin Institute of Physical Education, Harbin Institute of Physical Education and Northeast Normal University. There are still some schools under construction, such as Beijing Sports University and Tsinghua University (Sohu Education 2015). There are also few related winter sports teacher activities currently. Only in Heilongjiang Province where winter sports education is more developed, winter sports teachers could have more chance to improve teaching ability through the ski training classes, winter sports teaching seminars, winter sports' issues report meeting, winter sports project research development forum. This is also the reason why the winter sports teaching level in other area has declined year by year.

The lack of teacher resources is one of the reasons why teenager cannot effectively participate in winter sports. According to a survey of Beijing young people participate in winter sports, 70.43% of students perform professional ice-snow sports training under two times. Subjective reasons are mainly due to their aim is to have experience in winter sports and promoting health and entertainment. The objective reason is that at present, Beijing and even the whole country are very lack of professional winter sports teachers and coaches. 15.64% of the students have conducted 2-3 training sessions each year (Tencent Mind 2018). Most of them have a good sports base and are the reserve force for the teenager sports team. Most of the students with more than five training are from school sports teams. There are also winter sports enthusiasts who voluntarily participate in amateur training.

In the city Harbin which is a relatively developed winter sports city in China, there are 13 coaches specializing in speed skating, 12 special coaches for short track speed skating, 12 coaches for figure skating, three coaches for freestyle skiing, four coaches for alpine skiing but no coaches for cross-country skiing (Xinhua 2017). From an interview of Chinese coaches, many coaches have low academic qualifications. Among them, there are 17 coaches for the college degree, 23 coaches for the

undergraduate degree, three coaches for the master degree, and only one for the doctoral degree. In Harbin, winter sports coaches have a low overall education. Among them, the number of coaches for college and undergraduate education level has already accounted for 91%, highly educated coaches account for only 9% of the total number. So, there are eight junior coaches, 10 intermediate coaches, 21 senior coaches, and five national level coaches (Wang 2018).

The effective guidance of social sports instructors is also an important guarantee for ensuring the smooth development of teenager winter sports. By the end of 2016, the number of public welfare social sports instructors in China has reached more than 500,000. This data reflects that the development of social sports instructors in China has undergone a lot of development, but it still cannot meet the needs of the majority of Chinese people for fitness training. Especially the lack of professional guidance mass winter sports facts became increasingly prominent. Skiing started late in China, and ski instructor training is also relatively backward. China has officially trained ski instructors since 2005, and by 2017, only seven people have passed the certification. The ratio of ice sports professional social sports instructors is even lower (Zhang 2017).

4.2.2 Winter Sports Faculty in Finland

Selection of students for the teacher majors in Finland is extremely strict (WalesOnline 2011). Only qualified senior high school graduates can enter the normal education for further studies. This lays a solid foundation for the future professional development of these normal-college students and achievement of the teaching performance of primary and secondary schools. Finnish universities have the same strict enrollment system. Candidates who apply for the teacher major need to pass the written test and an interview. The written test is extremely strict, with only 25% of the top students entering the second interview stage. Even if they are admitted to the teacher majors, these students still need to maintain a good learning record to continue their studies, otherwise, they are in

danger of dropping out of school (Klinga 2018). In addition, Finland has added a "psychological test" based on written tests and interviews. For example, at the Faculty of Education at Jyväskylä University, a "psychological test" is required for applicants. It mainly measures the students' learning potential, personality traits and learning motivation. This test is one of the important basis for the applicant to enter the Institute of Education (Liang 2013, 377). Strict selection of teacher-training students raises the entry threshold for teachers, which in turn increases the degree of professionalism in teaching and, to a certain extent, guarantees the improvement of teachers' social status. Teachers have thus become an honor. The education curriculum for primary and secondary school teachers established by the Faculty of Education of the Finnish University covers the following topics: professional learning in teaching subjects, learning in minor courses, and learning in educational theory (including pedagogy, psychology, subject teaching methods, and teaching practice). Communication and language learning (Liang 2013, 380). Finnish universities usually develop research-oriented teachers and develop their professional abilities so that they can solve teaching problems both inside and outside the classroom through observation and analysis. Therefore, the Finnish universities pay particular attention to the scientific research ability and subject research ability of normal major students, and communication skills with primary and secondary school students. Since most of the universities have teaching practice bases, students can conduct teaching practice very quickly. Through internships, interns have access to students from different social backgrounds and learn how to teach them (Liang 2013, 381). Throughout the onboarding process, Finland has an integrated system for the integration of sports teacher education. The integrated development of physical education teachers is one of the most critical strategies for the development of school sports in Finland and a necessary guarantee for the success of school sports in Finland's primary education.

In recent years, Finland has designed a professional development testing system for physical education teachers (Sahlberg 2018). It aims to enrich

the professional knowledge and teaching themes of physical education teachers and cultivate reflective skills to promote professional development. A distance education project was launched in 2005 to develop the education of teenager sports instructors, superior project coaches, and adult recreational sports coaches which cooperated with Finnish Sports Federation, Youth Finland, Finnish Sport for all Association, Finnish Olympic Committee and Finnish Coaching Association. This project is mainly aimed at Finland's 74 sports leagues, 11 sports organizations, and other coaching organizations (This is Finland 2011). The focus of the project is sports specialization. That is, the National Sports Federation is the main agent of the project and is responsible for the part of the project that belongs to their subject area. In October 2016, the Ministry of Education of Finland and the Ministry of Culture jointly issued the education development plan of "Develop the best teachers in the world". To this end, Finnish government allocates 15 million euros each year to promote and upgrade the system (Xie 2018).

4.2.3 Similarities and Differences

China and Finland have the similar pre-service teachers' courses. They all have three basic courses: public basic courses, professional courses, and educational courses. Public courses and professional courses account for a relatively large proportion. In contrast, the proportion of educational courses is less. Chinese educational curriculum has a sturdy theoretical but weak practicality. As a result, they are unable to efficiently use what they have learned in teaching practice. China's pre-service teacher education is relatively weak for normal students in their research and problem-solving abilities. This is not conducive to solving the teaching problems they face in the future.

