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Reasons and Characteristics of Shanghai Elderly Sport Participation

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ABSTRACT

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The aim of this thesis is to find out the reasons why Shanghai elderly people participate in sporting and physical activities and what are the characteristics of Shanghai elderly sport participation. Shanghai is rapidly aging city, and sport participation among the elderly is proved important to keep people both physically and mentally healthy in their later life. Quantitative data (n=174) was collected in order to answer the research questions about the reasons and characteristics of elderly sport participation in Shanghai and to discuss possible constraints with regard to sport participation. SPSS 17.0 was applied to analyze all statistical data from 174 Shanghai elderly sport participants.

Main results of this thesis revealed that the top ten popular physical activities were jogging, brisk walking, square dancing, cycling, Taiji, badminton, table tennis, hiking, gate-ball, and fishing. The reasons in the order of importance for elderly people to participate in sporting and physical activities were to satisfy esteem needs, belongingness and love needs, self-actualization needs and physiological and security needs. Main conclusions indicated that it was perceived as the most important reason to meet esteem needs by the Shanghai elderly to participate in sporting and physical activities. Shanghai elderly people tended to choose those moderate-intensity aerobic activities and many physical activities do not have high demanding for the venues, facilities, equipment, and sporting skills. Shanghai male elderly participants were more active than female elderly participants in terms of the physical activity frequency. Possible constraints included poor support from family, friends, peers and neighbors, discouraged participation by ageist stereotypes and sociocultural norms. Suggestions were accordingly proposed, including building sound and multiple public policies, reorienting positive aging image and creating supportive environments to empower the elderly.

Key words: elderly population, sport participation, physical activity, Shanghai

CONTENTS

ABSTRACT	2
1 INTRODUCTION	4
2 AGING OF THE POPULATION.....	9
2.1 Current global aging situation.....	9
2.2 Current aging process of China.....	10
2.3 Characteristics of the aging situation in Shanghai	10
3 ELDERLY SPORT PARTICIPATION.....	12
3.1 Reasons, characteristics, and constraints of elderly sport participation.....	12
3.1.1 Cultural perspectives about elderly sport participation.....	13
3.1.2 Social perspectives about elderly sport participation.....	14
3.1.3 Psychological perspectives about elderly sport participation	17
3.1.4 Constraints of elderly sport participation.....	21
3.2 Global elderly sport participation.....	24
3.3 Elderly sport participation in China	25
3.4 Elderly sport participation in Shanghai.....	27
4 RESEARCH DESIGN AND METHODOLOGICAL CHOICES	29
4.1 Research Questions	29
4.2 Quantitative data	29
4.2.1 Data Collection.....	30
4.2.2 The Implementation of Data Analysis.....	31
5 RESULTS	33
5.1 Demographic analysis of the respondents.....	33
5.2 The amount of physical activities of the respondents	36
5.3 The main choices of the physical activities.....	38
5.4 The reasons for Shanghai elderly sport participation.....	42
5.5 Gender differences in Shanghai elderly sport participation	48
6 DISCUSSION AND CONCLUSIONS.....	52
7 SUGGESTIONS AND EVALUTATION OF THE THESIS	58
7.1 Building sound and multiple public policies.....	58
7.2 Creating positive aging image and supportive environments for the elderly.....	59
7.3 Thesis evaluation.....	60
REFERENCES.....	62
APPENDICES	76

1 INTRODUCTION

The world population of the persons aged 60 and over will reach over 1 billion by the year 2025. Out of these people, 860 million are estimated to be in the developing world (Harahousou, 2006). Due to the growing gap between the rich and poor countries, the quality of the elderly's life has a big difference between developed countries and developing countries. In the developed countries, the elderly enjoy a comparatively high social welfare and safe life. While in many developing countries, elderly people are suffering from poverty, bad health and well-being conditions and poor health care services etc. Facing the crisis of the aging trend in the world, there are numerous discussions about the ways to tackle the current problems brought on by an aging society. Thus solutions include improving the living conditions of the elderly, and creating better conditions for the elderly to participate in sport and physical activities. The great challenges of aging issues are global and they create an ever-urging necessity to increase both qualitative and quantitative researches on health-related later life.

With the improvement of national health care, the average human life expectancy in China is growing. In the recent decades, China is facing serious issues of a growing elderly population. Since the year 2000, China gradually stepped up to the high-ranking place among aging countries in the world (CKN, 2012). Now China has the largest population of the elderly in the world, accounting for 1/5 of the total number of elderly persons in the world and 1/2 of that of the Asian elderly population. The elderly population in China was expected to reach 200 million in 2013 and constantly increase by approximately 29 million in the following seven years. (CHINANNEWS, 2011.) Moreover, in 2050 it is estimated to reach 430 million, more than 30% of the total population, which means that for nearly every third Chinese people there will be one

elderly person in 2050 (Tian, 2007).

It has been widely accepted by the medical authorities that physical activity is one of the important factors that affect health-related life styles. Others include genetic, social and economic environment, lifestyle, nutrition, and chance factors. In general, nutrition, exercise, mental and social activity, and supportive physical and social environments are the key factors that influence elderly people's quality of life (Metz, 2000). Even from economic or pecuniary perspectives, physical activity is considered to have direct and positive input into the health production function. Mcmurdo stated that regular exercise could be the best investment for old age people (as cited in Grundy & Dangour, 2007). According to Wojtek and Andiarra (2009), for the elder people, actively participation in physical activities is an affordable and cost effective means to prevent chronic diseases and conditions, enhance independence and high quality of life. People in those countries which have comparatively high sport participation rates are likely to have a longer lifespan, higher productivity in working, more easily achieve life satisfaction and improve life quality. What they have input, such as time, money or energy will eventually be paid back.

According to Gratton (2000), psychic benefits can arise from the sense of well-being which is derived from being physically fit and healthy. As Rejeski and Mihalko (2001), Biddle, Fox & Boutcher (2000) argue, moderate aerobic physical activities may prove more beneficial for increasing overall satisfaction with one's life. Moderate-intensity aerobic activity requires people's efforts to raise heart rate, such as brisk walking, jogging, aerobic dancing, bicycling, and swimming (CDC, 2008). Moreover, those adults who were taking part in more physical activities, reported more satisfaction about their life (Stathi et al., 2012). In terms of psychological well-being, the latest results

show that elderly participants in physical activities underlined the satisfaction of their need of relatedness, autonomy, and competence (Ferrand, Nasarre, Hautier & Bonnefoy, 2012).

Researches show that physical activities have been related to physiological, psychological and social benefits of elderly people (Alfermann and Stoll, 2000; McAuley and Rudolph, 1995 as quoted in Harahousou, 2006). It is of great significance to facilitate elderly sport participation in order to improve elderly people's life quality and health condition. On one hand, it is a big challenge for those sport organizations and NGOs to cooperate in creating preconditions to achieve the above goals by making the relevant sport policies, offering enough sport facilities, organizing sporting and physical activities, which are suitable for the elderly to keep health and well-being. On the other hand, it is also a great challenge for the elderly themselves to be more aware of their health and well-being, and then become more active in physical activities.

In the city of Shanghai, elderly physical participation is becoming one of the key research topics in the academic field. When the city first stepped into aging society in China in 2002, the elderly population (aged 60 or over) accounted for 20% of the whole city population, ranking top in China (Li & Zhou, 2004). Previous researches showed that since the 1990s, due to the social and economic reformation of sport in China, elite sport remained the priority, and was supported by the government. Mass sport began to be paid large attention to by carrying out the National Fitness Program (Zhang 2007; Sui et al., 2006). Therefore, with the improvements in living standard, economic income and health awareness, more and more Chinese people are willing to spend time and money on sport and leisure activities. Sport participation rates in China are largely increasing in the 21st century compared to that during the 1990's.

Moreover, sport participation rate of the elderly (age 60-65) in China is relatively high, which might be due to their discretionary time, health and well-being awareness, venue choice etc. (Su & Wei, 2006). Chinese elder sport participants preferred to choose from low to moderate physical activities, such as jogging, Taiji, martial arts, qigong, swimming, dancing, hiking, table tennis, bowling (Bai & Cao, 2006). Because of the historical, cultural and geographic disparities, there are differences of choices on physical activities among people from different parts of China. Shanghai is the first aging city with a large population of elderly people in China (ifeng, 2009). Shanghai elderly people have their own characteristics and reasons to participate in sport and physical activity. Therefore, it is necessary to have specific research on them in order to encourage additional elderly people to participate in physical activity and create an improved, healthy, and supportive environment for people in later life.

In most of the developed countries, there are increasing public resources and financial support for aging-related issues. More and more proof has been shown to the beneficial role of physical activities in the aging life. Topics of the elderly adults and physical activities have attracted much theoretical and practical interest by the researchers. As a big developing country with the largest aging population, more financial and public resource support is gradually put into the aging population. Under such circumstances, it also attracts many Chinese researchers' attention on the study from children and youth sport participation to the study of the middle-aged and elderly adult sport participation.

In the future, more research questions will relate to the topic of how to get elderly people active and promote successful aging through sport participation in the developing countries. This thesis was carried out with the main purposes of exploring on the reasons and characteristics of Shanghai elderly sport participation to further

understand how sociocultural determinants influence individuals by identifying internal psychological dispositions. Moreover, in spite of the increasing support and encouragement to elder sport participation from the Chinese government after the launch of the National Fitness Program, many elderly people still have difficulties in actively participating in the physical activities. Therefore, according to research results, this thesis also further discusses those main sociocultural and economic constraints that influence elderly sport participation.

This thesis consists of seven chapters: the first chapter includes the background information to show the importance of this research area, the principal findings from previous researches, and the main purposes and nature of the present study. The second chapter shows the literature review with regard to the status quo of aging on the global, national and local levels. The third chapter demonstrates the literature review related to the reasons of elderly sport participation from the cultural, social and psychological perspectives and possible constraints of elderly sport participation. In addition, the status quo of elderly sport participation on the global, national and local levels is described in this chapter as well. From the fourth to the seventh chapter, the methodological choice, data collection and analysis, principal findings, discussion, conclusions and suggestions of the thesis are presented.

2 AGING OF THE POPULATION

Aging population has become a global phenomenon. According to the report from the United Nations (UN hereinafter) about world population aging 2013 (UN, 2013), the number of elderly persons (aged 60 or over) was 841 million people in 2013 and is expected to reach 2 billion in 2050. However, different nations have different criteria for the definition of elderly age. According to the World Health Organization (WHO hereinafter), UN generally use 60 as the cut-off of the age for defining an elderly person (WHO, 2014). In many countries, the retirement age is 65 years old. So in those countries, 65 is usually used as the cut-off age for the elderly people. Compared to those countries, in China the elderly people are always referred to people aged 60 years old or over. This chapter consists of three sections, which mainly demonstrate the status quo of aging on the global, national and local levels.

