

Original Research

Retirement of disabled athletes: an exploratory study on causes and consequences in national athletes of Korea

Ji Tae Kim¹, Youngin Won^{2,*}

Submitted: 13 November 2021 Revised: 6 January 2022 Accepted: 13 January 2022 Published: 2 March 2022

Abstract

Background: The purpose of this study was to explore the reasons athletes with disabilities retire, their retirement process, and their life after retirement in view of the difficulties they may encounter after retirement. This study was conducted as a qualitative study. Methods: 10 retired para-athletes from Korean national teams were selected as research participants through the snowball extraction method. The procedure consisted of a group interview and an individual interview over a total of four stages. For systematic interpretation suitable for the purpose of the study, the collected data were classified and interpreted using domain analysis and taxonomic analysis among cultural analysis methods. Results: Firstly, athletes with disabilities retired for four reasons: declining physical strength and performance, neglecting injuries, difficulties maintaining their livelihood, and a lack of business-sponsored sports team. Second, the retirement process experienced by disabled athletes appeared in three stages: a temporary retirement phase, an incomplete retirement phase, and a full retirement phase. Third, after athletes with disabilities have retired, their lives change. Although the participants enjoyed positive aspects of retirement including a rest period, they also experienced feelings of absurdity, regret, and alienation from the processes involved in social adaptation. Conclusions: The findings revealed that national athletes with disabilities retired because of a decline in physical strength and performance, neglecting their injuries, their inability to maintain their livelihood, and a lack of business-sponsored sports teams. Second, the retirement process of athletes with disabilities encompassed three stages: temporary retirement, incomplete retirement, and full retirement. Third, their retirement adaptation patterns included extra leisure time, feelings of absurdity, regret, and isolation, and financial difficulties. The study provides basic data on the retirement of athletes with disabilities for

Keywords: Disabled athlete; Reasons for retirement; Retirement process; Life after retirement; Sports retirement

1. Introduction

While retirement may be perceived as positive in that newly retired individuals have the opportunity to start their lives afresh, it may be viewed as negative because the retired lose their roles [1]. Consequently, retirement has a very important meaning for individuals because of the numerous physical, psychological, and social effects it has on their lives [2]. Retirement was previously regarded as a life event, which involved individuals leaving their primary employment and no longer being engaged in socio-economic activities. However, in modern society, it is understood as a process of life, which has diversified attributes [1]. Accordingly, Topa *et al.* [3] stated that retirement is an event when individuals officially retire from work and encompasses a broad process that includes various stages including preparation for retirement, retirement, and adaptation.

Generally, retirement occurs between the ages of 60 and 65 years when individuals are transitioning from middle age to old age [4]. On the contrary, most athletes retire when they are in their twenties and early thirties. As athletes endeavor to adjust to their new environment after retirement, they may often experience mental distress, an identity crisis, and/or become a social misfit [5,6].

Accordingly, the problems of life that athletes experience after retirement have been studied on a social and national level. Studies on why athletes retire have focused on environmental and overall major factors [7–9]. Studies have also explored athletes' preparations for their retirement [10,11]. Furthermore, research from a social perspective has been conducted on adaptation and institutional improvement for life after retirement [12]. However, this research was limited to able-bodied and professional athletes. Because the retirement of disabled athletes has rarely been explored, it is recommended that studies be conducted on such.

Unlike people without disabilities, people with disabilities have difficulties finding employment, and unlike non-disabled athletes, most disabled athletes are earning a living from training allowances. In the pre-interview process to select a research topic, one disabled person said that the only way to be separated from people without disabilities and not to be discriminated against was an athlete. In other words, for athletes with disabilities, exercise is the driving force of life, and it is one of the ways to forget about disability and live as a human being. When these retired athletes retire with various injuries and secondary diseases suffered while exercising, social problems such as being un-

¹Department of Recreation & Leisure Sports College of Sports Science, Dankook university, 31116 Chonan, Republic of Korea

²Department of Football Management, Munkyung College, 36930 Gyeongsangbuk-do, Republic of Korea

^{*}Correspondence: 4684645@naver.com (Youngin Won)

able to find a new job and experiencing financial difficulties are occurring.

Depending on the cause, athletes' retirement may be classified as voluntary and involuntary retirement [13]. One may ask whether causes of voluntary and involuntary retirement are the same for able-bodied athletes and athletes with disabilities. Furthermore, one may question if the characteristics of retirement are the same for both groups of athletes. Consequently, it is imperative that research be conducted on the retirement process of athletes with disabilities so as to shed light on their life after retirement.

