

Korean Association of
Physical Education and
Sport for Girls and Women

70th

Anniversary International
Academic Conference



Women's Sports Issues & Prospects: Pride, Passion, & Power

November 01^{Fri} - 02^{Sat}

Olympia Hall & Seoul Hall, **Olympic Parktel**



Hosted and
Organized by



Korean Association of
Physical Education and
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Women's Sports Issues & Prospects: Pride, Passion, & Power

Program

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Day 1 2024 November. 1. (Fri) Olympia Hall	Opening Remarks : Hyun Mi Heo (President of the Korean Association of Physical Education and Sport for Girls and Women) Congratulatory Address : 10:00 In Chon Yu (Minister of Culture, Sports and Tourism) ~10:30 O-kyeong Lim (Member of the National Assembly of South Korea) Kee Heung Lee (President of Korean Sport & Olympic Committee) Kang-young Song (President of Korea Institute of Sport Science) Han Kyung Lee (President of the Korean Alliance for Health, Physical Education, Recreation, and Dance)	Jinwook Chung (Dongguk University)
	<Keynote Session> Issues and Prospects for Women's Sports Studies Moderator: Eunha Koh (Sport Insight)	
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Opening Remarks

Distinguished members of the KAPESGW,
honored guests, ladies and gentlemen,

It is with great honor and gratitude that I welcome you all to the Academic Conference of the KAPESGW, marking this cherished society's 70th Anniversary. As the 30th President of this esteemed society, I am deeply honored to stand before you on such a momentous occasion.



Since its founding in 1954, our society has played a pivotal role in advancing KAPESGW. Over the past 70 years, we have achieved a number of remarkable academic accomplishments and research contributions, elevating the status of women's sports and fostering gender equality in Korean society. Today, we reflect on these proud achievements while looking ahead with confidence, preparing to take new strides toward an even brighter future as we edge closer to this society's centenary.

This 70th Anniversary Academic Conference is a celebration of our past successes and a platform to chart the course of our future. Today, we gather with renowned scholars and experts from here at home and abroad to discuss the current issues and future directions of women's sports from diverse perspectives. In all this, we aim to strengthen the academic foundation of our field and expand the scope of international academic collaborations.

Moreover, I have set the following goals for this significant conference: firstly, to deepen the academic breadth of women's sports and establish our society as a leading organization in systematic research. Secondly, to enhance our cooperation with various domestic and international organizations related to women's sports, thereby increasing the practical impact of our research. Thirdly, to explore concrete strategies for establishing gender-equality policies in sports and to take the lead in protecting the rights and interests of women in sports.

It goes without saying that achieving these goals will require the active participation and interest of all our members. Your passion and dedication will safeguard the future of our society and ensure its continued success.

Lastly, I extend my heartfelt thanks to everyone who has worked tirelessly to organize this conference. The wisdom and experience gained through this milestone event will serve as a stepping stone for the further development of our society, thereby ensuring a bright future for women's sports and sports science in Korea.

Thank you.

Hyun Mi Heo

30th President of the Korean Association of
Physical Education and Sport for Girls and Women

Congratulatory Address

Distinguished Guests, Ladies and Gentlemen, I am Yu In-Chon, the Minister of Culture, Sports and Tourism.

I would like to congratulate you on the 70th anniversary of Korean Association of Physical Education and Sports for Girls and Women, and the international conference held to celebrate this occasion.



I want to express my sincere gratitude to President Heo Hyun-mi and everyone at the Association for organizing this meaningful event.

At the 2024 Paris Olympics, for the first time in history, the number of male and female athletes participating was equal. The women's marathon also replaced the men's marathon as the highlight of the closing ceremony. Considering that only 22 out of 997 athletes were female at the first Olympic Games in Paris in 1900, this represents a remarkable change.

The performance of female athletes in Korean national team was also outstanding. From Kim Yae-ji, who has become a global star in shooting, to Kim Yu-jin, who made legendary history in taekwondo, and Sung Seung-min, the first Asian woman to win an Olympic medal in modern pentathlon, many remarkable performances by female athletes that still fill us with pride. Looking at the numbers, among the 144 athletes, 78 were women, and of the 46 medalists, 28 were female, highlighting their achievements

compared to their male counterparts.