2.1 Current global aging situation

Due to more and more prominent signs of increasing numbers of elderly people all over the world, the aging issues are paid great attention to nowadays. 1st October was designated as the International Day of Older Persons by the UN (UN, 2012). Aging brings about great impact on global social, economic and political issues. According to the statistics from the UN (2012), it is expected that 50 years later, in many countries, the percentage of elderly people will account for 70% of the whole population. In 2012, the life expectancy at birth was 71 years old (The World Bank, 2012). In 2050, the average life expectancy will be 76 years old (UN, 2012). The elderly population in the world today is over 600 million. In 2020, the world's elderly population will reach 1.2 billion and 2 billion in 2050, of which the percentage of Asian elderly people will

account for 54%. (Wang & Cai, 2011.) For instance, according to statistics of WHO in 2012, the life expectancy of Japanese was 84 years old. Japan is one of the countries with the longest life expectancy in the world (WHO, 2012).

2.2 Current aging process of China

The average life expectancy of China was 75 year-old in 2012 (WHO, 2012). In 1999, China entered the aging society (Report of aging China, 2008). As one of the developing countries, China is now more aware of the economic, political and social problems brought about by aging than last decade. The aging process of China has gone through several periods: In 2000, the population of people over 60 years old was 137 million. From 2000 to 2020, the aging population of China is expected to increase rapidly from 137 million to 229 million. Between 2020 and 2040, the statistics suggest that China will face a high peak aging period and the number of elderly population will reach 374 million. (Cao & Bai, 2000.) Nowadays, it is also under discussion that the current system in China should not only rely on the state's financial funding to pay for the medical and service expenses of the elderly, but should adopt a positive and effective way to solve the problems brought about by the aging. The General Administration of Sport of China (GASC hereinafter) has been promoting concepts of lifelong sports and sport for all to citizens by launching National Fitness Program since 1995 (GASC, 2014).

2.3 Characteristics of the aging situation in Shanghai

According to Shanghai Daily (2014), the Shanghai local average life expectancy in 2013 was almost 82 and half years. The Shanghai Health and Family Planning

Commission said that those who are born in this city can be expected to live until 82.47 years old on average. When considering citizens' health, life expectancy, maternal mortality rate and infant mortality rate of the city of Shanghai are now on a par with many developed countries. The past few years witnessed the continuing growth of life expectancy of Shanghai citizens. Correspondingly, the elderly population in the city of Shanghai will rapidly increase in the following years.

In the end of 2012, the total elderly population (aged 60 or over) in Shanghai was 3.67 million, which accounted for 25.7% of the whole city population. The elderly population from 2011 to 2015 will annually increase by more than 0.2 million. (Xinmin, 2013). In 2015, the elderly population (age 60 or over) in Shanghai will account for 30% of the whole city population (HINEWS, 2012). There will be more and more elderly persons who live alone. The number will continue to increase, especially among people aged 80 or above. The phenomenon of single elderly persons will become more and more easy to see. Moreover, the parents of only one child will gradually become the main body of the new elderly. When the one child in a family gets married and has a child, their parents have become old in age. In 2013, 80% of the new elderly population in Shanghai will be the one-child parents, which is considered as a new trend of the aging population (Li & Zhou, 2004; Chen & Gu, 2005).

3 ELDERLY SPORT PARTICIPATION

In China, elderly people refer to those aged 60 years old or over. Therefore, the target group of the previous studies in China, in regard to sport participation of the elderly, primarily concentrates on people over 60 years old (Fan & Dai, 2001). Elderly sport participation here mainly refers to participation in either casual or organized physical activities for the purpose of improving the physical, mental well-being and longevity of the elderly persons. Here physical activities refer to a broad concept, which includes sport, exercise and sporting-related leisure activities. Through elderly sport participation, it is significant to mobilize elderly persons to participate in appropriate physical activities, specially health-enhancing activities, in order to improve their physical conditions, enhance prevention and treatment of age-related diseases and maintain longevity for the elderly (Tian, 2007).

This chapter consists of four sections as showed in the following part. First section gives general information about reasons, characteristics and constraints of elderly sport participation. Then, the next sections go into details to show the status quo of elderly sport participation on the global and national levels. Furthermore, it gives the information about the local context of Shanghai elderly sport participation, in which the research was done.

3.1 Reasons, characteristics, and constraints of elderly sport participation

More and more studies related to elderly sport participation are from the perspectives of more macro-level social sciences, such as sociology, psychology, economics, political and cultural studies. In addition to people's participation, sociocultural world, also the

self should be examined for understanding life structures (Levinson, 1978 as quoted in Harahousou, 2006). According to J. L. Crompton (2001), it can be concluded from three perspectives, society, psychology and culture to explain reasons for participation in leisure physical activities. Moreover, the study of the sport participation among Shanghai elderly people needs to be brought into the context in which these cultural, social, psychological factors, such as social class and gender may have influence on perceptions, feelings, motives and behaviors of the elderly.

3.1.1 Cultural perspectives about elderly sport participation

Simone de Beauvoir (1972) showed that there exist cultural constructions of undervalued social groups such as elderly people and women. For instance, a positive image of old age should derive from those who can access power. On the contrary, those elderly people who lack property and power would be stereotyped as unattractive (Vincent, 1995). From the perspective of cultural geography, activity including physical activity is valued through the encounter the individual makes the space, and how this part of an ongoing process of self-realization, lay knowledge and identity (Crouch, 2000b as quoted in Crouch, 2006). Individual cultural contextualization helps to identify the reasons that matter and why people do things, for example, the cultural value among distinctive sporting sites (spaces) and people doing sports (actions) there (Crouch, 2006). In general, sociology is essentially about group formation, whereas the issue of identity is at the heart of the subject (Vincent, 1995). Therefore, it is very important to see how people identify themselves and find their senses of belonging in sport participation from the sociocultural perspectives.

Under different cultural contexts, there are more disparities than similarities that can be

shown with regard to the characteristics of elderly sport participation. For example, in Japan, when pensions become major incomes for elderly citizens, they have limited expenses on sport and physical activities. Since the social life also changes in one's later life, elderly people lose certain interpersonal and social contacts after the retirement. In Japan elderly physical activities are often carried out only among intimate friends or a small number of relatively close people. (Wei & Niu, 2005.) In the Netherlands, emphasis is put on lifelong sport in people's later life. Take MEFS (More Exercise for Seniors), which is one of elder physical activity programs in the Netherlands for example. This program was designed by considering the needs, capabilities and desires of the elderly persons. It emphasizes less organized activities of the elderly, but individual ones. (Zhou, 2009.) In Germany, non-governmental organizations make full play to effectively promote the elderly sports. The training of elderly sports instructors is paid much attention to. Elderly persons are divided into different groups according to their features to participate in sports. Volunteers play significant roles in every sector of the elderly sport participation. (Niu & Hu, 2005.) The characteristics of the elderly sport participation in the U.S.A are shown in six aspects of public policy, family and community, health care, academic research, publicity and marketing. Many programs are designed to encourage the elderly to cope with the aging issues, in order to achieve better health and well-being by various physical activities in their daily life. (Zhou, Chodzko & Chae, 2009.)

3.1.2 Social perspectives about elderly sport participation

The social construction of the difference shapes up social inequalities from one group to another. Class inequalities exist in the aging process, and they strengthen, rather than

diminish with age. Oblivion and irrelevance from working class would lower the status of elderly people. Moreover, some researchers even claim that the concept of class does only pertain those who have labor force and thus retired elderly adults and those housewives are not in any class at all. (Vincent, 1995.) Elderly people are deprived by both income and employment. Nevertheless, class structure makes them look like exploiters, rather than being exploited in many aspects of resources such as pensions, health care, public welfare. Therefore, researches on sport participation among elderly people should pay attention to the social and environmental factors that affect their choices and motives.

Structural-functionalist models focus on perspectives of the institutional and societal forces in understanding leisure behaviors. Constructional sociological approaches also give ideas for the social construction of leisure, including sport participation. Proposed in the 1970's, attribution theory contributed to giving reasons to how people engage in social events and the ways those social factors influence people's behaviors. Sociological social psychological methods are commonly applied to the studies of leisure, including sports and physical activities. For instance, the symbolic interactionism pays attention to how people perceive the world and in turn how this leads to their actions. (Mannell, Kleiber & Staempfli, 2006.) Theories in social gerontology attribute to the justification of importance for the elderly to participate in physical activities. For example, activity theory (Burgess, 1960) and continuity theory (Atchley, 1971) show that a high level of physical activity increases satisfaction with life in general and it serves as a form of compensation to uninterruptedly pursue a satisfying life for the elderly (Burgess, 1960; Atchley, 1971 as quoted in Harahousou, 2006).

It can also be seen from the Veblen's classic theory of leisure class (1899) that individuals seemed to display wealth and leisure to claim their social status. The institution of leisure class embodied some activities with special meanings behind it, such as power and ownership. The lower class is always trying to catch up to the higher or noble class by engaging in certain leisure activities, which makes them not purely 'noble' any more nowadays. Examples can be found in golf and bowling. Furthermore, the feminist perspectives showed that many women have structural disadvantages in sport participation, due to socially constructed gender differences and inequalities (Watson et al., 1996 as quoted in Harahousou, 2006). Moreover, it was noted that women participated more actively and persistently than men in some leisure class activities for achieving their positions in leisure class (Veblen, 1999).

Some North American researchers who work in social psychological area are interested in understanding the reasons that why people participate in outdoor recreation. The motivation researches emerged in the 1960's, blossomed in the 1970's, and continued to flourish (Manning, 1999 as quoted in Mannell, Kleiber & Staempfli, 2006). According to social psychology, leisure serves as forms of needs compensations for oppressive work (Mannell, Kleiber & Staempfli, 2006). Nowadays, there is evidence that physical activity can bring people not only physical health, but also mental well-being (Smith, 1996). Some elderly people participated in physical activities, so that they can enhance self-expression and self-confidence. Some think that they can express themselves with exercise, while exercise also gives them self-confidence. (Rasinaho, Hirvensalo, Leinonen, Lintunen & Rantanen, 2006). Moreover researches have also been done on social structure, personality and the symbolic interactionism, which try to explain symbolic meanings for people's actions and interactions (Thoits, 1995).

3.1.3 Psychological perspectives about elderly sport participation

According to previous studies on motives, there still exist problems with vague definitions of motives or motivations. Motives are generally regarded as the direction and intensity of one's efforts (Weinberg & Gould, 2011). For instance, motives for sport participation can be considered as an internal personality characteristic in sport participation or as an external influence from sport participation. However, in this thesis, motives are mainly defined as reasons or explanations for elderly sport participation with the main aim to satisfy their various needs. Thus, sport participation with leisure behaviors and experiences, can be considered as a function of interplaying external social environment and internal psychological dispositions, such as needs, emotions, perceptions. Psychological phenomena have their beginnings in the individual's interactions with his or her social environment (Mannell, Kleiber & Staempfli, 2006).

Previous researches of motivation represented different points of views, including achievement motivation, intrinsic and extrinsic motivations. One of those fundamental motive studies about human behavior as stimulation by the urge to satisfy needs was proposed by Maslow (1943). Maslow's Motivation Theory is related to individual growth and development of the inner strength. This theory is typically represented by five dimensions, including physiological needs, security needs, needs of love, affection and ownership, esteem needs, and self-actualization needs. According to the theory, human needs are able to influence human behaviors. Only unmet needs can influence behaviors as motivational tools. Human needs are arranged in order of importance, from the basic (such as food and shelter) to complex (such as self-actualization). Maslow's hierarchy of needs is from the lower level to a higher level. During different periods of time, different needs manifest in a variety of urgency. The most pressing human needs

are the main reasons that motivate people for action. The highest human need is self-actualization, which is in the most effective and most completed way to express people's potentials.