It is crucial that studies on the retirement of athletes with disabilities should be conducted from the perspective of these athletes. However, decisions on the welfare policies for those with disabilities are made by able-bodied individuals, which leads to the dissatisfaction of those who are directly involved, namely, athletes with disabilities. Therefore, the purpose of this study was to explore the retirement process of athletes with disabilities from their perspective by employing a qualitative research design.

The purpose of this study was to explore retirement process of athletes with disabilities by conducting an indepth analysis. Three research questions were formulated:

- What are the reasons athletes with disabilities retire?
- In what retirement process do athletes with disabilities engage?
- How do athletes with disabilities experience life after retirement? It was hoped that this study would provide baseline data to support athletes with disabilities in their retirement and further contribute to academic development.

2. Materials and methods

2.1 Participants

Intentional sampling methods based on the researchers' experiences and professional insights as well as their subjective judgment of the purpose of the study were employed [14]. The following criteria were used to select the participants.

First, participants had to have been disabled for most of their lives, played for the national team in their chosen sport, and won medals in a variety of competitions including the Olympic Games, Asian Games, and National Sports Games. Second, participants were required to speak honestly and with ease about their own experiences. Furthermore, because it is essential that researchers are able to build rapport with participants in research of this nature, participants who would be able to share intimate details of their lives with the researchers were selected. Third, those who had rich stories about their lives and could plan and talk about the future through various experiences were selected as participants. The purpose and the procedure of the study were fully explained to potential participants. Those who agreed to participate in the study were selected.

After selecting the first participant, the snowball extraction method was employed to select the other three participants. There were a total of 10 participants in this study, and the sample size was selected according to the standard of 3 to 10, which is the number of participants in a phenomenological study suggested by Dukes (1984). In addition, although sex was not restricted among the study participants, the history of sports for the disabled in Korea was recent, and among retired disabled athletes, In the case of retired female athletes, data could not be collected because the recommendation of the first participant was not made because of the nature of the snowball extraction method. The participants' demographic and sociological characteristics are presented in Table 1.

2.2 Procedure and data analysis

The study comprised four steps. Approval for the study was acquired from the Dankook University Ethics Committee (DKU-2018-09-023) prior to the commencement thereof. Before each step of the interviewing process, informed consent was obtained from the participants. The interviews were recorded by means the mobile phone recording application. Thereafter, the recorded interviews were transcribed.

In the first stage, the participants were selected and group interviews were conducted. The participants were selected by employing the snowball extraction method through one individual who worked in the most relevant sports group of the disabled retired athletes. The purpose of the study was explained and five people who were employed in the sport industry were interviewed for the first group interview. The second group interview was conducted with five retired athletes who were currently working in industries other than sport or were not employed. During this process, the participants were asked to provide written informed consent and demographic information. Each group interview lasted approximately 90 minutes.

In the second stage, individual interviews were conducted with those who had participated in the first stage group interview. The individual interviews were held in a place where the participants had been consulted previously. The memory box technique, which is a method employed to recall past work through the records of the trainees such as their training diary, diary, and photographs, was used during the individual interviews. Each interview lasted approximately one hour. However, two to three additional interviews of 30 minutes or less were conducted with each participant to supplement the data collected during the first individual interviews.

The third step consisted of data analysis and a peer review. The data analysis was performed by classifying and interpreting the data by utilizing domain analysis and taxonomic analysis among the cultural analysis methods proposed by Spradley [15]. Accordingly, the transcripts



Table 1. The participants' demographic and sociological characteristics.

Name (pseudonym)	Gender	Age	Family details	Sport	Date of injury	Retirement
subject 1	Male	57	married/child 2	table tennis	33 years old	Retirement
subject 2	Male	53	married/child 2	Wheelchair basketball	1 year old	Retirement
subject 3	Male	53	married/child 2	Powerlifting	3 years old	Retirement
subject 4	Male	62	married/child 3	Powerlifting	3 years old	Retirement
subject 5	Male	58	single	Wheelchair basketball	23 years old	Retirement
subject 6	Male	64	single	Wheelchair tennis	31 years old	Retirement
subject 7	Male	53	single	Wheelchair basketball	30 years old	Retirement
subject 8	Male	57	single	Wheelchair tennis	6 years old	Retirement
subject 9	Male	68	single	Wheelchair tennis	8 years old	Retirement
subject 10	Male	52	single	Wheelchair tennis	1 year old	Retirement

were read a number of times and the educational values were classified into research texts. The results of the analysis were analyzed during the participants' interviews. The intergovernmental review was returned to the participants with the interpretations and results derived from the data and information collected by the researchers [16].