Finland has an integrated sports teacher education system which means teachers have high academic qualifications and strong professionalism. While in China, academic qualifications are lower and professionalism is not strong enough. Finland has the high quality of pre-service teacher

education and strict admission policies are adopted. Pay attention to personality and psychological testing, and strive to select candidates that are indeed suitable for the occupation of physical education teachers. At the same time, training the physical education teachers' teaching methods and scientific research consciousness are always paid a lot of attention, and be striving to build a good sports knowledge system and motor skills framework. While the pre-service teacher education curriculum in China is not well-targeted and practical, the knowledge and skills students learn in school may not be available after graduation.

Both China and Finland attach importance to the training of physical education teachers and social sports instructors. However, there is very little post-entry training for sports teachers in China. The training of social sports instructors started late, and the financial support is not enough. Especially the lack of winter sports teachers and the proportion of social sports instructors per capita is low. Finland actively supports the development of education for sports teachers and has established a complete education system. Sufficient to support the development of teenager winter sports education. It also put forward the education development plan of "Develop the best teachers in the world " and provide corresponding financial support. Following Figure 6 presents the main similarity and differences of both countries' faculty.

	China	Finland
Similarity	Pre-service Teacher Education.	
Differences	Inadequate Financial Support	Adequate Financial Support
	Teacher: Poor Professional Quality.	Teacher: High Professional quality

Figure 6. Comparison Table of Winter Sports' Faculty

4.3 Comparison on Winter Sports Teaching Method

4.3.1 Chinese Teaching Method

China's Ministry of Education has already implemented the project "Sports and Art 2+1". To improve the teaching level of teachers, the project requires all local schools in the country need to provide students with music, sports, and arts courses (Li 2011). Also, the curriculum of sports and arts is incorporated into related teaching plans, and there is a need for changes in the content and forms of teaching. (Ministry of Education of People's Republic of China 2011). Physical education teaching should meet the individual differences of students, and pay attention to the physical and mental development rules of students and content should meet the requirements of the syllabus (Tang 2016) In addition, students were divided into several levels in the Sports and Health Curriculum Standards" promulgated in 2011. Specific requirements have been made to different study areas and standard level which different grades need to meet (Chinese Textbook Expert Committee 2011).

In general, the current Chinese syllabus and curriculum standards are uniformly formulated and promulgated by the Ministry of Education.

- Teaching content: Main focus is to improve the physical quality and develop various kinds of sports items and to increase the game of rhythm activities.
- Teaching instruction: Emphasizing the leading role of teachers and focusing on the combination of the bidirectional positivity.
- Teaching form: Group exercises are mainly based on teachers leading.

- Teaching method: Traditional standardized teaching method is the main method. Teaching methods in some schools pay more attention to the development of student personality.

The structure of curriculum resources for primary education in China is relatively simple. For a long time, textbooks are the only curriculum resources. In the increasingly diverse and growing social life, the limitations become more pronounced. In the 60s and 70s of the 20th century, many schools not only offered skating classes but also organized after-school training programs such as speed skating and ice hockey (Guo 2017). Many skating places were open to the public. Winter sports were the main outdoor activities for young students in the winter. However, after the 1980s and 1990s, due to the influence of economic interests and exam-oriented education, the venue for outdoor activities has become smaller and the exercise time has decreased, resulting in the fact that most students today do not skate. Only a few schools have ice rinks. Most of the winter sports lessons in schools are snow jogging. The content of rich winter sports activities has not been developed and utilized. (Sun 2018).

According to People's Republic of China Sports Law, all the schools must establish compulsory sports courses according to the requirements of the Ministry of Education. By 2010, the Ministry of Education of China specified in the "Senior Elementary School-Sports and Health Education Syllabus for Nine-year Compulsory Education" that the primary school must have two classes per week before the second grade, and three classes per week from the third grade, and two classes a week for middle school. In short, no less than 64 hours per school year before the second grade, and not less than 96 hours per school year from the third to the fifth grade. Middle school and high school are also 64 hours (People's Republic of China Sports Law 2008).

Organized sports activities can attract more young people to achieve the goal of making friends, and then form social networks to promote sports

activities. Establish clubs or associations, conduct regular club activities or organize sports competitions to let students feel the joy of sports. For example, there are 15 ice hockey clubs in Beijing and 116 youth ice hockey teams. Altogether nearly 2,000 players. Each year, more than 1,000 teenage hockey leagues, inter-school leagues, and tournaments will be held (Wang 2016).

4.3.2 Finnish Teaching Method

Finnish students have at least 2 hours of outdoor activities every day to promote their physical development start from kindergarten. In primary and secondary schools, through physical education classes and health education classes, students' physical, mental, and social skills have been developed, especially e to promote students' psychological and social skills through the physical exercise (This is Finland 2012). For example, 80 percent Finnish integrated schools are carrying out the "Schools on the Move" program to ensure that all students have at least one hour of physical activity each day. Children and teenagers will also have more opportunities to participate in artistic and cultural activities (Liikkuvakoulu 2018).

Finnish school physical education curriculum can promote the overall development of students and pay attention to the comprehensiveness, basicity, and extensibility of the course content (Korpela 2012). First of all, regarding the concept. The content of the course focuses on cultivating students' learning ability, independent ability, and innovation ability, focusing on developing their social adaptability, and encouraging them to understand and respect others. This concept not only helps students to improve their individuality but also allows them to experience the success and enjoyment of sports as much as possible. Second, regarding course content. The content of the course is close to the student's real life, and it focuses on richness and diversity. Based on the needs of social growth and student development, it embodies the characteristics of daily life, personalization, health, and lifelong development (This is Finland 2012).

In recent years, the curriculum has placed more emphasis on activities that represent Nordic culture, such as skiing, orienteering, ice hockey, etc. Physical education teachers have real freedom in teaching design. The specific school curriculum is usually formulated by the local education department and the school within the framework of the national core curriculum. Although the government has stipulated the total class hours of the course, the school can redistribute the class hours according to the specific circumstances (Souhu Education 2018). This has a positive impact on the development of physical education in schools. Physical education teachers make decisions on the development of school sports, which can effectively plan the development of school sports.

Besides, to support and motivate students, Finland also encourages students to make full use of the ability to use extra-curricular resources and bring off-school learning to campus. From the perspective of their interests and hobbies to master various skills. In this way, Finnish teenagers can make full use of their leisure time and participate in multiple winter sports clubs to learn more skills.