Another very important theory is Health Belief Model (HBM hereinafter) (Becker et al., 1975), which was first proposed in the field of Health psychology, later applied in sport and exercise psychology. HBM states that health behaviors are affected by social and psychosocial factors, in which the core part is about personal beliefs in health. Those beliefs regulate people's perceptions on threat, thus affecting their possible health-related behaviors. According to HBM, people generally do not take the initiative to exercise, unless they have a certain exercise motivation, a certain level of knowledge of sport and exercise. Besides that, people may take action only when they perceive that they have potential health problems, or understand the benefits of physical activities and feel that it is not difficult to exercise. In general, their actions are affected by the social-economic conditions, demographic and behavioral factors. People will change their actions under the impact of their environment around, such as being encouraged by friends and family or being driven by mass media. From previous studies, researchers found that those who are aerobic exercisers have a stronger exercise motives and they have more knowledge and perseverance to maintain their cardiovascular health. On the contrary, people who are non-exercisers are more vulnerable when facing disease, especially cardiovascular diseases. During 1980s, this theory maintained a high position in sport and exercise psychology. However, after 1990s, this theory has been questioned by some scholars, and thus this model was amended to better apply in the study of psychology. Thus Harrison (1992) and others have modified the model by adding the self-efficacy theory.

Moreover, achievement motivation explains the reasons why people making efforts to finish a task, overcome obstacles and achieve better results than others. One of the achievement theories explaining what motivates people to act, is need achievement theory (Atlomspm. 1974 as quoted in Weinberg and Gould 2003, 61), which is also one very important theory of achievement motivation theories. McClelland proposed a theory based on Maslow motivation theory. McClelland's Achievement Motivation Theory (1967) was about three powerful needs: the need for affiliation, the need for power and the need for achievement. Attribution theory also emerged in the 1970's, which mainly contributed to explaining the cause and effect of people in some events or activities and the effects these inferences on their social behaviors (Mannell, Kleiber & Staempfli, 2006). In recent decades, many studies have been focusing on people's motives and behaviors in sport participation by applying different research methods.

In 2006, Dionigi researched factors that affected motivations and behaviors of the elderly athletes as the aging issues were growing in the developed countries. A combination of research methods was used in the study (Dioniqi, 2006). In 2012, Ferrand, Nasarre, Hautier and Bonnefoy used self-determination theory in explaining elderly people's physical behaviors, and finding out their motivation types for active physical behaviors. Mixed quantitative and qualitative methods were applied in the study (Ferrand, Nasarre, Hautier & Bonnefoy, 2012). In the same year, Stathi, Gilbert, Fox, Coulson, Davis and Thompson (2012) found out in their mixed-method study that the perceived quality and accessibility to natural or constructed sports facilities were the main factors that had effect on elderly people's decisions and initiatives of sport participation. Certain threats or barriers of elderly sport participation included limitations on facility function, lack of motivation, easy accessibility and social company (Stathi et al., 2012). In 2012, a proactivity-based model was used to

demonstrate that future orientation becomes a key motivator for the elderly in practicing physical exercise (E. Kahana, Kelley & B. Kahana, 2012). Motives to participate in sport games have become more social than physical. In 2013, Phillips and Flesner analyzed two factors influencing elderly people's physical activity by using the qualitative method. They mainly designed their research on six aspects: elderly people physical activity experiences, the value of physical activity, threats and obstacles to physical activity, measures to activate physical activities, their needs for physical activities (Phillips & Flesner, 2013).

From the national scope of study, the majority of the Chinese elderly sports participants were health cultivation-oriented and disease prevention-oriented (Bai, Cao 2006). Elderly participants have different motivations and choices for sporting and physical activities in Shanghai (Li & Zhou, 2004). Chinese elderly people have mainly the motivation of improving health and fitness, enjoying leisure, adjusting emotions, preventing diseases, social networking, cultivating hobbies and enhancing skills of physical movement to participate in physical activities (Yi, 2010). Moreover, according to Zhang, Li (2012) and Zheng (2007), elderly people from other cities in China generally participate in physical activities with the motivations to achieve physical and mental well-being, preventing or curing diseases, socializing with others, showing personal sport capabilities, cultivating hobbies and so on (Zhang, 2012; Li, 2012; Dong, Zheng, 2007). However, because of the regional traditions, history and culture and environmental factors etc., Shanghai elderly participants' motivations and choices for physical activities may show some differences from that of elderly participants from other Chinese areas. Further study and research in this field may effectively help to find out what factors or constraints lead to motivation and choices of Shanghai elderly people to participate in physical activities.

3.1.4 Constraints of elderly sport participation

According to GASC (2008), the main constraints that limit sport participation in China are time, money, education, lifestyle and sports facilities. For example, in China, the young age group (16-29) and the elderly age group (60-69) are the two most active groups participating physical activities. While the middle-aged group, due to high pressure from work and little leisure time, are generally less active in sport participation. In terms of sports facilities, although the number of sport facilities is increasing rapidly in the recent decades, from 850000 in 2003 to over one million in 2011, the average square meters of sports facility for each citizen still remains low due to the large population in China (Fan, Hong, Min & Guan, 2013). Nowadays, the environmental problems seem to become bigger constraints to sports participation in many areas in China. As what can be seen in the capital city of China in 2013, because there were serious levels of air pollution, many people stopped outdoor physical activities for half months (China Meteorological Administration 2013 as quoted in Fan, Hong, Min & Guan, 2013).

Constraints that influence elderly people to participate in physical activities are usually both societal and individual. On the societal level, constraints are not necessarily formed by age, but rather associated with social class, structure, gender, and the sociocultural and historical contexts (Freysinger, 2002 as quoted in Harahousou, 2006). Despite that, constraints of elderly sport participation may play the role as a mirror to reflect the constraints in people's later life. Therefore, it could become one purpose for an elderly adult to participate in sport to hide his or her aging status and make a difference from oneself and others (Lolb, 2000). Therefore, inequalities are further amplified even inside the age group as different advantaged and disadvantaged individuals.

Godbey and Barnett (2007) pointed out that social situations are not all created equally (Godbey & Barnett, 2007). Take many developed countries for example, the government and social welfare departments pay a lot of attention to both the physical health and mental well-being of senior citizens, which try to provide a good environment and services for the elderly to take exercise, especially the most suitable sport games for them. Despite that, according to the study results of scholars in European countries (including Finland) and America, there still exists unmet demand for physical exercise among elderly persons (Rantakokko & Iwarsson, 2010; Godbey, Barnett, 2007). As a developing nation, many problems currently exist in sport participation for elderly people in China. With the rapid aging process, the lack of government funds, relevant policies and recommendations, and professional physical activity instructors turned out to be great constraints to sport participation among the elderly.

It is hard to see any national recommendation in China, especially for the elderly. While in the US and European countries, there are a lot of discussions on physical activity recommendations for health. In 1995, the U.S. Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (ACSM) made the recommendation to suggest that adults should take 30 minutes of moderate-intensity physical activity. In 2007, the American Heart Association (AHA) and the American College of Sports Medicine (ACSM) proposed the recommendation to suggest that adults aged 18-65 years should take moderate-intensity aerobic physical activity for a minimum of 30 min on five days each week or vigorous-intensity aerobic activity for a minimum of 20 min on three days each week. The U.S. Department of Health and Human Services (DHHS) made the physical activity recommendations in 2008, which especially focused on the 150 minutes a week in total instead of saying five times 30

minutes per week. (Oja, Bull, Fogelholm & Martin, 2010.) In 2010, the World Health Organization (WHO) set global recommendations on physical activity for health, including that people aged 65 or over should do at least 150 minutes of moderate-intensity aerobic physical activity or more than 75 minutes of vigorous-intensity aerobic physical activity per week (WHO, 2010).

In general, a need for national and regional guidelines for physical activity was also expressed. For instance, the EU and Finland have their own recommendations for health-enhancing physical activity (HEPA). In China, according to the suggestions from some researchers, the criteria is that people should do at least three times of physical activity per week with the minimum of 30 min for each time and moderate- or vigorous-intensive physical activities (Fan, Liu, Min and Guan, 2013). While for the elderly adult, it recommended that at least three times a week for 20-40 min each time of moderate- and vigorous-intensity physical activities (Xiao, 2012).

On one hand, some senior citizens may lack awareness or knowledge of the importance of participating physical activities in daily life. This makes it very difficult for them to start or take enough time for the physical activities. On the other hand, some elderly people have difficulties in maintaining and fully engaging in physical activities, and gaining enjoyment from sport participation. Thus they become less active or inactive for physical activities.

Biddle, Fox and Boutcher (2000), Grundy and Dangour (2007) argued that generally speaking, the confidence in the ability (self-efficacy) to be active, goal-setting and encouragement or support from others including family, friends, neighbors and health-care workers can affect sport participation. Maintenance of good health and

functional ability and supportive social networks affect sport participation among the elderly (Stathi et al., 2012). Moreover, elderly people should be involved and be encouraged to physical activities in appropriate and desirable ways (Grundy & Dangour, 2007).

3.2 Global elderly sport participation

With the global aging process, many issues related to elderly people, receive a lot of attention. Some countries are making efforts to take measures in all aspects to increase the effective control of aging. These efforts not only aim at improving living conditions of elderly persons and caring their food nutrition, but also contributing to making better sport and physical activity environments for the elderly in order to increase the fitness and well-being of the elderly. Nowadays sports are widespread leisure activities with different age groups including young age, middle-age and elderly people, and different forms of sport participation, such as fitness clubs in private sector, sport clubs in third sector and physical activities organized by the public sector (Tischer, Hartmann-Tews & Combrink, 2011). The studies on elderly sport participation should also be based on specific settings. For example, in some countries, e.g. Finland, several daily life routine activities such as, gardening, picking mushrooms, and household work could also be considered as physical activities of the elderly.

Elderly people around the world who are active in sports could gather around in international level games. Take the Huntsman World Senior Games for example, in October 6, 2014, it will celebrate its 27th anniversary. Started in 1987 as the World Senior Games, it is held every year for international senior sports competition. It is also a platform to promote the idea that good health and physical fitness should become a

way of life, not an occasional hobby (Huntsman World Senior Games, 2014). Although more and more elderly people are aware of the importance to participate in sport and physical activities, there are still many elderly adults who are less active or inactive in sport participation due to the social, economic and cultural situations of nations.

3.3 Elderly sport participation in China

Since 1996, there has been a sport participation policy in China. A sport development plan was made by the central government in 2011 with the aim at increasing the sport participation rate to 32% by 2015 while the number in 2007 was 28.2% (12th Five Year Plan for Sport Development as quoted in Fan, Liu, Min & Guan, 2013). The top ten popular physical activities in China are walking, running, ball sports, cycling, hiking, swimming, dancing, outdoor fitness exercise and gymnastics (Chen 2012 as quoted in Fan, Liu, Min & Guan, 2013). In general, Chinese males have higher sport participation rates than females. However, the elderly female group has a higher sport participation rate than younger women (Fan, Liu, Min & Guan, 2013).