The fourth step comprised multidimensional analysis, which was conducted through peer-to-peer consultation to ensure the authenticity of the study. A polygonal analysis involves the study of phenomena by using two or more methods of data collection. This is to prevent the analysis of interview contents from the subjective viewpoint of the researcher in qualitative research [17]. Peer-to-peer consultation is required to ensure that the data collected by specialists who do not participate directly in the study as well as that of participants are reflected in the findings and that the interpretation does not distort any meanings [18]. In this study, the peer-to-peer consultation was supported by one professor of special education and a doctor of physical education who had experience in qualitative research.

3. Results

3.1 Reasons for retirement

The results revealed that athletes with disabilities retired for four reasons: declining physical strength and performance, neglecting injuries, difficulties maintaining their livelihood, and a lack of business-sponsored sports team. In contrast to able-bodied athletes, there is a considerable gap between new players and national delegates among athletes with disabilities. However, with the development of technology and support of sports science, this gap has narrowed. One participant stated the following:

Young friends are strong, and these friends learn basic things and come out friends who have played athletics. I guess I cannot help it because of the difference in technology. I actually learned it myself, without actually teaching anyone. There is no saying that ping pong is good ... Disabled people do not have posture. How much effort can you beat your opponent? ... This is your own know-how. (subject 6)

Furthermore, individuals with disabilities have physical limitations and injuries that are not treated properly. Complex disorders may result because of this neglect, which may also lead the retirement of athletes with disabilities. One of the participants shared as follows:

At that time, the most difficult thing was that the ligament was broken and left for two months. I did not get an overhaul. I did not get my arm later ... so I had a close examination and I was cut off to surgery. It's been too long since ... it's not systematic, and now many athletes have experienced it, so I will be quick to take care of the injury. (subject I)

Athletes are only able to make a living by being affiliated with a professional team. However, there are relatively few athletes with disabilities in comparison to individuals without disabilities. Moreover, there are very few teams without sponsors and, thus, not many unemployed players. Therefore, athletes with disabilities may be forced to leave their jobs to make a living. One participant explained as follows:

There are those who upgrade their lives through sports and they maintain their livelihood even if they are not unemployed. However, because I have to live and work, I have to live with it. I have a family and I have to live with it. I cannot work for a small salary, and because of the uncertainty about the future, I cannot not have a job. (subject 4)

3.2 Retirement process

The retirement process athletes with disabilities go through was classified into three stages. First, they experience a temporary retirement phase in which they engage in a small amount of exercise until they recover from their injuries. Second, they engage in an incomplete retirement phase during which they begin to play other sport and/or play their chosen sport at club level. Third, they experience full retirement, which encompasses other activities and resocialization into society. Three participants shared their experiences:

Honestly, I do not think I was completely retired. I am not actually a ping pong player but I am a club member in other sports ... I think I will be able to become a national



representative at any time ... I think I will be a little harder because I have a wide range of players ... I am a fully retired player I think it's difficult ... It's like going to retirement ... I think so ... (subject 10)

I do not think it's clear that retirement. The general public retires and retires again, and there are a lot of cases. Are they retired? Of course, it is a little different from working at home, but in the case of people with disabilities, it is easier to change into a sport that is more comfortable and easier to use. There is no easy exercise, of course. I'm going to visit again. (subject 5)

I'm a fully retired player. I'm not strong enough to be able to work out anymore. I do not have any interest anymore ... but my colleagues did not think so. I can work out again. It's not easy to admit that people with disabilities are completely retired ... although some of the events will be different ... (subject 7)

3.3 Life after retirement

After athletes with disabilities have retired, their lives change. Although the participants enjoyed positive aspects of retirement including a rest period, they also experienced feelings of absurdity, regret, and alienation from the processes involved in social adaptation.

Some of the participants rested and enjoyed moments of relaxation. They appeared to enjoy their transition to a new life including traveling with family members, becoming involved in various things they wanted to attempt, and endeavoring to develop themselves. One participant related the following:

There are a lot of positive things. When I am dedicated to the national delegate and exercise, I cannot do anything else. But I put down everything ... I knew that the table tennis was not the whole thing, so I spent leisurely time in other places. I have a lot of time to do. I wanted to try fishing too. I think that is very positive. I have not been able to travel to family once and for all, but I have to see my son, my daughter, and my mother. (subject 2)

But most of the retired athletes were under economic pressure. It was very difficult to find a new job from the position of the head of the household who is responsible for the livelihood of the family after retirement. For example, retired athletes who have been in sports for more than 5 years and more than 10 years have had difficulty finding new jobs other than sports, and the state subsidy has been insufficient to maintain the livelihood of married families.