4.3.3 Similarities and Differences

Both Chinese and Finnish primary and secondary schools offer an average of 2-3 hours of physical education. And has a particular position and legal nature in the overall curriculum. Physical education textbooks in both countries are self-determined, and their content is different. But they all pay attention to the development of students' personalities and try to make the students' physical and mental skills get exercised. In physical education teaching, more emphasis is placed on imparting sports skills and living ability, paying attention to students' interest in sports, and carrying out behavioral education on social behavior standards and good morals to enable students to Both body and mind are developed.

- Finland pays attention to the main role of the students in the classroom. Organizational measures and teaching methods are

conducive to the initiative and enthusiasm of the students. They attach importance to cultivating the students' judgment ability and acting ability, but the classroom organization is loose.

- Teaching method in China pays more attention to the leading role of teachers. Students are disciplined and consistent. The course content will be changed and adjusted for different teaching materials and students.

Compared with the current curriculum in China, Finland implements a decentralized curriculum that uses national, local, and school-level three-tier curriculum systems. The central performance is that the Ministry of Education of Finland roughly stipulates the disciplinary objectives, content and evaluation criteria. The local education departments should interpret and supplement the national syllabus in detail and incorporate local features to form an operable "local curriculum standard". Schools, teachers, parents, and students jointly formulate "school-level curriculum standards" in each school. Schools have specific decision-making power over curriculum setting, class schedule, etc. Teachers have the right to choose teaching materials and teaching methods. Students can also choose other subjects. Following Figure 7 shows the main similarities and differences of teaching method.

	China	Finland
Similarities	Emphasis on: Students' Personalities, Interest in Sports, Develop a Healthy Mind and Body	
Differences	Teacher- Centered Teaching Method	Student- Centered Teaching Method
	Rigid Course Settings	Flexible Course Settings

Figure 7. Comparison Table of Teaching Method

In a word, Finland's sports curriculum is flexible. Finnish education provides opportunities for students to choose through curricula, teaching students in accordance with students' aptitude, allowing them to explore their interests and develop their abilities through independent experimentation. Moreover, in order to tie in with the curriculum reform, mobile teaching equipment such as laptops and tablet computers will be more involved in classroom teaching. E-learning system and online teaching resource platform will also play a more important role.

4.4 Facility of Winter Sports Education

Perfect teaching facilities, corresponding sports venues, and equipment are necessary for teenager winter sports education.

4.4.1 Winter Sports Facility in China

Sports facilities and fields are the basic requirements for improving the quality of winter sports education and improving the health of students. The lack of sports venues and facilities and the poor teaching environment are important factors affecting Chinese teenager winter sports education. In recent years, due to the warm winter weather, the availability of ice sports venues has decreased. And under the constraints and impact of economic factors, schools ice rink has been reduced year by year, which has restricted teenagers' winter sports activities (National Board of Education 2018).

According to statistics, as of the end of 2015, there were more than 200 skating halls nationwide, more than 500 ski resorts, 30 million square meters of ski slopes, and 1,000 kilometers of ski slopes. Of which about four-fifths of ski slopes area of less than 50,000 square meters. There are currently 80 standard indoor skating halls in China, mainly in Beijing, Heilongjiang and Jilin. Most of them are standard venues (Lanxiong Sports

2018). In addition to the standard ice skating halls, there have been a large number of ice spots in various places in China in recent years. The data of outdoor ice skating is difficult to count due to restrictions on venues, climate, human resources, financial resources, and managers' attitudes. And some of those outdoor ice skating rinks are very casual and irrational. However, it is certain that the number of outdoor skating rinks has sharply decreased compared with the past. The schools that regularly pour rinks each year are already rare. At present, the country's ski resorts are widely distributed, and more than 20 provinces and cities all have different sizes of ski resorts (Liu&Zheng 2017). Among them, there are few large-scale ski resorts, most of them are small, and medium-sized, and others are poorly equipped. The using areas, capacity, number of ski tracks are short, and ropeway transportation capacity is low. In the 1980s, the project millions teenager doing winter sports in Heilongjiang Province carried out in full swing. Skating was once a major winter sports activity for the teenager in Heilongjiang province. However, school winter sports have shrunk year by year because of funding and policies. According to a survey of 80 primary and secondary schools in Heilongjiang Province, only 11.3% of schools poured standard rinks in winter 2017, 25% of schools poured small rinks, 5.0% of schools poured small ice tracks, 58.7% of schools didn't have anything related to skating (General Administration of Sports of China 2016).

4.4.2 Winter Sports Facility in Finland

Since the 1980s, Finland has attached great importance to the construction of teenager sports education facilities. The second sports law that entered into force in 1999 pays more attention to the role of sports in health. Based on this legal document, the Ministry of Education decided to spend more national sports expenditures for the construction and maintenance of stadium facilities in five years, to meet the needs of the public for daily sports activities on the site environment, including the construction of fitness parks, fitness plazas, and bicycle lanes This change

in fiscal policy provides an environmental basis for regular physical exercise (Itkonen & Salmikangas 2015, 547). Corresponding to the "Healthy Life" program, Finland also launched a "Young Finnish Plan" which targeting young people to promote the development of non-athletic sports. At the same time, increase financial investment, efficiently improve the construction of gymnasium facilities, and create a comfortable and convenient fitness environment (This is Finland 2011).

Since the Finnish government's focus on sports in the 1970s has gradually shifted from competitive sports to mass sports, the top priority in solving mass sports has always been the construction and improvement of sports facilities (Korpela 2012). The government has increased financial investment in the construction of state-owned non-profit sports stadiums and also fully mobilized privately owned for-profit venue facilities to open to the public. About 75% of Finnish sports facilities are built and operated by local governments, and private facilities are mostly located in large cities and densely populated areas. Balanced sports resources, sports facilities, and excellent sports education teachers nationwide. Regardless of the size and geographical location of the school, they all enjoy the same quality sports teachers and the same standardized stadium equipment (The Ministry of Education and Culture 2018).

Finland has the world's largest number of ice hockey and world-class ski resorts (This is Finland 2011). The geographical features of many lakes and rivers in Finland also create a lot of natural skating rinks. There are artificial outdoor ice rinks for free to use by the public in winter in the communities and schools. Due to the popularity of ice hockey, the numbers of Finnish ice hockey hall are far greater than in other countries. According to the Figure 8, there are 268 indoor ice hockey rinks and 38 outdoor rinks with excellent snow conditions in Finland and distributed throughout the country (Statista 2018).