Chinese elderly people in general have comparatively high sport participation rates. GASC reported in 2007 that the Chinese sport participation rate was 28.2% while the sport participation rate of elderly people aged 60-69 was 35.4% (Fan, Liu, Min & Guan, 2013). In 1997, the state launched a large-scale of social surveys on national mass sports (Pan, 2008), which showed that the participation rate of the elderly population who actively participated in physical activities was relatively high. The number of 66 to 75-year-old participants in physical activities accounted for 38.46% of the population of that period age elderly people (Fan & Dai, 2001). The elderly sport participation rate reached a high level, even more than that of people aged from 26 years old to 55 years

old. Chinese elderly physical activities are relatively highly organized on a voluntary basis (Su & Wei, 2006).

It is mainly the community-based organizations such as neighborhood committees that organize elderly people to participate in various sports and physical activities in activity site, such as streets, square places, parks or in some other open places, which are near the family households (Zhang, 2007). There are around 30 people in average and more than 200 people at most in each activity site. Most activity sites have around 3-4 instructors or volunteers, who can teach technical methods to elderly exercisers and organize physical activities. In some communities, towns and streets, there are also some elderly sports associations and clubs. Elderly people prefer long-distance running, Taiji, martial arts, qigong, swimming, dancing, hiking, table tennis, bowling and so on. The characteristics of elderly people's choices of physical activities include weak competition, focusing on activities with rhythm and rhyme, mainly exercising in community-based places. (Bai & Cao, 2006.)

In recent years, the state launched several policies to support physical activities for the elderly. On one hand, the National Fitness Program (2011-2015) stressed the importance of encouraging elderly persons, especially those with disabilities, to participate in a proper number of physical activities. The state also attached great importance to developing the elderly physical activities as one of the main measures to further promote the national fitness campaign. On the other hand, the 12th Five-Year Plan of Chinese Sport Course strengthened the organization and leadership of the sports activities carried out by the elderly, disabled and other special groups. Moreover, the 12th Five-Year Plan of Chinese Aging Course pointed out that with the arrival of the peak growth of elderly population, it is of great importance to further promote elderly

physical activities. (Zhang 2007; Sui et al., 2006.)

3.4 Elderly sport participation in Shanghai

As an international metropolis, the city of Shanghai has a comparatively higher level of economic and cultural development than many other smaller cities in China, which contributes to provide better quality life for elderly person and guarantee sport participation of the elderly by providing varieties of sport facilities in the community, parks and sport venues. (Chen & Gu, 2005). Around 60% of the elderly population in Shanghai frequently participate in physical activities (Shanghai government, 2012).

According to the previous study, a park is the priority place for elderly people in Shanghai to take part in physical activities. After that come sports venues, communities and schools. Elderly people choose parks as priorities to do physical exercise or sporting activities for several reasons. A park usually has big area and a good environment with a lot of green trees and other plants. Thus the air is fresh and has less pollution. People who participate in physical activities in parks can also socialize with each other in the good environment around. (Li & Zhou, 2004).

Jogging is one kind of simple, flexible and moderate-intensity physical activity and has only a few limitations on site and equipment. Therefore it is preferred by the elderly. The group activities such as aerobic dancing (square dancing), and Taiji are also priorities of elderly sport participants. However, other activities such as Weiqi, walking, which have low-intensive physical requirements on participants, are also among Shanghai elderly participants' choices. (Li & Zhou, 2004). Elderly physical activities are mainly in the form of walking, jogging, Taiji, dancing, ball games, chess etc. (Chen & Gu,2005). The popular physical activities among Shanghai elderly persons mainly

include walking, jogging, dancing, Taiji, badminton, chess, Weiqi, biking, fishing, swimming, gate ball etc. (Lu, 2010). Moreover, according to Li (2011), Shanghai elderly people have varieties of choices of physical activities. Generally, females like relaxing and group activities, whilst males prefer individual activities.

4 RESEARCH DESIGN AND METHODOLOGICAL CHOICES

According to the previous studies in the fields of sport sociology, sport and health psychology and gerontology, research questions of this thesis were formulated in the early stages of the research design. In the further stage of the research, quantitative method was applied to tackle the issues of elderly sport participation in Shanghai. In the last stage, data was collected in relation to respondents' demographic information, choices, duration and frequency of physical activities. Their perceptions concerning the reasons why they engaged in sport participation were further analyzed.

4.1 Research Questions

This thesis sought to solve the following main research question: what are the reasons for elderly people in Shanghai to participate in physical activities? Several sub-questions included: What are the characteristics of Shanghai elderly sport participation in terms of their choices, duration, and frequency of physical activities? What kind of gender differences are shown in Shanghai elderly sport participation? What are the possible constraints to elderly sport participation from social, cultural, psychological and economic perspectives?

4.2 Quantitative data

Questionnaires were used to collect quantitative data. A survey was conducted in parks located in different areas in Shanghai. Demographic information was used to gather age, residence area, gender, marital status, income, education, current health status. The motives of the Shanghai elderly people to engage in sport participation were assessed with a questionnaire that included 22 items. They were based on Maslow's motivation theory with four dimensions of physiological and security needs, belongingness and

love needs, esteem needs and self-actualization needs. Different dimensions of questions were put in disrupted order so as to avoid mental suggestion to respondents. 5-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree) was applied into the questionnaire, as showed in the appendices.

4.2.1 Data Collection

In the stage of data collection, three master degree students from Shanghai University of Sports were recruited into the survey team. Therefore, 180 questionnaires were randomly given to participants by four master degree students, Chi Yang, Yi Zhang, Jing Zhu and Pengfei Liu from 1 August to 15 August, 2013 in five parks of Shanghai. Those five parks are located in five areas of Shanghai, Huang Pu Park, in the city center, Min Xing Park, in Northeastern area, Lujiazui Green Land, in Southeastern area, Xin Zhuang Park, in Southwestern areas and Lin Jiang Park, in Northwestern area.

Most of the elderly people participate in physical activities by making use of the place of public areas in Shanghai, such as parks. According to the preliminary observations, a lot of elderly people choose to do physical activities in the parks in the mornings around 6 am to 8 am. Therefore, the survey team was entitled to go to the parks in the morning when a lot of elderly people were there. Before going to the parks, survey team had training in the aspects of the purpose, target group, time and way of data collection in order to ensure the uniformity. The survey team should introduce the purposes of the study to every respondent. Before filling in the questionnaires, respondents were told that questionnaires were anonymous and confidentiality was guaranteed. The target respondents were Chinese people aged 60 years old and over, living in Shanghai, either independently participating in physical activities or belonging to some of the elderly

groups. Respondents were also told to return the questionnaires back to the survey team on the site. In addition to that, they were informed that the approximate duration of each questionnaire was 30 minutes. However, flexibility of time was accepted during the data collection. Small gifts (shopping bags) were prepared beforehand for each respondent with the aim of guaranteeing good cooperation and high return rate. Most elderly people were willing to cooperate and participate in the survey. In the end, 177 questionnaires were collected with a return rate of 98.3%, among which 174 questionnaires were valid, with the effective response rate of 96.6%.

4.2.2 The Implementation of Data Analysis

SPSS 17.0 was applied to analyze all statistical data, focusing on the author's interpretations of findings from quantitative data. Data analysis included reliability and validity test, descriptive analysis, and equality of variances. The data helped to find out problems existing right now in Shanghai elderly sport participation and to further discuss the possible constraints of sport participation as well. Moreover, because of the regional traditions, historical, cultural and environmental factors, Shanghai elderly sport participants have unique and specific characteristics in their ways, reasons and choices for sport participation. In order to better analyze and discuss their sport participation, national and local culture including sport culture, history, economic and political conditions all needed to be taken into consideration in the research.

The scale in the third part of questionnaire was checked for reliability and validity through the methods of calculating Cronbach α and Construct Validity. In this study, statistical software SPSS 17.0 was used to test the questionnaire reliability, thus ensuring the reliability and internal consistency of the questionnaire. In the Reliability

Analysis of SPSS, the Cronbach α value is 0.813. If Cronbach α value is over 0.7, it means that the scale has relatively high reliability. Furthermore, KMO-Bartlett's Test in Factor Analysis of SPSS was used to test the validity. The value is 0.733, higher than the standard acceptable value of validity 0.5, showing that the scale has relatively high validity as well.

5 RESULTS

Results of the analysis were divided into several parts. Demographic information further showed background details about the elderly respondents in Shanghai, including gender, age, education, monthly income and so on. The amount of physical activities provided the information about the frequency and duration of physical activities. Their main choices of physical activities produced the information about the most popular physical activities in Shanghai elderly sport participation with the Chinese characteristics. Then reasons and gender differences in Shanghai elderly sport participation were further discussed accordingly.

5.1 Demographic analysis of the respondents

Respondents of the questionnaires were elderly sport participants who participated in physical activities or exercised in the parks of Shanghai. As can be seen from the table 1, more females (54%) than males (46%) were surveyed. Most aged mainly between 65 and 70 years old, 55.7% of the total number. It also can be seen from the data that respondents mainly had high school (technical secondary school) education level, accounting for 56.9%, which reflects that the total education level was not very high among those elderly sport participants. However, the capability of the respondents to understand the survey should be sufficient. Most respondents could well cooperate with investigators, which could also affect the survey results about perceptions of those elderly sport participants.

In terms of the financial conditions, 4% of respondents had less than 600 RMB (approx. 75 euros) of income per month. Only 13.8% had more than 3000 RMB (approx. 400

euros) of income per month. Most had the income from 600 RMB (approx. 75 euros) to 1500 RMB (approx.180 euros), accounting for 82.2% of the total number. From 2012, the minimum basic living allowance in urban city of Shanghai is 570 RMB (approx. 70 euros). Compared to the standard of monthly minimum wage of Shanghai urban worker's 1620 RMB (approx. 200 euros), which was recently amended in April 2013, most of those elderly sport participants had less purchasing power than other working groups. According to the survey from GASC, Chinese citizens do not have a high purchasing power in sports related activities, though it is increasing. In 2003, the annual expense on sports and leisure activity was only 300 yuan (approx. 40 euros) on average in China, while 462 yuan (approx. 55 euros) in Shanghai. Moreover, elderly people had the lowest purchasing power. (GASC, 2003.) According to a survey conducted in 2008 also by GASC, people spent an average of 593 yuan (approx. 70 euros) per year on sport and leisure activities (Fan & Lu, 2011). However, elderly people are not regarded as necessarily poor in China, and some of them may have better financial conditions than younger generations. As previous research showed that some of the elderly age group is even one of the wealthiest societal groups (Godbey, 1994 as quoted in Harahousou, 2006). But on average, as regard to the relationship between age and financial wellbeing, the elderly population did not benefit as much as the middle age (Vincent, 1995). Chinese elderly people still prefer taking exercise or engaging in daily physical activities in a lower cost or for free.