Those who were economically comfortable could have adapted easily. But those who have not been able to be home are not going to spend much time with their family, even if they stop working because they have to work on industrial fronts. If you are not backed by financial support, you will not be able to adapt even if you retire. (subject 8)

In addition, the retired athletes with disabilities lost their social status as athletes. They also experienced alienation when working with individuals without disabilities. Two participants related their feelings:

I feel empty. For example, in the old days, I gave too much clothes. After that, I have to pay for it, but before I used to say, "I did not know the shoes were so expensive." I mean, I did not know it cost so much because I was getting support. (subject 9)

We all go to lunch together, but people with disabilities usually arrive a little late. There are some who are not, but it is okay to go along with them, but if there is a difference, these people may be uncomfortable because of me ... Some people do not go and eat lunch alone. I've heard stories about them, and the place to eat outside is also uncomfortable. If you are a wheelchair-bound person(subject 3)

4. Discussion

4.1 Reasons for retirement

Athletes with disabilities in national teams retire because of declining physical strength and performance, neglecting to treat injuries, difficulties in maintaining their livelihood, and lack of business-sponsored sport teams. The results of this study concur with Kang and No [19] and Park and Won [20].

First, Jang and Kim [21] and Lee and Cho [22] also found the decline in physical fitness and performance resulted in retirement. Athletes with disabilities tend to battle endlessly with injuries caused by disability. As they age and the intensity of the exercise in which they engage decreases, their performance also decreases.

Second, the results concur with Kuettel *et al.* [8] who revealed that retired female athletes had neglected their injuries. Female athletes suffered from major and minor injuries. Because the athletes were inclined to conceal their injuries and continue to exercise, they were unable to manage their injuries systematically. In addition, because most of the sporting events for the disabled take place in a harsh environment, it may be difficult to receive professional knowledge on emergency measures or rehabilitation for injuries during the early stages thereof.

Third, Park and Won [20] revealed that national ice hockey players who played irregularly and whose employment was insecure experienced difficulties making a livelihood. The results of this study suggest that athletes with disabilities are not an exception. Most disabled sports teams comprise national and/or new athletes who are employed in a team and who may be regarded as lifelong athletes. Therefore, any financial benefit that these athletes acquire constitutes their entire training allowance. Thus, athletes with disabilities who are married often retire.

Finally, Park and Won [20] revealed that national ice hockey players limited the entry of new athletes into the system. Disabled sports teams who sign long-term contracts with their team members narrower new players' possibilities further because athletes with disabilities may continue their careers in their thirties, forties, and fifties. Thus, new players may retire if they are unable to enter the system.



In conclusion, athletes with disabilities may retire because of physical strength and poor performance, neglected injuries, difficulty making a livelihood, and/or a lack of business-sponsored sports teams. Furthermore, athletes with disabilities may not be managed systematically like their counterparts who are not disabled. This suggests that sporting associations should invest in their athletes with disabilities in a systematic way so that their injuries and livelihoods can be managed, thus further ensuring that they do not retire early.

4.2 Retirement process

The retirement process of athletes with disabilities constitutes three stages: temporary retirement, incomplete retirement, and full retirement. These results do not concur with previous research on the retirement process of ablebodied athletes [20,21]. In this study, the retirement process was characterized as follows.

First, temporary retirement refers to a situation in which active players stop their physical activity temporarily due to injury and/or deterioration of performance. While some players are unable to overcome their injuries after a rest period, which leads to their retirement, others continue playing after their injuries improve. These so-called temporary retirement athletes have difficulties in adapting to social life other than exercise during their rest periods.

Second, incomplete retirement occurs when athletes retire from their main sport and transition to other sports on a club level. However, such athletes find it difficult to become involved in other sports because it is unlikely that they will excel at these and they are accustomed to excelling. However, Kim and Shin [23] noted that sporting associations for disabled athletes often select new athletes who have retired from their primary events. In fact, national representatives have been selected in this manner. Although not all athletes are successful in their new event, when faced with full retirement, they may endeavor to excel at a new sport.