Countries by number of ice hockey rinks in 2016/17

Search:

Records: 13 ▼

	Indoor	Outdoor
Canada	3,300	5,000
Russia	560	2,583
United States	1,535	1,000
Sweden	356	136
China	154	206
Kazakhstan	38	327
Finland	268	38
Germany	216	45
Czech Republic	198	8
Switzerland	111	193
Japan	117	50
France	117	8
Slovakia	61	17

Figure 8. Countries by number of ice hockey rinks in 2016/17 (Statista 2018)

4.4.3 Similarities and Differences

Both China and Finland attach importance to the construction of adolescent winter sports education facilities. However, China's teenager winter education facilities are far behind Finland regarding both on-campus facilities and off-campus facilities.

Examining Chinese school sports from the perspective of balanced allocation of resources, there is an apparent gap between the distribution of winter sports resources in urban and rural areas. Perfect winter sports education facilities are mainly distributed in developed cities. The success of primary winter sports education in Finland is due to the concept of fair education. Fairness is the goal orientation of the balanced allocation of

winter sports resources in Finnish schools, and it is also the path chosen for the balanced development of Finnish school. The distribution of Finnish youth snow and ice sports education facilities is relatively balanced in urban and rural areas. Moreover, the Finnish government provides a stable financial guarantee for the construction of teenager winter sports facilities, while at the same time attaching importance to private winter sports education facilities. Following figure 9 shows the main similarity and differences of winter sports' facilities.

	China	Finland
Similarities	Attach importance to the construction of winter sports' facilities.	
Differences	Unevenly Distributed Facilities	Evenly Distributed Facilities
	Lack of Equipped	Fully Facilities

Figure 9. Comparison Table of Winter Sports Facilities.

4.5 Interview

The interview completed in the April of 2018. The researcher visited and interviewed interviewee in Lahti Region Oy. Results of the interview are being used in the thesis. In the beginning of March 2018, the writing process of the thesis has begun. The first step was gathering theoretical information such as what are the current policies to assist the development of winter sports, teenager winter sports situation in China and Finland, and what is the teaching method in both countries. The interviewee is the national team head coach of ski jumping and Nordic combined who was working in Finnish Ski Association. The interview questions that are crucial to the study have been answered by the interviewee. All questions will be

divided into three perspectives to explained and analyzed in this chapter which is personal experience, Chinese culture and history, and winter sports facility.

The first interview perspective is concerning the personal experience of the interviewee. Interviewee was born in Lahti, Finland. Start from 2000, he began to work in Finnish Ski Association as a head coach. From 2006 to 2012, the interviewee was the team head coach in Japan national team. Since 2013, the interviewee back to work in Finnish Ski Association. In the past two years, the interviewee has visited China and coached for several times with the Winter know-how project of Lahti Region Oy in the city Zhangjiakou and Harbin, so that the interviewee knows about some simple Chinese culture and the basic situation of teenager winter sports education. Image 1 below shows the interviewee taught Chinese teenagers how to do cross country skiing.



Image 1. The interviewee in Zhangjiakou, China (NordicZone 2017)

The second interview perspective is the influence of Chinese culture and history on the development of winter sports. From the opinion of interviewee, Finnish winter sports culture has a long history. It can be said that winter sports are the daily life of Finnish. Every city in Finland can ski and every school has courses related to winter sports. So, everyone has opportunity to experience and spread this culture. So many Finnish are good at winter sports because they are imperceptibly influenced by what they constantly see and hear that everyone around them is doing these

winter sports. However, there are not many records of winter sports in Chinese history. If parents don't understand or not interested in winter sports, their children will also reduce their chances to contact with winter sports. Most of Chinese children can only learn about winter sports from television or the internet, which reduces the cultural spread of winter sports to some extent.

Due to China's constantly reforming economic system in the late 1980s which is mentioned in previous chapter, the country's financial support for the public's winter sports was seriously affected. Until the year 2015 when Beijing was selected to host the 2022 Winter Olympics, China has once again provided strong support for the healthy development of the winter sports industry in terms of policies, infrastructure construction and system reform.

The third interview perspective is winter sports facility and sports' fields. According to the interviewee, if you want to promote a new sport in a country, the sports fields and facilities are indispensable, and professional coaches are also required.

At present, China has implemented the "Millions of Teenager on Ice and Snow" campaign and the "School Ice and Snow Plan" to promote the development of teenager winter sports. In addition, the government has cooperated with social organizations to develop winter sports teaching in the form of government-purchased services. The book "School Winter Sports Series" which is printed by the government is published all over China. The interviewee has 6 years of experience in coaching winter sports in Japan and now still has the chance to go to Japan. But this time, he chose to coach in China under these current circumstances of China. Because the interviewee is full of hope for the development of Chinese teenager winter sports and the success of the 2022 Beijing Winter Olympic Games.

5 DISCUSSION

5.1 Answering Research Questions

The thesis focuses on finding out the similarities and differences of teenager winter sports education between China and Finland. The main research question is: What can Finnish winter sports development and experience bring to the development of Chinese teenager winter sports education? The research question is answered later in this chapter, as mentioned in sub-chapter 1.2, there is the sub-questions which is answered first. The sub-question is presented and answered below.

In comparison, which aspects of winter sports education have significant differences between China and Finland?

Teenagers winter sports education of China and Finland are quite different in terms of development goals, management system, teaching method, faculty, and winter sports facilities. Finland leads China in these areas. This is the cause of economic and social development, historical and cultural traditions, as well as the reasons for the development of the national sports concept and the concept of parenting. This is due to a combination of causes.

Due to climatic and geographical reasons, teenager winter sports education has a situation in which “north more than south” and “north is stronger than south” in terms of teacher allocation, facility construction, and curriculum. Finland has a balanced allocation of sports resources. Stop evaluating students with performance and ensure that all students participate equally in winter sports activities. Therefore, the development of Finnish teenager winter sports is more balanced.

Both China and Finland regard the idea of combining “health first” and “quality education” as the guiding ideology for teenager winter sports education, and put teenager physically and mentally fully developing and cultivating teenager's sports capabilities into specific training goals.