Furthermore, it also can be seen the results that 16.1% lived alone, 55.2% lived with spouse, and others lived with more than one generation. As regard to those elderly people who live alone, especially the disabled, Shanghai government supports them with extra monthly elderly allowance, from 150 RMB (approx. 20 euros) to 250 RMB (approx. 32 euros) (SRCOA, 2010). Participants answered their subjective perceptions

on their physical conditions, 93.7% thought they were in good or ordinary conditions. This can show that most of those who engaged in physical activities at least 'feel' good, although their real health situations were unknown. It is also the same with satisfaction, if specific needs of elderly people are fulfilled by sport participation, they can feel more satisfied with themselves and enjoyment in life. Moreover, the enjoyment can in turn motivate elderly people to keep active in physical activities. (Harahousou, 2006.)

Table 1. Background information of the respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	male	80	46.0	46.0	46.0
	female	94	54.0	54.0	100.0
Age (years)	60-64	44	25.3	25.3	25.3
	65-70	97	55.7	55.7	81.0
	>=71	33	19.0	19.0	100.0
	Total	174	100.0	100.0	
Education	Junior high school or lower	43	24.7	24.7	24.7
	Senior high school or technical secondary school	99	56.9	56.9	81.6
	Junior College or University	32	18.4	18.4	100.0
Monthly income (RMB)	<=600	7	4.0	4.0	4.0
	601-1500	79	45.4	45.4	49.4
	1500-3000	64	36.8	36.8	86.2
	>=3001	24	13.8	13.8	100.0
Family situation	live alone	28	16.1	16.1	16.1
	live with wife/husband	96	55.2	55.2	71.3
	live with children	41	23.6	23.6	94.8
	live with three or four generations	9	5.2	5.2	100.0
Physical condition	good	62	35.6	35.6	35.6
	ordinary	101	58.0	58.0	93.7
	bad	11	6.3	6.3	100.0

5.2 The amount of physical activities of the respondents

It can be seen in the table 2 that 29.3% of the respondents engaged in physical activities once or twice a week, 47.7% three or four times a week and 22.4% five to seven times a

week. 85.6% did at least 30 min for each session. Since there are no unanimous recommendations of physical activities for different age groups in China, sometimes sport population is often proposed in China to calculate the number of people who physically actively participate in sporting and physical activities with three times a week and at least 30 minutes moderate physical activities in each session (Xu & Rui, 1991). Besides the definition of sport population, only some suggestions of physical activities were given by the General Administration of Sport of China (GASC) on GASC official website. For example, GASC suggested it was more important to focus on exercise frequency than exercise intensity (GASC, 2005). It can extend life span to walk four times a week with at least 15 minutes in each session (GASC, 2013). GASC also suggested elderly people to do aerobic physical activities to help to maintain their cognitive functions and delay senescence (GASC, 2013). In 2014, GASC even proposed to elderly people that it is still good for health, if they could do at least moderate physical activities once a week, such as gardening, washing cars, walking and dancing (GASC, 2014). However there is no duration recommendation for those moderate physical activities.

Table 2. Physical activity duration and frequency of respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Duration (min)	<30	25	14.4	14.4	14.4
	30-45	103	59.2	59.2	73.6
	>45	46	26.4	26.4	100.0
	Total	174	100.0	100.0	
Frequency (times/ week)	0	1	.6	.6	.6
	1-2	51	29.3	29.3	29.9
	3-4	83	47.7	47.7	77.6
	5-7	39	22.4	22.4	100.0
	Total	174	100.0	100.0	

Table 2 also showed that 70.1% of Shanghai elderly people who participated in the survey engaged in physical activities more than three or four times a week, 85.6% at least 30 minutes in each session. Some still haven't reached the criteria in the WHO 2010 global recommendations on physical activity for health, which recommended that elderly people should do at least 150 minutes of moderate-intensity aerobic physical activity or more than 75 minutes of vigorous-intensity aerobic physical activity per week (WHO, 2010).

Although there are no national recommendations in China, the criteria that some Chinese researchers in this field suggested are less demanding than WHO global recommendations. In China, the existing suggestions for physical activities are mostly based on Chinese national conditions and the 1995 U.S. Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (ACSM) recommendations. However, it is still worth considering that whether the current situation needs to be updated based on the newest evidence, for instance, as reviewed for the U.S. Department of Health and Human Services (DHHS) 2008 physical activity recommendation or other international health-enhancing physical activity recommendations.

5.3 The main choices of the physical activities

As can be seen in the table 3, the top 10 most popular physical activities among participants aged 60 or over were jogging, fast walking, square dancing, cycling, Taiji, badminton, table tennis, hiking, gate-ball, and fishing.

Due to the historical and cultural reasons, some physical activities have long-time

important positions in the Chinese culture, for example, biking. Biking has been considered as one of the most important transportation means for Chinese people since the 1990s. However due to the economic development and modernization of the Chinese cities, from 1995 to 2005, the number of bicycles in China fell by 35%, reducing from 670 million to 435 million. At the same time, the number of private cars has doubled, increasing from 4.2 million to 8.9 million. (Shbicycle, 2012.) Despite the total number of bikes declining in Shanghai, bikes are no longer very practical transportation means in metropolis. Bicycle culture is still popular among the elderly and now becoming trendy among young people as well. Shanghai has over 1000 free bike renting sites all over the city with more than 20000 rental bikes (Qqddc, 2008). Therefore, it is convenient for the elderly to find free bikes and make biking part of their daily exercise.

There are economic, social, political, historical and cultural factors that have effects on Chinese elderly sport participation and people's preference on physical activities. In terms of the economic factors, recent years witnessed the rapid development of economy in China. People have higher income, better social welfare and social security system, improving life quality and life-style. However, compared with other age groups, elderly people in China normally have less income, as what have already mentioned before according to the table 1. Thus, elderly people may have less purchasing power for leisure and certain sporting activities and products, e.g. for sport equipment, sport shoes, sport clothes, venue fees and so on. Some physical activities are not very popular among the elderly (e.g. tennis), because elderly people tend to choose those physical activities which have less requirements concerning equipment, shoes, clothes and the venue, e.g. walking, jogging, Taiji, dancing and so on. Furthermore, in some parks of Shanghai, there are some free sport facilities that could be used by everyone. This is one

reason why parks are favored by a lot of elderly exercisers.

Table 3. Physical activities among the elderly (participants' age: ≥ 60).

		Responses		
		N	Percent	Percent of Cases
\$choices ^a	Brisk walking	55	12.0%	31.6%
	Jogging	58	12.6%	33.3%
	Taiji	35	7.6%	20.1%
	Aerobic dancing(square dancing)	41	8.9%	23.6%
	Badminton	34	7.4%	19.5%
	Table tennis	30	6.5%	17.2%
	Swimming	14	3.0%	8.0%
	Bowling	11	2.4%	6.3%
	Fishing	21	4.6%	12.1%
	Gateball	25	5.4%	14.4%
	Pool	15	3.3%	8.6%
	Hiking	27	5.9%	15.5%
	Golf	13	2.8%	7.5%
	Strength training	17	3.7%	9.8%
	Weiqi	14	3.0%	8.0%
	Bridge	7	1.5%	4.0%
	Cycling	35	7.6%	20.1%
Others	8	1.7%	4.6%	
Total	460	100.0%	264.4%	

a. Dichotomy group tabulated at value 1.

Many Shanghai elderly people still try to avoid intensive activities in the fear of falling injuries, fractures and so on (online.sh, 2012). Elderly people are afraid to go to hospitals, which could cost them a huge amount of money due to sports injuries. Moreover, serious injuries are not only physical, but also social and mental crisis for individuals. For the elderly in Shanghai, injuries could bring them and their children financial burdens, the short-term and long-term social isolation and the fear to restart some sporting and physical activities (Fan & Huo, 2011).

In terms of the social factors, institutional and societal determinants also influence elderly people to participate in certain physical activities or leisure activities in certain places (Crouch, 2006). As one of the economic, political and cultural metropolis in China, Shanghai has a large elderly population (age 60 or over) accounting for 1/4 of the total population. According to the Ministry of Human Resources and Social Security of the People's Republic of China (1999), the statutory retirement age in China is 60 years old for males and 50 years or 55 years old for females in terms of their positions in the workplace. And the retirement age will be extended by the year of 2020. This is due to the social reforms in China, with the aims of restructuring the population, supplying abundant labor resources, and enhancing the social security (CNTV, 2013). Compared to other groups of population, retired people usually have more time but less income resources. The continuing aging process creates burden and urges the city to promote the services for the elderly such as providing enough hospital beds, day care services and supports for the elderly. Therefore, it is considered as one means to relieve those burdens through promoting physical activities among the elderly by the municipality.

Currently, Shanghai elderly sport participation is also in coherence with Chinese national policies. For example, the National Fitness Program (2011-2015) has a clear aim to facilitate elderly sport participation in all levels of the nation, since physical activities are considered as effective and positive interventions to improve physical, mental and social well-being of the elderly (SOHU, 2011).

Moreover, from the perspectives of body and space, it can be seen that in those places such as streets, square places, parks with large space and free sport and fitness facilities,

elderly people will choose to do physical activities e.g. walking, jogging, and dancing. It is also an outcome of social construction of space (Borgogni, 2013). On one hand, parks are important for elderly sport participation, which shows the meaning of spacing (Crouch, 2001, 2003 as quoted in Crouch, 2006). On the other hand, under some circumstances, activities, here as physical or sporting activities could be self-generated. Then the meaning of sites is configured, contextualized and constituted almost wholly by the participants themselves (Crouch and Tomlinson, 1994 as quoted in Crouch, 2006). Therefore, this is one interpretation of the phenomenon that those peaceful, quiet and green parks are mostly favored by elderly people to organize themselves and participate in various physical activities in such a crowded, noisy and big city of Shanghai.

In terms of the historical and cultural factors, on one hand, many elderly people do not have the skills from their young age for the skill-required sporting activities, such as tennis, swimming, gym, golf. On the other hand, elderly people prefer those comparatively moderate-intensity, peaceful and so-called health cultivation or Yangsheng (Dear, 2012) activities, such as Taiji, fishing, hiking, gate-ball and so on. Chinese traditional culture emphasizes the harmony of the body and the space. It looks upon those activities with slow pace and deep breath. Coping with all motions by remaining motionless is one important idea of Chinese traditional sports such as Taiji, Weiqi and so on. Therefore, some kind of sports are not favored or avoided by elderly people, for the reason that they are considered too intensive and easy to get injuries (Tianjin Daily, 2008).

5.4 The reasons for Shanghai elderly sport participation

Elderly participants were also asked to give scores to 22 items on their reasons for sport

participation according to their perceptions on them. As shown in the table 4, the order is from the highest score to the lowest one. Dating with friends, keeping thirsty for knowledge, learning scientific exercise knowledge, getting social identity, displaying creativity and ability, pursuing happiness and interest, killing boring time after retirement, keeping social status, self-realizing and showing self-value, and meeting new friends rank the top 10 motives for sport participation, with respectively scores of 4.36, 4.32, 4.29, 4.25, 4.24, 4.24, 4.23, 4.21, 4.20 and 4.19.