The 70th anniversary of the Korean Association of Physical Education and Sports for Girls and Women is particularly meaningful as we see increasing participation of women in both elite sports and sports for all. I hope this academic conference, themed “Issues and Prospects of Women’s Sports,” provides a valuable opportunity to thoughtfully consider the future direction of women’s sports.

Once again, congratulations on the 70th anniversary. The Ministry of Culture, Sports and Tourism will continue its policy efforts to create an environment where all citizens, regardless of gender, can enjoy sports activities. Thank you.

Yu In-chon

Minister of Culture, Sports and Tourism

Congratulatory Address

“70 Years of the Korean Association of Physical Education and Sport for Women! 70 Years as a Sports Powerhouse!”

Celebrating 70 Years of the Korean Association of Physical Education and Sport for Women!

As a member of the Korean women’s sports community, I would like to sincerely congratulate you on the 70th anniversary of the Korean Association of Physical Education and Sport for Women. The past 70 years of the association have been instrumental in advancing the development of sports in Korea.



Since Park Bong-sik became the first Korean female athlete to participate in the 14th London Olympics in 1948, Korean women athletes have consistently achieved remarkable accomplishments. The strength of women’s sports in Korea was first demonstrated when our national women’s table tennis team claimed the world championship title for the first time in history at the 1973 World Table Tennis Championships in Sarajevo. This legacy continued with the 1984 LA Olympics, where women’s archery led the charge, and this year, with the Paris Olympics, Korean women athletes have played a significant role in elevating Korea’s status to a top-10 global sports nation.

Since the 2000s, with the commercialization and popularization of sports, women's sports have gained equal importance and competition alongside men's sports. In Korea, women's sports began to be popularized through school sports programs, and by the

2012 London Olympics, female athletes participated in every event, with women making up an average of 46% of the total participants. Additionally, the participation of women in community sports has grown significantly. According to the 2018 National Sports Participation Survey, for the first time in history, the participation rate of women in community sports surpassed that of men.

However, the challenges of advancing the rights of women athletes and breaking through the glass ceiling remain unresolved. As the saying goes, "the 2% who act lead the 98% who don't," and in order to address these issues and elevate the status of women's sports, we need more intense thought and active engagement from women athletes. The Korean Association of Physical Education and Sport for Women has been the compass guiding such thought and action, and I hope it will continue to strengthen this role in the future. I, too, will stand alongside the association, envisioning the future of Korean sports and women's sports, and work to bring that vision to life.

Once again, I congratulate the Korean Association of Physical Education and Sport for Women on its 70th anniversary and wish for its continued leadership in the growth and sustainability of Korean sports, especially women's sports. Thank you.

O-kyeong Lim

Member of the 22nd National Assembly

Congratulatory Address

Dear Korean Association of Physical Education and Sport for Girls and Women,

It is a true pleasure to be with you all today. First and foremost, I extend my heartfelt congratulations on the opening of the 2024 International Academic Conference, commemorating the 70th anniversary of the Korean Association of Physical Education and Sport for Girls and Women. This conference presents an invaluable opportunity to reflect on the current landscape of women's sports and explore pathways toward a more promising future.



I wish to express my deepest gratitude to Hyun Mi Heo, President of the Korean Association of Physical Education and Sport for Girls and Women, and to everyone whose dedication and hard work have made this meaningful conference possible. I warmly welcome each member of the sports community here today; it is our shared passion for sports that has brought us together.

During this conference, we will engage in a series of insightful presentations and discussions under the theme, *"Women's Sports: Issues and Prospects – Pride, Passion, and Power."* The continuous growth of research and development within women's sports is both essential and natural. Sports represent key values, such as fairness, equality, inclusion, and diversity. Notably, the 2024 Paris Summer Olympics marked a historic milestone as the first gender-equal Olympic Games, achieving a 50:50 gender ratio

among competing athletes.