However, in terms of educational methods, China is highly generalized in teaching, does not involve specific content, and has universal guiding significance. In Finland, the content of the teaching is detailed, and it is clearly structured. It involves all aspects of health and sports education and has strong operability. The teaching guiding ideology of Finnish teenager winter sports education is based on Finnish culture, including sports culture traditions and realistic conditions, and is confirmed in legal form. However, teenager winter sports education in China is mainly regulated by policy documents. For example, the "Decision of the Central Committee of the Communist Party of China on Deepening Education Reform and Promoting Quality Education in 1999" and the 2016 General Administration of Sports issued "13th Five-Year Plan for Youngsters Sports".

The common ground of two countries in teenager winter sports educational management system is they all have special administrative government agencies to help formulate a variety of educational programs and sports regulations. Such as Sports General Administration of China, the Ministry of Education of China and the Ministry of Education of Finland. The education system in Chinese schools is government-led. It is a management system that combines the hierarchical system with the division system. Finland currently belongs to a socially-oriented management system. But China is gradually changing to a socially-oriented management system.

Both countries offer sports education courses, on an average of 2-3 academic hours per week. It has a certain position and legal nature. However, the Finnish curriculum is quite flexible. Finnish schools take the initiative to exercise the right to set up their own courses and widely absorb teachers' participation in the curriculum set. Through the curriculum, students will be given more choices and practice according to their aptitude. Allow students to explore their own hobbies and develop their abilities through independent experimentation.

Finland has a complete pre-service, entry-level and post-employment sports teacher education integration system. Strict access policies are implemented and attention is paid to the development of physical education teachers' pedagogical knowledge and scientific research awareness. Strive to build a good sports knowledge system and sports skills framework for physical education teachers. In contrast, China's pre-service teacher education curriculum is similar to Finland's curriculum, but the proportion of educational courses is relatively small, and its practicality is weak. Moreover, China lacks a post-employment and post-sports teacher training system. In particular, there is a lack of winter sports instructors, and the proportion of social sports instructors per capita is low. But Finland attaches great importance to the development and support of sports special coach education, has formed a system and can support the development of teenager winter sports.

Figure 10 presents the comparison table of similarities and differences of teenager winter sports education in general.

	China	Finland
Similarities	<ul style="list-style-type: none"> - Manage by specific national agencies. - Pre-service Teacher Education. - Emphasis on healthy mind and body. - Focus on students' personalities, interest. - Attach importance to the construction of winter sports' facilities. 	
	National centralized management system.	Socialization sports' education management system.
	Course content is highly summarized	Course content is specific and detailed.

Differences	Information feedback slow and inefficient.	Communication is convenient and rapid.
	Lack of sports teacher in-service training.	The complete training system of sports' teacher.
	Unevenly Distributed Facilities.	Evenly Distributed Facilities.
	Lack of Facilities.	Fully Equipped.

Figure 11. Comparison table of similarities and differences of teenager winter sports education in general.

As the sub-question is presented and answered, following is the answer of the main research question, which was:

What is the enlightenment that Finnish winter sports development process and experience brings to the development of Chinese teenager winter sports education?

Finland is a strong country in winter sports and China will host the 2022 Winter Olympics. The high degree of correlation and complementarity has contributed to the rapid increase of China and Finland exchanges and cooperation in winter sports.

First of all, the two sides can use the platform of the 2022 Winter Olympics to carry out in-depth cooperation. According to the joint statement between the two countries, the two sides will use the 2022 Beijing Winter Olympic Games as an opportunity to promote cooperation between sports organizations, sports academies and enterprises of the two countries in sports education, scientific research, training and the holding of large-scale sports events.

Secondly, it is also very important to carry out exchanges and cooperation in the form of the “China-Finland Winter Sports Year” in 2019. China should base itself on learning and drawing lessons from Finland's experience in the training of winter sports professionals to quickly increase the level of winter sports competition and strive to achieve outstanding results in the 2022 Winter Olympics.

Both sides can also cooperate in winter sports consultation and management, event organization and operation, venue planning and design, sustainable operation of venues and investment, which will not only help China to organize the 2022 Winter Olympics into a green and sustainable event. It will also promote the export of Finnish winter sports talents and related businesses to China.

In addition, both sides should strengthen the development of the winter sports industry market. It is estimated that by the year 2025, about 300 million Chinese will participate in the ice and snow sports. The size of the Chinese winter sports industry is expected to reach 1 trillion Yuan. Faced with such a broad market prospect, both Chinese and Finnish companies can fully cooperate in the winter sports, leisure and fitness service industry, competition and performance industry, ice and snow tourism, and related equipment and equipment R&D and production to jointly share this big slice of winter sports economy.

5.2 Suggestions for Future Research

To develop teenager winter sports, first step is to promote mass winter sports. Northeast China as an important foundation, with emphasis on the development of North China and Northwest China, and to lead the development of some southern regions. Second, various types of winter sports facilities suitable for all groups of people must be established throughout the country.

The last point is to promote the development of the winter sports industry. The growth in the number of people, facilities, and equipment brought

about by the development of winter sports has provided the immense market demand and driving force for the development of the winter sports industry. And the development of the winter sports industry and related industry will definitely have a great development trend.

6 CONCLUSION

The goal of the thesis was to find out the similarities and differences of teenager winter sports education between China and Finland. The final purpose was to analyse what enlightenment Finnish winter sports development process and experience brings to the development of Chinese teenager winter sports education.

The development of a country's winter sports is inseparable from the active participation of teenagers. With school being an important base for training and education, the following content needs to be focused on and developed:

1. Each school should increase its emphasis on winter sports. Schools should increase funding while spending rationally, and improve teaching conditions.
2. Schools should utilize geographical advantages and share social public resources. They should fully and reasonably implement winter snow teaching, and promote the development of winter sports.
3. During the teaching process, schools should continue to add popular and useful winter sports curriculum content to stimulate students' interest in learning. They should improve teaching quality, take full advantage of curriculum resources, and meet the needs of winter sports teaching.
4. Teachers and coaches should self-improve, establish a scientific and healthy teaching philosophy, and enrich teaching methods and content. By improving the skills of students' winter sports, they will continuously improve the overall quality of students.
5. Exchanges and cooperation between schools, as well as social organizations such as sports clubs, should be strengthened. Administrators should organize students to participate in extracurricular winter sports programs, carry out interscholastic

competitions, communicate to the general public, correctly guide students and cultivate high-level winter sports reserve personnel.

REFERENCES

Written Sources

Basic Education Course Textbook Expert Work Committee. 2011. Beijing. Beijing Normal University Publishing Group.