Table 4. Motives for sport participation among the elderly.

	Minimum	Maximum	Mean	Std. Deviation
Date with friends	2	5	4.36	.655
Keep thirsty for knowledge	1	5	4.32	.720
Learn new scientific exercise knowledge and skills	1	5	4.29	.728
Get social identity	2	5	4.25	.719
Display creativity and ability	2	5	4.24	.752
Pursue happiness and interest	2	5	4.24	.719
Kill boring time after retirement	1	5	4.23	.700
Keep social status	1	5	4.21	.757
Self-realize and show self-value	2	5	4.20	.688
Meet new friends	2	5	4.19	.724
Obtain enjoyment of visual sense	2	5	4.19	.716
Synchronize with fashion	2	5	4.18	.768
Self-challenge	2	5	4.18	.663
Improve aesthetic taste	2	5	4.17	.763
Get attracted by beautiful nature	3	5	4.17	.740
Guide others	1	5	4.15	.753
Improve living quality	2	5	4.14	.802
Get a sense of belongingness as a group member	2	5	4.12	.747
Realize youthful dream	1	5	4.11	.779
Adjust and eliminate negative mood	2	5	4.08	.747
Keep health and well-being & prevent disease and sequelae	2	5	4.07	.772
Delay senescence and maintain physiological functions	1	5	3.70	.882

*Means of the scores given to the options selected by the respondents: 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree.

There are many researches related to the justification of reasons why many elderly people are motivated as follows. First, physical activity in this case may serve as need compensation for elderly people. For instance, it can be considered as a compensation for disconnection with social networking after retirement (Mannell, Kleiber & Staempfli, 2006). Second, physical activities are very important for the elderly in their later life, in that it can play a significant role in successful aging and life satisfaction (Harahousou, 2006). Third, physical activities give chances for the elderly to date with friends in certain familiar places and let them feel safe instead of staying at home alone. (Crouch, 2006). Fourth, the embodied practice in physical activities is significant in terms of the individual life, self-identification and relations to the world, as an identity (Burkitt, 1999 & Crouch, 2003a as quoted in Crouch, 2006). Fifth, evidence showed that exercise or physical activities are related to the positive mood and positive psychological benefits, especially in the case of moderate-intensive exercise (Hansen, Stevens & Coast, 2001). Sixth, more elderly people will participate in varieties of physical activities if the importance of sport and physical activities to health and well-being is well known (Wankel and Berger, 1990; Blair, 1993 as quoted in Harahousou, 2006).

The case of China is different from some other Asian countries where a lot of the elderly population remains sedentary. Some Chinese elderly people are even more active than other age groups in physical exercises as a form of pastime (Harahousou, 2006). This may be due to the cultural background dating back to ancient China when people put emphasis on longevity and Yangsheng (Dear, 2012). Then, some elderly sport participants may regard sport participation as a good way to achieve longevity.

Table 5 shows the results of different dimensions of motives for sport participation

among those elderly participants. The order of the motives for the Shanghai elderly to participate in physical activities are to meet esteem needs, belongingness and love needs, self-actualization needs and physiological and security needs, which are listed according to the means of 4.2519, 4.2141, 4.1954 and 4.0895 respectively. This order reflects what elderly people need and how the social inequalities are reproduced in old age, even becoming amplified in China.

On one hand, elderly people are considered as those most likely to be poor, though some of them are richer than their previous generations. However in China, people have stereotypes on them to be the most 'money-saving' group, in that they need to preserve their money in case that they get serious diseases in later life, which will be a big cost for them. And they are afraid of giving financial burdens to their offspring and relatives. (Fan & Huo, 2011.) And in recent years of China, those who turn to become elderly people have unique situation with the Chinese characteristics that they have only one child under one-child policy. This national policy was launched in 1979, when China suffered heavy economic, social and environmental problems. The local policy in Shanghai was revised by the government in 2003, stating that it is possible to have two children if under certain circumstances, e.g. both of the parents are an only child (NHFPCPRC, 2003). And from 1 march, 2014, the content of the local policy in Shanghai was adjusted again to further relax one-child policy (HeXun, 2014). However, those persons as one-child in the family are called 'sandwich persons' (Tencent, 2013), because they are expected to look after their last generations (old parents, sometimes grandparents as well) and their next generations (young kids). Many elderly people thus do not want to become 'burdens' to their children.

On the other hand, there is a kind of ideological blindness to the real interests of elderly

people. From the perspectives of Marxian on exploitation and class, elderly people have limited access to the means of social distribution, because of physical disabilities, negative body images and other social barriers of ageism. Elderly people may have common interests imposed on them by a particular social structure and their interest is also created by the media. For example, it is emphasized in the media and law that the importance of family support and service to elderly people for meeting their belongingness and love needs in order to alleviate the social burdens under current unsound social security and welfare systems for the elderly in China. Negative stereotypes regarding elderly people make them have even more difficulties to organize and express their real interests. In China, those inequalities in old age could be even in different level in different places of China. Although Shanghai is one of the economically most developed regions in China, it also has disparities in pension insurance systems between urban and rural areas. On 7 February, 2014, a decision was made by executive meeting of state council of China to establish a unified national pension insurance system for urban and rural regions in China (Tu, 2014).

Table 5. Four dimensions of motives for Shanghai elderly sport participation (n=174).

	N	Minimum	Maximum	Mean	Std. Deviation
Esteem needs	174	2.33	5.00	4.2519	.49588
Belongingness and love needs	174	3.00	5.00	4.2141	.42899
Self-actualization needs	174	3.00	5.00	4.1954	.36891
Physiological and security needs	174	2.86	5.00	4.0895	.42264
Valid N (listwise)	174				

Sport participation can be purely enjoyable for the elderly, but it can also fulfill higher cognitive or psychological needs for elderly people (King, 1996 as quoted in Harahousou, 2006). The first two needs are esteem needs, belongingness and love needs. In a youth-oriented culture, elderly people find the changes in later life compared to

earlier life mainly in aspects of limited income, declined health, decrement of social status, loss of social companions, lack of skills and knowledge for new things, increment of anxiety and depression. There is one negative stereotype called ageism, sometimes over-generalizing this group of people. Therefore, elderly people are eager to find ways to make compensations and the platforms to reconstruct both their public image and self-concept. Participating in some prestigious activities, such as golf can help elderly adults to keep or increase their social status and social connections (Harahousou, 2000). People's taste, preferences and choices of specific activities may change over time from earlier life to later life. However, their intrinsic motives and complex needs can remain continuity. Some elderly people care what others think of them and thus want to meet the expectations of others, especially when they are suffering negative effects of physical and mental aging.

Moreover, sport participation for elderly people can provide channels of information, opportunities of communication and availability within a social group, a circle or a community on a societal level. It can also offer them platforms to avoid social isolation, freedom to show themselves, chances to break aging stereotypes on individual level. Group physical activities can help elderly adults satisfy their needs of belonging and have opportunities to seek long-term friendships and relationships with other group members. Having a strong social network and good social interaction with friends, parents, and colleagues could enhance both physical and mental well-being of people in later life (Harahousou, 2006). According to one research report in China, sport participation was taken in different organizational forms, among which participation with friends was the most popular one (Fan, Liu, Min and Guan, 2013).

Then other two needs are self-actualization needs, physiology and security needs,

respectively in 3rd and 4th positions of the order. They are also very important in explaining the reasons for Shanghai elderly people to participate in physical activities. There is consistency and continuity in interests of engaging in sport and leisure activities, many elderly people either take sport experiences not only as means to keep health and well-being, but also sources for keeping elderly life patterns or seeking the new experiences as ways of pursuing enjoyment, and finding values in later life. From sport participation, it is easier for them to find a sense of belonging, especially in Chinese collective culture, to decrease the fear of stress and anxiety, such as the feeling of insecurity in unsafe neighborhood, anxiety of social isolation after retirement and the depression of living alone due to widowhood or divorce.

In conclusion, the need for achievement, success and mastery does not change with age (Harahousou, 2006), due to various social losses with aging, Shanghai elderly people perceived that different kind of needs can be satisfied through sport participation. Esteem needs, belongingness and love needs, self-actualization needs and physiological and security needs are all important but perceived different positions in order for Shanghai elderly sport participants.

5.5 Gender differences in Shanghai elderly sport participation

In the table 6 it can be seen that male and female participants have relatively significant differences in choosing several physical activities, such as Taiji, aerobic dancing (square dancing), badminton, gate-ball, swimming, golf, Weiqi and cycling. Among those activities, female elderly participants prefer Taiji, aerobic dancing (square dancing), badminton, while male elderly participants prefer swimming, gate-ball, golf and cycling. However, traditional Chinese culture admires that it is better for women to take part in

activities such as dancing and Taiji, which include aesthetics, more femininity and less masculinity. Meanwhile, physical activities of obvious masculinity such as strength training and golf, were not preferred by many females, especially elderly females are in fear of injuries as well.

With the launch of the National Fitness Program, more and more fitness facilities (fitness path) are built on street, in residential communities, parks and so on. It can be seen that some female elderly people also would like to do some strength training by using those free facilities. Also female elderly people could have varieties of choices as males have. They are even more active to participate in some of those leisure and sporting activities, which were considered as noble sport or dominated by males before, such as bowling, golf and so on. Therefore, leisure or other sporting activities for women has great potentials to resist cultural stereotypes and constraints on various aspects of life (Henderson & Shaw, 2006). Moreover, diversity of sport participation for the females also has significance to women's sexual freedom. The meaning of making choices by female participants is like what Steinam stated that, the greatest gift we give one another is the power to make a choice in that the power to choose is even more important than the choices we make (Steinam, 1995 as quoted in Henderson & Shaw, 2006).

However, the different choices made by female and male participants can also reflect that social construction of masculinity is still there influencing both genders' sporting lives. Men also face problems when some physical activities do not fit the ideal image of masculinity. Therefore, their options and choices are disadvantaged and constrained. For example, there are less male participants choosing dancing than females. And the total amount of choices made by males is less than females in the survey, as seen from

the table 6.

Table 6. Gender differences in choices of physical activities.

			gender			
			male	percentage	female	percentage
\$choices ^a	Brisk walking	Count	24	30.00%	31	32.98%
	Jogging	Count	27	33.75%	31	32.98%
	Taiji	Count	12	15.00%	23	24.47%
	Aerobic dancing (Square dancing)	Count	11	13.75%	30	31.91%
	Badminton	Count	12	15.00%	22	23.40%
	Table tennis	Count	15	18.75%	15	15.96%
	Swimming	Count	11	13.75%	3	3.19%
	Bowling	Count	3	3.75%	8	8.51%
	Fishing	Count	9	11.25%	12	12.77%
	Gate-ball	Count	14	17.50%	11	11.70%
	Pool	Count	8	10.00%	7	7.45%
	Hiking	Count	14	17.50%	13	13.83%
	Golf	Count	10	12.50%	3	3.19%
	Strength training	Count	9	11.25%	8	8.51%
	Weiqi	Count	9	11.25%	5	5.32%
	Bridge	Count	4	5.00%	3	3.19%
	Cycling	Count	20	25.00%	15	15.96%
	Others	Count	5	6.25%	3	3.19%
Total	Count	80		94		

Table 7 shows that 48.93% of the female participants would participate in physical activities 3-4 times per week. Compared to 46.25% male participants did the same, females seemed to comparatively have a high level of involvement in physical activities too, although 21.27% of female participants did 5-7 times per week less than 23.75% of male participants did. In terms of average frequency, the male participants were still more active than the female participants in sport participation. Previous studies showed that many women were more likely to take on their family roles at a young age, therefore when they grow old and relinquish from those roles before, they would like to

return to their personal activities, such as being involved in sport and physical activities (Bialeschki and Michener, 1994 as quoted in Harahousou, 2006). In the old time of China, it would even be considered as one virtue that women took on family roles rather than go to work. Therefore those elderly ladies who might have the physical capacity for physical activities however due to some reasons, they only had chances to display those capabilities in their later life. Then there came the phenomenon that as the involvement level of some physical activities decreased with the aging progress, many women seemed to become more active in sport participation when they grew older.