It is also heartening to witness a noticeable rise in women's participation in sports activities across Korea. In recreational sports, women are now actively involved in dynamic and emerging fields like soccer and futsal. In this context, today's international conference serves as an ideal platform for discussing current issues, future prospects, and the achievements and challenges in women's sports research.

At the Korean Sport & Olympic Committee, we are dedicated to advancing initiatives that support women's physical activity, and we are committed to developing additional programs that encourage female sports participation. I invite each of you to share your valuable insights and perspectives from various fields, as your contributions will greatly enhance the growth and development of women's sports.

Once again, I offer my sincere congratulations on the opening of the 2024 International Academic Conference celebrating the 70th anniversary of the Korean Association of Physical Education and Sport for Girls and Women. I wish health and happiness to all esteemed members of the sports community and distinguished guests present today.

Thank you.

Kee Heung Lee

President of the Korean Sport & Olympic Committee

Congratulatory Address

Distinguished international and domestic scholars, experts, and members of the Korean Association of Physical Education and Sport for Girls and Women.

It is a great honor to be here today to celebrate the 70th anniversary International Academic Conference of the Korean Association of Physical Education and Sport for Girls and Women. This conference marks a significant milestone, reflecting the commitment of association to promoting sports for women through research, collaboration, and practical efforts.



For 70 years, the association has played a crucial role in advancing sports for women. Through research, academic discussions, and partnerships with various organizations, it has contributed to the development of sports for women both in Korea and around the world.

Sports for women represent more than just athletic competition. They symbolize the ongoing challenges for equality, empowerment, and the breaking of social barriers. While significant progress has been made, we still face numerous issues that must be addressed to ensure women have the opportunities and platforms to realize their full potential in sports.

This conference brings together scholars and experts to discuss the challenges and opportunities facing women in sports today. By sharing knowledge and ideas, we can

explore new ways to strengthen women's participation and leadership in sports. We hope this conference will inspire new collaborations and help future scholars contribute to the advancement of women in sports.

Once again, I congratulate this remarkable 70th anniversary International Academic Conference of the Korean Association of Physical Education and Sport for Girls and Women. I thank all of you for your participation and look forward to the valuable insights and outcomes that will emerge from this conference.

Thank you

Kangyoung Song

President of Korea Institute of Sport Science

Congratulatory Address

Good day, everyone. I am Han Kyung Lee, President of KAHPERD: Korean Alliance for Health, Physical Education, Recreation, and Dance.

First and foremost, I would like to sincerely congratulate you on the opening of the "70th Anniversary International Academic conference of Korean Association of Physical Education and Sports for Girls and Women." I extend my gratitude to President Hyun Mi Heo and all those involved for their dedicated efforts in organizing this conference. I also appreciate all members who have taken despite their busy schedules.



The year 2024 marks the 70th anniversary of Korean Association of Physical Education and Sports for Girls and Women, which has been a leading force in the development of women's sports in Korea since its founding in 1954. I would like to express my gratitude to the founding president Shin Sil Kim, past presidents, board members, and all members for their dedication to academic research and the advancement of women's sports rights. I wish for the continued growth and success of the Korean Society of Women in Sports.

While women's sports have made significant progress over the years, there are still issues that need to be addressed. I hope that this conference, themed "Women's Sports Issues & Prospects: Pride, Passion, & Strength," will serve as a platform for diverse

discussions and solutions regarding the current issues in women's sports, as well as insights into future prospects.

I would like to once again thank the presenters for taking the time to share their insights today. I hope this gathering will foster the exchange of ideas among scholars and lead us toward better paths forward.

Once again, thank you to everyone who contributed to the preparation of this conference, and I wish for the continued success and peace of the Korean Society of Women in Sports and all its members.

Thank you.