Basic Education Curriculum Textbooks Expert Work Committee. 2011. 体育与健康课程标准.

Chen, X., Liu, J., Liu, J. 2015. 大学体育传承与发展：马约翰体育教育思想暨学校体育工作研讨会论文集. Beijing. Tsinghua Publish.

Chinese Textbook Expert Committee. 2011. 义务教育体育与健康课程标准（2011年版）.

Liang, F. 2013. 比較教育學: 起源、內涵與問題的探究. Taiwan.

Lin, S. 2008. 新时期我国普通高校体育教育专业人才培养模式的发展取向. Sports instructor. Vol. 23, ISS. 2, p. 2.

Sun, C. & Yang, Z. 2017. 中国冰上运动场馆发展现状. Beijing: China Ice Sports Industry Development Report (2017)

General Administration of Sport of China. 《社会体育指导员发展规划（2011年—2015年）》

Electronic Sources

Niemi-Nikkola, K. 2018. Policies and development [accessed 14 May 2018] Available at: <http://minedu.fi/en/policies-and-development-sport>

Souhu. 2017. 冰雪头条:安踏赞助13支国家冬季运动队,中国冰雪产业10倍空间待“填补”,北京朝阳区25所中小学体育教师接受首堂花滑普及课

[accessed 14 May 2018] Available at: http://www.sohu.com/a/135165474_492694

BBC Sport. 2015. Beijing to host 2022 Winter Olympics and Paralympics [accessed 3 April 2018] Available at: <https://www.bbc.com/sport/winter-olympics/33730477>

Chen, J. 2017. “三亿人上冰雪”目标依旧遥远，中国滑雪最缺的就是专业人才. 澎湃新闻 [accessed 8 May 2018] Available at: https://www.thepaper.cn/newsDetail_forward_1712309

China Daily. 2017. Winter sports leader wants to help China prepare for 2022. [accessed 4 May 2018] Available at: http://www.chinadaily.com.cn/world/2017xivisitsfinlandandus/2017-04/04/content_28790485.htm

Countries by number of ice hockey rinks in 2016/17. 2018. [accessed 8 May 2018] Available at: <https://www.statista.com/statistics/282353/countries-by-number-of-ice-hockey-rinks/>

Crossman, A. 2018. An Overview of Qualitative Research Methods. ThoughtCo. [accessed 11 May 2018] Available at: <https://www.thoughtco.com/qualitative-research-methods-3026555>

DeFranzo, S, E. 2011. What's the difference between qualitative and quantitative research? [accessed 11 May 2018]. Available at: <https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/>

European Commission. 2010. Sport and Physical Activity. [accessed 8 May 2018] Available at: http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_334_en.pdf

Finnish National Agency for Education. 2018. Compulsory education in Finland. [accessed 8 May 2018] Available at:

http://www.oph.fi/download/180148_Compulsory_education_in_Finland.pdf

General Administration of Sports of China. 2016. 冰雪运动迎发展机遇玩冰乐雪就到黑龙江. [accessed 26 April 2018] Available at:

<http://www.sport.gov.cn/n16/n1107/n2069668/7529198.html>

Hancock, L. 2011. Why Are Finland's Schools Successful? Smithsonian Magazine. September 2011. [accessed 6 May 2018] Available at:

<https://www.smithsonianmag.com/innovation/why-are-finlands-schools-successful-49859555/>

Harala, R. 2014. Woman and men in Finland 2014. Statistics Finland. [accessed 8 May 2018] Available at:

http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yyti_womefi_20140_2014_10368_net.pdf

Itkonen, H & Salmikangas, A. The Changing Roles of Public, Civic and Private Sectors in Finnish Sports Culture. 2015. University of Jyväskylä, Finland. [accessed 26 April 2018] Available at:

[https://www.mruni.eu/upload/iblock/cde/\[545-565\]%20Itkonen.pdf](https://www.mruni.eu/upload/iblock/cde/[545-565]%20Itkonen.pdf)

Krishnaswami, O. & Satyaprasad, B. 2010. Business Research Methods [accessed 7 May 2018]. Available at:

<https://ebookcentralproquestcom.aineistot.lamk.fi/lib/lamkebooks/reader.action?docID=588025>

Li, L. 1989. A Land of a Thousand Lakes. The New York Times. [accessed 8 May 2018] Available at: [https://www.nytimes.com/1989/04/16/travel/a-](https://www.nytimes.com/1989/04/16/travel/a-land-of-a-thousand-lakes.html)

[land-of-a-thousand-lakes.html](https://www.nytimes.com/1989/04/16/travel/a-land-of-a-thousand-lakes.html)

Li, X. 2011. 各地开展体育艺术二加一项目让校园充满活力. Ministry of Education of People's Republic of China. [accessed 1 May 2018] Available at:

http://www.moe.edu.cn/s78/A17/moe_797/201107/t20110708_122012.html

Liikkuvakoulu. Increasing physical activity and decreasing sedentary time among school-aged children. [accessed 23 April 2018]. Available at: <https://liikkuvakoulu.fi/english>

Liu, S., Zheng, Y. 2017. 冰雪飘入百姓生活. Paper People China. [accessed 26 April 2018] Available at: http://paper.people.com.cn/rmrb/html/201701/12/nw.D110000renmrb_20170112_1-22.htm

Liu, X. 2016. 冰雪运动纳入中小学体育课 将制定教学指南. Tencent Education. [accessed 8 May 2018] Available at: <http://edu.qq.com/a/20161128/004632.htm>

Ministry of Education of China. June 2015. 1999年教育大事记. [accessed 4 May 2018] Available at: http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_163/200408/3460.html

Ministry of Education of Finland. 2014. Sport finance and administration. [accessed 8 May 2018] Available at: <http://www.minedu.fi/OPM/Liikunta/liikuntapolitiikka/rahoitus/?lang=en>

National Board of Education. 2018. 国家教委办公厅关于转发《当前中小学体育工作中存在的主要问题及改进意见》的通知. [accessed 1 May 2018] Available at: <https://baike.baidu.com/item/>

Pertsch, F. 2018. How No More Boots Aims to Conquer the Winter Sports Market in China. ISPO Sports. 37, March 2017. [accessed 4 May 2018] Available at: <https://www.ispo.com/en/markets/how-no-more-boots-aims-conquer-winter-sports-market-china>