Table 7. Gender differences in frequency of sport participation (n= 174).

		gender		
		Male	Female	Total
		(%)	(%)	
Frequency	0	0 (0)	1 (1.06%)	1
(times/week)	1-2	24 (30.00%)	27 (28.72%)	51
	3-4	37 (46.25%)	46 (48.93%)	83
	5-7	19 (23.75%)	20 (21.27%)	39
Total		80	94	174
Average frequency (times/week)		3.49	3.42	

6 DISCUSSION AND CONCLUSIONS

Previous results reveal that what perceived by the Shanghai elderly people as the most important needs to meet through sport participation are esteem needs. Reasons in order of importance for the Shanghai elderly to participate in physical activities are to meet esteem needs, belongingness and love needs, self-actualization needs and physiological and security needs. Shanghai elderly people have their own characteristics in sport participation. Results show that the top ten popular physical activities among Shanghai elderly sport participants are jogging, brisk walking, square dancing, cycling, Taiji, badminton, table tennis, hiking, gate-ball, fishing. It indicates that Shanghai elderly people tend to choose those moderate-intensity activities. Since elderly Finns are among the most active groups in physical activities even in the world level as discussed before, here a comparison was made between Chinese and Finnish elderly sport participations in terms of physical activity choices. The top ten physical activities among elderly Finns are walking, biking, Nordic walking, skiing, gymnastic, swimming, gym, water gymnastic, dancing, jogging (sport.fi as quoted in Sport in Finland, 2012). Although, disparities are obvious, there are some similarities, such as both elderly people in Finland and China like walking, biking, dancing and jogging.

Moreover, Shanghai elderly people tend to choose the physical activities that do not have high demanding for the venues, facilities, equipment and sporting skills. For example, in order to play tennis, people need to have the tennis skills, have tennis rackets, tennis shoes, sportswear, other sports products like bottles, bags, hats, sunglasses, and they have to go to tennis court. While Shanghai elderly people play Taiji in a city public park every day, they just wear loose clothes and play in a peaceful mood. The choices, durations and frequencies of sport participation show that there are gender

differences in sport participation between Shanghai female and male elderly adults. Current social construction of masculinity might influence both genders' choices of physical activities. However, according to physical activity frequency of the respondents, male elderly sport participants are still more active than female elderly sport participants in Shanghai.

Furthermore, there is lack of specific recommendations for HEPA in China. As seen in previous studies (e.g., Gratton et al. 2011; European Commission 2009 as quoted in Vehmas and Ilmanen, 2013), Finnish people in general are very active in sport participation and among the highest levels in Europe. 75% of the senior Finns exercise at least once a week (Finnish Sports Federation 2010a; Tilastokeskus 2013 as quoted in Vehmas and Ilmanen, 2013). Therefore, take the Finnish physical activity pie as a good example to show the elderly how to be active in sport participation. Chinese recommendations for frequency and duration could also be categorized into types of physical activities. Since, sports and physical activities are highly emphasized in Finnish society. Finland also gives specific recommendations for citizens to engage in physical activities. For example, the Finnish recommendation is illustrated by a physical activity pie that 2h 30 min of moderate activities or 1h 15min of vigorous activities for people aged 18-64 (UKK, 2009).

Besides what have been discussed above on the basis of the research results, it is also needed to further discuss the recognition of the individual choice and agency as well as multiple systems of inequalities and possible constraints of Shanghai elderly sport participation. Moreover, those constraints could be divided into two categories from perspectives of personal level and structural level.

On the personal level, constraints include poor support from family, friends, peers and neighbors; discouraged participation by ageist stereotypes and sociocultural norms. Such as in widowhood family, sometimes it would be more difficult for the elderly people to initiate physical activities if the persons do not have partners to go together. Or elderly people's friends and neighbors are more interested in some other recreational activities such as Majiang, which is one kind of national game played usually by four people sitting around a square table for a long time. They would rather join the sedentary activity than doing physical activities. Moreover, some media even helped to promote playing Majiang as a longevity tip for the elderly by demonstrating the example of one old man living in Shanghai aged 100 who likes playing Majiang a lot (Sohu, 2009). And some media claimed that the function of playing Majiang to prevent senile dementia has already had scientific proof (Xinmin, 2012). However, it is still controversial whether Majiang is really beneficial for the elderly. Some other determinants that restrict their sport participation include some stereotypes regarding the elderly, e.g. strength training is not suitable for Chinese seniors (Li, 2007).

On the structural level, constraints include lack of venues and facilities in public, community and private sectors for the elderly, lack of programs specialized for the elderly, high cost of fitness and leisure activity, high cost of transportation means and historical and sociocultural reasons for perceived lack of skills.

The sport venues and facilities for the elderly in the city of Shanghai are in shortage. Many community facilities are taken up by young and middle-aged adults. Although elderly people have stronger needs than other groups of people, there are fewer facilities suitable for them, or they are taken up by younger persons (Zeng & Wu, 2006). Despite in 2011, Shanghai had 7741 community sport facilities, 764 public playgrounds, 859

fitness trails and 80% of school sport venues open to the public (Xinmin, 2011), compared to the large population of 24 million people living in the city of Shanghai, sport venues and facilities are still in shortage in general. Sometimes conflicts between elderly sport participants and other age groups of people are resulted from the occupation of public space for physical activities. For example, the noise of some elder people dancing in the residential places made some young people very angry and unsatisfied (Wangyi Sport, 2013).

The National Fitness Program is a general program guiding the sport for all on the state level of China. Although it also stresses the importance of encouraging the elderly sport participation, it is not a specialized program that considering the specific needs, interests and patterns for the elderly. On the municipal level of Shanghai, according to National Fitness Program, in 2004 and 2005, there was a everybody exercises program with the purposes to encourage every Shanghai citizens to learn and participate in at least one kind of physical activity every week (SAS, 2004). This program was supported by both Shanghai Administration of Sport (SAS) and the administrative office for aging. Since 2012, the national conference on creative physical activity programs for the elderly has been held twice in China. The latest one will be held in 12-15 May, 2014 in Jiangxi Province. The aim of this conference is to collect ideas for programs and methods specialized in promoting physical activities among the elderly (TSAEC, 2014). Generally speaking, not only on the state level, but also in the city of Shanghai, there are not enough programs specialized for the elderly at present.

The high cost of fitness and leisure activity can be seen in the metropolis city of Shanghai compared to other smaller cities in China. For instance, the average annual membership fee is from 1000 RMB (120 euros) to 4000 RMB (500 euros), which will

be a comparatively high cost for the elderly (KMCHINA, 2012). Some leisure activities such as golf practice in driving range in some parks of Shanghai also have high price. Take the driving range built in 2011 in Huangxing Park, Yangpu District of Shanghai for example. The annual membership fee was around 4000 RMB (500 euros) for the promotion price (HGDR, 2011), so the price is even higher in the normal season.

Shanghai has a comparatively high cost of public transportation means compared to other big cities in China. For example a Shanghai city bus ticket price is from 2 RMB (0.25 euros) and a metro ticket price is from 3 RMB (0.35 euros) according to the distance without any discount for bus card or student card, while Beijing city bus ticket price is from 1 (0.12 euros) with 60% off discount for bus card and 80% off for student card and metro ticket price is only 2 RMB (0.25 euros) for any distance (YNET, 2013). Although elderly people aged over 70 with a local Shanghai identity card could be exempted from public transportation fee, still a large number of elderly people living in Shanghai have to pay for the public transportation means. This may limit many of them to travel long distances to reach the sport venues, such as Shanghai Oriental Sports center, one of six municipal sports center, is located far away from city center and nearly in the terminal station of Shanghai metro line 8 in Pudong District (shmetro, 2012).

With the opening up and reform policy being taken in China in 1970s, school physical education gradually reset its position in the whole education systems. It is further consolidated by the launch of several national policies, e.g. the School Physical Education Ordinance in 1990, the Outline of Educational Reform and Development in 1993, the Decision of Promotion of Comprehensive Quality Education in 1999, and the Recommendation for Promoting School Physical Education in 2006 etc. (MEPRC,

2009). For a long time, sports or physical activities are downplayed in the school education system in China. Many schools have only few P. E. classes, or even canceled P.E. class in order to better study those so-called main subjects such as Chinese, mathematics, English and so on. Nowadays, students have varieties of choices of playing sports inside or outside of school. They learn sports skills, such as tennis, badminton, swimming, table tennis, bowling, snooker at very young age. However, as regard to elderly people, on one side, they haven't been in a good environment to learn sports skills. On the other side, they have more difficulties in learning new skills at old age. Thus, the lack of facilities and skills limits some of their choices in sport participation.

In conclusion, the order of the reasons of the importance for the Shanghai elderly to participate in physical activities are to meet esteem needs, belongingness and love needs, self-actualization needs and physiological and security needs. Shanghai elderly people tend to choose low or moderate-intensity aerobic activities, most of which do not have high demanding for the venues, facilities, equipment and sporting skills. Current social construction of masculinity and femininity might influence both genders' choices of physical activities. However, Shanghai male elderly sport participants are more active than female elderly sport participants in the physical activity frequencies. Possible constraints include poor support from family, friends, peers and neighbors; discouraged participation by ageist stereotypes and sociocultural norms; the lack of sport venues, facilities and specific programs for the elderly; the high cost of leisure and transportation, and other constraints from both personal and structural perspectives.

7 SUGGESTIONS AND EVALUTATION OF THE THESIS

Suggestions to the decision makers in China are accordingly proposed, including building sound and multiple public policies, reorienting positive aging image and creating supportive environments to empower the elderly. In the end, thesis evaluation helps to reflect on what has been learned in the whole process of making a master thesis and to explore some future research ideas with regard to sport participation among the elderly.