Third, full retirement refers to a state in which athletes participate in physical activity for rehabilitation or health, but have retired from their chosen sports completely. Full retirement is dependent on players' personal circumstances such as family life, other employment, and physical difficulties. Some fully retired athletes become involved in related fields.

Moreover, athletes with disabilities tend to retire 10 years later than those without disabilities. However, unlike those without disabilities, it is imperative that those with disabilities make a distinction between temporary retirement, incomplete retirement, and full retirement. Furthermore, athletes with disabilities are different from individuals with disabilities who are not involved in sport. Consequently, it is imperative that a retirement athlete support system for retired athletes with disabilities is established.

4.3 Life after retirement

The retirement adaptation patterns of the national athletes with disabilities involve extra leisure, feelings of absurdity, regret, and isolation and financial difficulties after retirement. This study supports the results of Kim and Kim [24] and Park and Won [20] who revealed various adaptations of retirement.

First, in relation to disabled athletes' adaptation to retirement, leisure time was measured during what is commonly referred to as middle age [25]. The results revealed that athletes with disabilities participate in their chosen sport for between 5 and 20 years. When they retire, they tend to spend time with their families that they neglected and/or start traveling. Thus, avoidance behavior immediately after retirement is a positive way of ensuring retired athletes enjoy a sense of psychological security and prepare for life after retirement.

Second, Park and Won [20] revealed disabled athletes' adaptation to retirement in an exploration of the career transition process of national ice hockey players. Athletes who do not retire voluntarily suffer negative psychological effects including helplessness and depression. It is recommended that such athletes be helped to view retirement more positively.

Third, the present study supported Kim and Kim [24] who explored professional footballers' adaptation to retirement in that adaptation to retirement should not be isolated, but done early in their careers. Although athletes with disabilities tend to retire later than their counterparts who are not disabled, they may need help to adjust to an environment where most individuals are not disabled.

Finally, the finding that many retired athletes experience financial difficulties supports Lim [26] finding that retired athletes experience emotional difficulties. In other words, retired athletes with disabilities also suffer financial difficulties due to the absence of their main source of income such as their training allowance. This is particularly true for athletes with families. It is believed that financial difficulties may exacerbate the negative effects of adaptation.

In essence, retired athletes' adaptation includes extra leisure time, feelings of regret, absurdity, and isolation, and financial difficulties. Thus, plans such as pension for athletes with disabilities who have retired should be considered.

5. Conclusions

The conclusions of this study conducted as a qualitative study are as follows.

First, disabled athletes retired because of decreased physical function such as cardiopulmonary function and joint function deterioration, decreased physical strength, and decreased performance, neglecting their injuries, difficulties maintaining their livelihood, and a lack of business-sponsored sport teams.



Second, the retirement process of athletes with disabilities encompassed three stages: temporary retirement, incomplete retirement, and full retirement.

Third, the patterns of retirement adaptation of the athletes with disabilities in the national team included extra leisure time, psychological effects, isolation, and financial difficulties. It is imperative that various policies such as pension plans be implemented for athletes with disabilities for when they retire.

These research results are meaningful to understand the retirement process of disabled athletes, which are different from people without disabilities. In addition, it can be seen that there were insufficient opportunities for disabled athletes to contribute to the development of younger athletes after retirement. Therefore, it is necessary to prepare policies to improve the various career paths of retired disabled athletes.

Some limitations of the present study that should be addressed in subsequent research are as follows. First, the sample comprised 10 participants, and a qualitative research method was applied. In follow-up studies, quantitative research using a substantial amount of data will be required to ascertain the status of retired athletes with disabilities. Second, this study focuses on the causes and process of retirement of athletes with disabilities, as well as their life after retirement; follow-up studies on support policies for retired athletes are needed. Also, according to the demographic characteristics of disabled athletes, research on the retirement process and life after retirement and research on retired athletes in more diverse areas of disability will be needed.

Author contributions

These should be presented as follows: JTK and YW designed the research study. JTK and YW performed the research. JTK and YW provided help and advice on research. JTK and YW analyzed the data. JTK and YW wrote the manuscript. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript.

Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Institutional Review Board (DKU-2018-09-023). The purpose and the procedure of the study were fully explained to potential participants. Those who agreed to participate in the study were selected.

Acknowledgment

We express our acknowledgment to Dankook University and Munkyung College for their assistance in the progress of this study.

Funding

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2018S1A5A2A03038256).

Conflict of interest

The authors declare no conflict of interest.