Qian, Y. 2015. 中国教育问题的“四大特点”. Tsinghua University. [accessed 6 May 2018] Available at: http://www.tsinghua.edu.cn/publish/thunews/9654/2015/20150317143337880101553/20150317143337880101553_.html

Sahlberg, P. 2018. Speed Q/A with SBS News: Exploring Finnish schools. [accessed 13 May 2018] Available at: <https://pasisahlberg.com/twin-q-interview-with-sbs-news/>

Saunders, M. Lewis, P. & Thornhill, A. 2009. Research Methods for Business Students. Fifth edition. England: Pitman Publishing imprint [accessed 30 April 2018]. Available at: https://is.vsfs.cz/el/6410/leto2015/BA_BSeBM/um/um/Research_Methods_for_Business_Students_5th_Edition.pdf

Scheerder, J. 2011. Understanding the game sport participation in Europe. [accessed 13 May 2018] Available at: <https://biblio.ugent.be/publication/1932490/file/1932507>

Sun, D. 2017. 孙东生:希望更多的人爱上冰雪运动. Beijing Organising Committee for the 2022 Olympic and Paralympic Winter Games. [accessed 8 May 2018] Available at: <http://www.beijing2022.cn/a/20170308/015396.htm>

Sun, X. 2018. Winter sports industry turning cold into gold. [accessed 15 February 2018] Available at: <https://www.telegraph.co.uk/news/world/china-watch/business/chinese-winter-sports-industry-grows/>

The Ministry of Education and Culture. 2018. Construction of sports facilities. [accessed 8 May 2018] Available at: <http://minedu.fi/en/construction-of-sports-facilities>

WalesOnline.2011. The selection of teachers in Finland is as strict as that for doctors leaving schools in a very healthy state. [accessed 18 April 2018] Available at: <https://www.walesonline.co.uk/news/local-news/selection-teachers-finland-strict-doctors-1827782>

Winter Sports Management Center. 2017. General Administration of Sports of China. [accessed 8 May 2018] Available at: <http://dyzx.sport.gov.cn/n5175/c795874/content.html>

Xinhua Finance Agency. 2016. 13th Five-year Plan for the development of sports industry issued. July 2016. [accessed 8 May 2018] Available at: http://en.xfafinance.com/html/13th_Five-year_Plan/Development_Policy/2016/241790.shtml

Xinhua. 2017. China, Finland agree to advance ties, deepen co-op. [accessed 1 May 2018] Available at: http://www.china.org.cn/china/2017-04/05/content_40563307.htm

Yang, L. 2016. 中国冬季运动发展进入黄金期 冬奥会春风推动3亿人上冰雪. People.cn. [accessed 8 May 2018] Available at: <http://sports.people.com.cn/n1/2016/1019/c407717-28791153.html>

Yang, L. 2016. 中国冬季运动发展进入黄金期 冬奥会春风推动3亿人上冰雪. People.cn. [accessed 8 May 2018] Available at: <http://sports.people.com.cn/n1/2016/1019/c407717-28791153.html>

Souhu Education. 2015. 中国大学体育专业排行：体育学科10强大学出炉. [accessed 6 May 2018] Available at: http://www.sohu.com/a/35958937_223188

Sun, B. 2017. 三亿人上冰雪也要从娃娃抓起！如何规避足球覆辙，成为校长们的议题. [accessed 8 May 2018] Available at: <https://www.ecosports.cn/Home/Consultation/show/id/7006.html>

Shuttleworth, M., Wilson, L. (Aug 9, 2008). Deductive Reasoning. Retrieved May 01, 2018 from Explorable.com Available at: <https://explorable.com/deductive-reasoning>

ChinaNews. 2016. 《群众冬季运动推广普及计划（2016—2020年）》发布. [accessed 13 May 2018] Available at: http://www.xinhuanet.com/2016-11/04/c_1119853884.htm

Peltonen, T. 2016. 黛安娜·派欧蒂妮：坐着不动的课堂将会退出历史。

FICEA. December 2016. [accessed 6 May 2018] Available at:

<http://ficea.fi/index.php/zh/component/k2/itemlist/category/86-finnish-education-research-chi>

Zhang, L. 北京滑雪产业发展迅猛存重经济效益、轻安全生产现象。

ChinaNews 16 February 2017 [accessed 18 April 2018] Available at:

<http://www.chinanews.com/ty/2017/02-16/8151148.shtml>

Zeng, Y. & Wang, J. 2017. 芬兰学校体育的发展、特征及启示.《成都体育学院学报》 June 2017. [accessed 4 May 2018] Available at:

<http://www.cnki.com.cn/Article/CJFDTotol-SORT201706020.htm>

Crossman, A. 13 July 2017. Deductive vs Inductive Reasoning - What's the Difference? ThoughtCo,2017. [accessed 2 May 2018] Available at:

<https://www.thoughtco.com/deductive-vs-inductive-reasoning-3026549>

Koepela, S. 2017. 芬兰的教育. Finnish Ministry of Foreign Affairs. 2017.

[accessed 2 May 2018] Available at: [https://toolbox.finland.fi/wp-](https://toolbox.finland.fi/wp-content/uploads/sites/16/2017/09/finfo_education_in_finland_zh.pdf)

[content/uploads/sites/16/2017/09/finfo_education_in_finland_zh.pdf](https://toolbox.finland.fi/wp-content/uploads/sites/16/2017/09/finfo_education_in_finland_zh.pdf)

Xie, Y. 2018. 芬兰:基础教育课程改革落地(上). Education News. February 2018. [accessed 6 May 2018] Available at:

http://www.jyb.cn/zqjsb/201802/t20180227_1000623.html

Wang, J. & Wang, C. 2018. 百米飞人出战冬奥从张培萌转型看中国冰雪运动突破. [accessed 14 May 2018] Available at:

<http://www.jiemian.com/article/1924032.html>

Wang, X. 北冰南展计划”中我国冰上项目专业人才. [accessed 18 April

2018] Available at: [http://www.xinhuanet.com/world/2017-](http://www.xinhuanet.com/world/2017-03/14/c_129509414.htm)

[03/14/c_129509414.htm](http://www.xinhuanet.com/world/2017-03/14/c_129509414.htm)www.sport.gov.cn/n16/n1152/n2523/n377568/n377613/n377733/.../n1650650.doc