7.1 Building sound and multiple public policies

In order to make better policies and programs for promoting Shanghai elderly sport participation, the related authorities e.g. the state council and General Administration of Sport of China should understand the realities of elderly people's daily life and their needs and interests under local sociocultural context in order to design appropriate policies and programs. For example, Shanghai elderly people may be gender sensitive and interested in programs that not only promote independency, health and well-being, but also more meaningful social interaction, self-accomplishment and recognition by others. Moreover, a concept of active city is very popular among Western countries. This concept has been developed to increase sport participation, which means that at the city-level there is more emphasis on how to get physical activities on the agenda of decision-makings (Kokko, 2014). An active city should gradually become vision for the city of Shanghai. The elderly age group should be a crucial part to form an active city. It is of great importance to apply health promotion (HP) and health-enhancing physical activity (HEPA) perspectives into planning supportive policies and practical programs, in that health and well-being issues are important factors for elderly people in

participating in sporting and physical activities. Take the sport and HEPA in Finland for example. Sport falls under the Ministry of Education and Culture while HEPA is under Ministry of Social Affairs and Health. Since 1990's, there have been state funding and major actions for HEPA promotion. And as regard for the specific group of the elderly adults, strength to elderly program was launched in 2004 in Finland (Kokko, 2014). Sport organizations at the local level of Shanghai and on state level should also be encouraged to undertake HEPA, especially for the elderly.

7.2 Creating positive aging image and supportive environments for the elderly

One response to ageism has been the systematic attempts to produce positive images of elderly people. In a sense, the active elderly sport participation challenges current culture, which is less aging-oriented but more young-oriented by reconstructing of the public images of the elderly. Sport resources distribution should be balanced between the elderly and young people so as to alleviate the conflicts among different age groups. As appeared in most developed countries, the current status of the elderly population encompasses more activity and independence, more positive and active image with an emphasis in active sport involvement in later life (Harahousou, 2006).

In terms of creating supportive environments for the elderly, it is important to create the sociocultural environments in which elderly people can easily engage in healthy and age-appropriate life-styles, accept the fact of loss in aging process, and quickly reorient their life. In addition, it is also important to create age-friendly environments in which elderly people, especially the handicapped could be easily supported in public places. Moreover, it is of importance to create the sport environments as well in which elderly people are not afraid of strengthening and exerting their reserve capacities.

7.3 Thesis evaluation

Sport participation among the elderly in Shanghai is a very interesting topic to me. Since I came to Finland, I found out that many elderly people are living an active later life. They do Nordic walking, jogging, biking, gardening, picking berries in the forests in daily life. Therefore I became more curious about the status quo of elderly people in Shanghai to participate in sporting and physical activities, and what are reasons and characteristics of their sport participation.

Despite that thesis writing was long duration and highly demanding work, it allowed me to apply what I have learned in SPOSMAPRO and previous knowledge into this field of elderly sport participation in Shanghai. From thesis writing, I really learned a lot, such as making a research plan, making appropriate methodological choices, carrying out data collection and data analysis and learning a lot of background knowledge about status quo of sport participation, sport-related policies in China and in the city of Shanghai. I was very pleased to see this research brought me not only pure objective results, but also broadened my views in multi-disciplinary studies.

However, limitations were still existing and sometimes inevitable in this research. For instance, the cognitive functions related to thinking, learning and reasoning may be deteriorated somehow with aging among some elderly participants, which may affect their understanding of questionnaire items, thus further affect the research results. Moreover, the limitation has also been shown in the results from the small amount of data compared to the large population of elderly people in Shanghai.

In the future, researches related to elderly sport participation could be done in either

broader scope or more narrow down in the areas of China where this kind of research is still nearly blank. This thesis was about the sport participation among elderly people in the city of Shanghai, which is one of the biggest cities in China with comparatively high speed of social and economic development. The characteristics of sport participation among the elderly in Shanghai could only partly reflect the situation of general sport participation in China, especially as a representative of the better developing areas. However, more researches are further needed to address to similar questions in other areas, especially many poor and developing parts of China with large elderly population.

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APPENDICES

上海老年人锻炼动机行为的问卷调查

尊敬的女士/先生:

您好!

我是芬兰与韦斯屈莱大学的研究生, 现需要做一份有关老年人参与体育锻炼的动机和行为的调查。请仔细阅读每个题目, 并依据您目前的实际情况和真实感受来回答。本次调查结果不记名、不公开, 仅作为科学研究之用, 您的回答无对、错之分, 请如实填写, 衷心的感谢您的配合!

填写说明:

1. 第一部分请您在所答案的题号上打“√”
2. 第二部分在您判定的程度线条上画“○”
3. 请您在“_____”上填写相关内容
4. 没有标注的题目, 均为单项选择

第一部分 基本信息调查

1. 您的性别: ① 男 ② 女
2. 您的年龄: ① 60岁-64岁 ② 65岁-70岁 ③ 71岁及以上
3. 您的学历: ① 初中及以下 ② 高中或中专 ③ 大专或本科 ④ 研究生及以上
4. 您的月收入状况: ① 600元及以下 ② 601元—1500元 ③ 1500元—3000元
④ 3001元及以上
5. 您目前的家庭居住情况: ① 单独居住 ② 夫妻一起居住 ③ 与子女同住 ④ 三代或四代同堂
其他_____
6. 您锻炼的频率是: ① 0次/周 ② 1—2次/周 ③ 3—4次/周 ④ 5—7次/周
7. 您每次锻炼的时间是: ① 30分钟以内 ② 30至45分钟 ③ 45分钟以上
8. 您目前的健康状况: ① 良好 ② 一般 ③ 不良
9. 您所住的区域是?
 - ① 市中心(黄浦区、徐汇区、卢湾区、长宁区、静安区)
 - ② 东南地区(浦东新区、奉贤区)
 - ③ 西南地区(闵行区、松江区、金山区、青浦区)
 - ④ 东北地区(杨浦区、虹口区)
 - ⑤ 西北地区(普陀区、闸北区、嘉定区、宝山区)
 - ⑥ 崇明县

10. 您日常参加的锻炼有(可多选)?

- (1) 健步 (2) 慢跑 (3) 太极拳 (4) 广场舞 (5) 羽毛球 (6) 乒乓球 (7) 游泳 (8) 保龄球
 (9) 钓鱼 (10) 门球 (11) 台球 (12) 登高 (13) 高尔夫球 (14) 力量训练 (15) 围棋 (16) 桥牌
 (17) 自行车

第二部分 老年人体育锻炼动机的调查

(以下评价指标分为5段, 各段的线条粗细不同, 由细到粗表示程度上的递增, 请在您判定的程度线条上画“○”。) 如:

对测试问题的描述 您参加体育锻炼的动机是——	请根据您对此问题的理解进行程度判断
1、延缓衰老, 维持生理机能:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
2、保健及治疗疾病或后遗症:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
3、调节与消除不良情绪:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
4、提高晚年生活质量:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
5、完成年轻时的愿望:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
6、追求快乐及满足兴趣	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
7、与社会潮流同步:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
8、结交新的朋友:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
9、重新成为团体一员的归属感:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
10、不与社会脱节保持社会认同:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
11、优美风景的自然吸引:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
12、视觉感官的享受体验:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
13、提高自己的审美情趣:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
14、挑战自我极限:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同
15、给予别人以指导:	完全不同意 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 完全赞同

16、发挥创造力及能力：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
17、保持社会地位获得肯定：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
18、学习科学的锻炼新知识：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
19、实现自我，展现自我价值：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
20、满足年轻嗜好和延续求知欲：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
21、打发退休后的无聊时光：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同
22、赴朋友的邀约：	完全不同意 ¹ ² ³ ⁴ ⁵ 完全赞同

Questionnaire on your choices and motives of sport participation

Dear Mr./ Ms.,

I'm a master degree student of University of Jyväskylä in Finland. Now we need to do a research about the reasons and characteristics of shanghai elderly sport participation. Please read every subject carefully, and answer it according to your reality and true feeling. This questionnaire is anonymous and not open, and only used to scientific research. Your answer will not be judged right or wrong, so please truthfully fill in. We are grateful for your cooperation.

Filling explanation

1. In part one, please draw “√” in your selected answer.
2. In part two, please draw “○” in your selected answer.
3. Please fill in relevant content in the “_____” part.
4. Questions without label are single choice.

Part one Basic Information

1. Your gender: ①Male ②Female
2. Your age: ①60-64 ②65-70 ③71 and above
3. Your education: ①Junior High School or Lower ②Senior High School or Technical Secondary School ③Junior College and University ④Graduate or Above
4. Your monthly income: ①600 yuan or less ②601-1500yuan ③1500-3000 yuan ④3001 yuan and above
5. Your family situation: ①live alone ②live with wife/husband ③live with children ④live with three or four generations ⑤ other
6. Your exercise frequency: ①0 times per week ②1-2 times per week ③3-4 times per week ④5-7 times per week
7. Your exercise duration: ①no more than 30 min. ②30-45 min, ③more than 45 min
8. Your physical condition: ①good ②ordinary ③bad
9. Your living district: ①city center(Huangpu District, Xuhui District, Luwan District, Changning District, Jingan District) ②Southeast District(Pudong District, Fengxian District) ③Southeast District(Minghang District, Songjiang Dstrict, Jinshan District, Qingpu District) ④Northeast District(Yangpu District, Hongkou District) ⑤ Northwest District(Putuo District, Zhabei District, Jiading District, Baoshan District) ⑥Chongming County
10. Your daily exercise choices(multiple choice)
 - (1)brisk walking (2)jogging (3)Taiji (4)aerobic dancing (square dancing)
 - (5)badminton
 - (6)table tennis (7)swimming (8)bowling (9)fishing (10)gate ball
 - (11)pool (12)hiking (13)golf (14)strength training (15)Weiqi
 - (16)bridge (17)cycling (18) others_____

Part two Survey of Motivations of Shanghai Elderly Participants in Physical Activities
 (the following evaluation index divide into 5 part, each part has different thickness line, from thin to thick show the degree increase, please draw “○” in your selected line)

Description of Test Question Your exercise motivation is to——	Please Judge According to Your Comprehension
1、delay senescence and maintain physiological function:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
2、keep health and well-being & prevent disease and sequelae:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
3、adjust and eliminate negative mood:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
4、improve living quality:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
5、realize youthful dream:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
6、pursue happiness and interest:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
7、synchronize with fashion:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
8、meet new friends:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
9、get a sense of belonging as a group member:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
10、get social identity:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
11、get attracted by beautiful nature:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
12、obtain enjoyment of visual sense:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
13、improve aesthetic taste:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
14、self-challenge:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
15、guide others:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
16、display creativity and ability:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
17、keep social status:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
18、learn new scientific exercise knowledge and skills:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement
19、self-realize and show self-value:	Total disagreement $\frac{1}{-} \frac{2}{-} \frac{3}{-} \frac{4}{-} \frac{5}{\blacksquare}$ total agreement

20、keep thirsty for knowledge:	Total disagreement $\overset{1}{-}$ $\overset{2}{-}$ $\overset{3}{-}$ $\overset{4}{-}$ $\overset{5}{-}$ total agreement
21、kill boring time after retirement:	Total disagreement $\overset{1}{-}$ $\overset{2}{-}$ $\overset{3}{-}$ $\overset{4}{-}$ $\overset{5}{-}$ total agreement
22、date with friends:	Total disagreement $\overset{1}{-}$ $\overset{2}{-}$ $\overset{3}{-}$ $\overset{4}{-}$ $\overset{5}{-}$ total agreement