References

- [1] Kang EN. A Exploratory Study on Multiple Trajectories of Life Satisfaction during Retirement Transition: Applied Latent Class Growth Analysis. Korean Journal of Social Welfare Studies. 2013; 44: 85–112.
- [2] Yeung DY. Adjustment to retirement: effects of resource change on physical and psychological well-being. European Journal of Ageing. 2018; 15: 301–309.
- [3] Topa G, Valero E. Preparing for retirement: how self-efficacy and resource threats contribute to retirees' satisfaction, depression, and losses. European Journal of Work and Organizational Psychology. 2017; 26: 811–827.
- [4] Han H, Kang E, Baek S. Factors influencing life style of retired elderly people. Journal of Korean Gerontological Nursing. 2002; 4: 195–206.
- [5] Barker D, Barker-Ruchti N, Rynne S, Lee J. Moving out of Sports: a Sociocultural Examination of Olympic Career Transitions. International Journal of Sports Science & Coaching. 2014; 9: 255–270.
- [6] Kontos AP. Developmental Sport and Exercise Psychology: a Lifespan Perspective. The Sport Psychologist. 2004; 18: 350– 352
- [7] KimChongHwan, JaeSeung Hong. The Study of Perception on Retirement for Professional Soccer Players. Korean Journal of Sport Science. 2015; 26: 320–328.
- [8] Kuettel A, Boyle E, Schmid J. Factors contributing to the quality of the transition out of elite sports in Swiss, Danish, and Polish athletes. Psychology of Sport and Exercise. 2017; 29: 27–39.
- [9] Seo YH. The structural relationship among athlete's retirement expectation, psychological sense of crisis, level of retirement preparation and re-socialization. The Korean Journal of Sports Science. 2012; 21: 393–406.
- [10] Fisher LA, Wrisberg CA. How to Handle Athletes Transitioning out of Sport. Athletic Therapy Today. 2007; 12: 49–50.
- [11] Lally P. Identity and athletic retirement: a prospective study. Psychology of Sport and Exercise. 2007; 8: 85–99.
- [12] Won Y, Kim J. Relationship among the Type of Captain Leadership, Cohesion, and Perceived Athletic Performance in the Middle and High School Soccer Team. The Korean Journal of Physical Education. 2017; 56: 109–120.
- [13] Martin LA, Fogarty GJ, Albion MJ. Changes in Athletic Identity and Life Satisfaction of Elite Athletes as a Function of Retirement Status. Journal of Applied Sport Psychology. 2014; 26: 96–110
- [14] Shin KC. Study on the routine structure of the elementary school physical education classes. Seoul National University: Seoul, 2006.
- [15] Tannenbaum N, Spradley JP. Participant Observation. Anthropological Quarterly. 1980; 53: 260.
- [16] Guba EG. Criteria for assessing the trustworthiness of naturalistic inquiries. ECTJ. 1981; 29: 75.
- [17] Mathison S. Why Triangulate? Educational Researcher. 1988;
- [18] Kim HB. Understanding adults' participation in lifelong education with a marketing concept. Andragogy Today: International



- Journal of Adult & Continuing Education. 2007; 10: 87–109.
- [19] Kang NW, No JK. Career barriers of retired female Taekwondo athletes. The Korean Journal of Sports Science. 2013; 11: 137– 152.
- [20] Park D, Won Y. Young Shin Won. Career Transition Process of former Korean National Ice Hockey Players. Korean Society for the Sociology of Sport. 2014; 27: 27–53.
- [21] Jang S, Kim I. Retirement circumstances and social adaptation experience in the re-socialization process of badminton players. The Korean Journal of Physical Education. 2016; 55: 29–41.
- [22] Lee SB, Cho MH. A study on social adaption of judo athletes post retirement. Journal of Sports Sciences. 2012; 24: 89–105.
- [23] Kim K, Shin SH. A Study on the Foreign countries' cases of

- Promotion of Athletes with disabilities -Based on the case study of Germany, England and China. Journal of Adapted Physical Activity and Exercise. 2013; 21: 57–69.
- [24] Kim JT, Kim WS. Social Adaptation Process and Supporting Factors of Minor-league Professional Soccer Players after Retirement. Journal of Sport and Leisure Studies. 2014; 56: 105– 121.
- [25] Lee L. The effects of retirement experience and leisure satisfaction to the preparation levels for old age: Focused on the middleaged. Ewha Woman's University: Seoul. 2015.
- [26] Lim SH. Unrealistic optimism and financial preparation for retirement of young adults. Ewha Woman's University: Seoul. 2013.