China Education. 2011. “体育、艺术2+1项目”引发争议 [accessed 23 April 2018] Available at:

http://www.edu.cn/yiwujiaoyu_1074/20110613/t20110613_632782.shtml

Wang, L. 2016. 北京冰雪运动为啥首选打造冰球? [accessed 23 April 2018] Available at: <http://beijing.qianlong.com/2016/0308/443923.shtml>

Lanxiong Sports. 2018. 中国的冰雪运动现状如何? [accessed 27 April 2018] Available at: <https://www.zhihu.com/question/52026314>

Guo, L. 2017. 新中国成立后什刹海冰场冬天滑冰好去处. [accessed 1 May 2018] Available at:

<http://www.sport.gov.cn/n316/n343/n1195/c825483/content.html>

Souhu Education. 2018. 北欧国家芬兰教育“世界最佳”的七大原因. [accessed 1 May 2018] Available at:

https://m.sohu.com/n/469752570/?wscrid=95360_2

This is Finland. 2011. 芬兰-运动和健身领域的领跑者. [accessed 1 May 2018] Available at:

<https://finland.fi/zh/shenghuoyushehui/fenlanyundonghejianshenlingyudeli ngpaozhe/>

Li, J. & Zhang, X. 2016. 还原芬兰基础教育真实面貌. [accessed 6 May 2018] Available at:

<http://ficea.fi/index.php/zh/component/k2/itemlist/category/86-finnish-education-research-chi>

Shen, N. 2015. 新华社：中国体育管理体制开始变身. [accessed 6 May 2018] Available at: <http://sports.sina.com.cn/review/paper/2015-12-07/doc-ifxmhqac0027983.shtml>

Shi, M. 2015. 中国体育管理学科发展问题研究. [accessed 6 May 2018] Available at:

<https://wenku.baidu.com/view/f2e1e84dae45b307e87101f69e3143323968f5a7.html?re=view>

Tecent Mind. 2018. 中国冰雪人群&潜在用户调研报告. [accessed 6 May 2018] Available at: <https://e.tencent.com/Reports/InsightReport-28.html>

Xie, Y. 2018. 芬兰:基础教育课程改革落地(上). [accessed 6 May 2018] Available at: http://www.jyb.cn/zqjsb/201802/t20180227_1000623.html

Cao, X. 2008. 发展体育运动增强人民体质. 南方周末. [accessed 8 May 2018] Available at: <http://www.infzm.com/content/16507>

CCTV News. 2018. 圆梦冬奥习近平启动中国冰雪运动“引擎”. [accessed 8 May 2018] Available at: <http://news.cctv.com/2018/02/10/ARTIY792AeFsz1IA4uTur8be180210.shtml>

Penguin Intelligence. 2016. Zhihu. [accessed 8 May 2018] Available at: <https://www.zhihu.com/question/52026314>

Qi, X. 2017. “百万青少年上冰雪”活动在哈尔滨市启动. 黑龙江日报. [accessed 8 May 2018] Available at: <http://www.hlj.gov.cn/zwfb/system/2017/12/19/010857103.shtml>

Sina Sports. 2016. 《冰雪运动发展规划（2016-2025年）》. [accessed 8 May 2018] Available at: <http://sports.sina.com.cn/others/winter/2016-11-02/doc-ifxxnety7136147.shtml>

Tang, Y. October 2016. 在体育教学中关注学生个体差异. [accessed 8 May 2018] Available at: <http://lczxx.dyedu.cn/a/jsfz/jslw/2017/0915/7510.html>.

This is Finland. 2011. [accessed 8 May 2018] Available at: <https://finland.fi/life-society/finland-the-frontrunner-in-sports-and-fitness/>

Xinhua. 2017. 今冬第一场雪，为啥在黑龙江这么受关注？ [accessed 13 May 2018] Available at: http://www.xinhuanet.com/2017-11/18/c_1121975361.htm

Zhu, Z. 2015. 冬奥筹备 布局为先（体坛观澜）. [accessed 14 May 2018] Available at: <http://sports.people.com.cn/n1/2015/1213/c14820-27920913.html>

He, Z. 2018. 冬天锻炼好处很多，但需要注意这些问题！ [accessed 14 May 2018] Available at: <https://www.17getfun.com/content/2888163>

Pajulahti. 2018. OLYMPIC TRAINING CENTER. [accessed 14 May 2018] Available at: <http://pajulahti.com/olympictrainingcenter/?lang=en>

Luo, S. & Zhang, X. 2009. 我国冬季体育可持续发展的对策. [accessed 14 May 2018] Available at: <http://www.cgvip.com/qk/82673x/200906/33691092.html>

Wang, M. 2018. Finland welcomes China's panda pair. [accessed 14 May 2018] Available at: <https://www.telegraph.co.uk/news/world/china-watch/culture/giant-pandas-in-finland/>

Worth, T. 2018. 5 Best Winter Sports to Try. [accessed 14 May 2018] Available at: <https://www.webmd.com/fitness-exercise/features/5-best-winter-sports-to-try#1>

Xinhua. 2017. 芬兰驻华大使：芬兰正在加深与中国在冬季运动领域的合作. [accessed 14 May 2018] Available at: http://www.xinhuanet.com/world/2017-03/14/c_129509414.htm

Virta, S. 2018. Promotion of physical activity. [accessed 14 May 2018] Available at: <http://minedu.fi/en/promotion-of-physical-activity>

APPENDICES

APPENDICES 1. Interview

Hi, my name is Zewei. As you know I'm working in Lahti Region Oy as a Content Coordinator. I know you have been to China for many times and have a lot of experience of coaching winter sports in China. May I take a few minutes and do an interview with you?

Questions:

1. Could you please introduce yourself, such as where were you graduated and what's your major degree? What's your job?
2. How many times have you been to China?
3. How many cities have you been?
4. How much do you know about China? Culture, food, custom?
5. What's the level(situation) of Chinese teenager winter sports?
6. Which sports did you teach in China?
7. How do you feel when you are teaching them?
8. What's the biggest difference of Chinese students and Finnish students when they are study winter sports?
9. What kind of reasons you do think make Chinese (teenager) winter sports developed so late or slow?
10. Which part should improve in your opinion, teacher, coach, equipment, fields?
11. Are you going to have any further cooperation with China about winter sports education?