Han Kyung Lee

President of the Korean Alliance for Health,
Physical Education, Recreation, and Dance

2024년 한국여성체육학회 70주년 기념 국제학술대회



Keynote Session

Issues and Prospects for Women's Sports Studies

Presentation 1

Key Issues and future directions for Women in Sport in Korea

Seong Sik Cho Hanyang University

Presentation 2

The role of exercise in women's health:
old topic but new insight in the era of Salutogenesis

Justin Y. Jeon Yonsei University

Key Issues and future directions for Women in Sport in Korea

Seong Sik Cho
Hanyang University

I. Introduction

Women in sports, worldwide, had the same stories until the mid-18th century; although women's sports existed only slightly in the UK or France, women's sports were almost non-existent and thus the sports world was a site for only men (Vadhera, 2018). Fortunately, the Industrial Revolution of the 18th century promoted women's advancement into society and began their participation in physical activities at a very low level. While women worked as industrial workers, women commuted to work by bicycle, but women's participation in sports was insufficient to the point where this was considered women's sports participation.

In Korea, which experienced the Industrial Revolution and women's entry into society later than in the West until the 20th century, women's sports took quite a different path and have a short history. And the development of women's sports was dominated by artificial and political factors rather than voluntary choices. As part of Japanese colonial education, female students were encouraged to take part in school physical education, and even after liberation, only female students were able to participate in physical activities through classes centered on school physical education. Since then, until the 1980s, women's sports were developed within the elite sports-centered policy paradigm of promoting national prestige without women's big participation in recreational sports and did not develop significantly and spontaneously. With the involuntary development of women's sports, the advancement and expansion of women's sports have been limited by Korean society's strong long-standing patriarchy and conservative prejudices against women's physical activities.

However, after the 1988 Seoul Olympic Games, the paradigm of sports promotion and development in Korean society was changed, and a movement to take part in 'sports for all' was largely adopted. In sports for all paradigms, women's sports participation was developed naturally and health promotion and physical fitness through sports were promoted regardless of gender. As a result, Korean women's sports appear to have grown smoothly and massively without any problems. In fact, many women participate in recreational sports at a similar level to men, and the female athletes of national team have won more medals than the male athletes of national team at the Asian Games and Olympics, showing that women's sports have made great progress. Despite the external growth of women's sports since the 1988 Seoul Olympics, however, the issues of gender equality in sports have been consistently raised in the male-dominated Korean sports.

This presentation sought to explore Korean women in sport and raise four key issues, from the perspective of gender (in)equality. To this end, it adopted a feminist approach that is relatively unfamiliar in the field of physical education or sports sciences and attempts to critically point out and discuss the issues of gender inequalities in sports in Korea. And finally, it suggested four major future directions for gender equality in sports in Korea, while presenting several challenges and expressing hope for a bright future toward gender equality in sports.

II. Key Issues of women in sport in Korea

Here four key issues were derived from a feminist perspective in four areas including recreational sports, elite sports, sports organizations, and women's sports academia.

1. Sport as a male privilege

When we talk about the status of women in sport in Korea, we first look at women's sport participation. According to government survey (Ministry of Culture, Sports and Tourism, 2023), the rate of regular sports participation of women at least once a week (61.9%) is found to be almost the same as that of men (62.8%). There appears to be slight difference between men and women in simple quantitative participation rates. However, when looking at the location of participation in exercise, the cost of participation, and the activity types of participation, there are differences between men and women; men are more likely to use private sport facilities (27.9%) than women (19.1%); men spend more money (KW 313,000/year) than women (KW 257,000/year) on purchasing sports equipment including shoes and apparels; simple walking is an event in which more than half of women (51.5%) have experience participating, but only one-third of men (34.5%) have experience participating in walking. Of the physical activities in which women 'regularly' participate, 49.7% are walking, while men do so in 25.5%. 10.1% of men participate regularly in golf, compared to only 3.8% of women. Women in Korea are like men's in terms of quantitative participation rate, but their exercise and workout qualitatively appear to be simpler, less costly, and less organized than men's. Men are privileged in recreational sports.

2. Sport as a male domain and control

There are significant differences in male and female participation in elite sports. The highly competitive sports in Korea are the most men-dominated field. In the number of registered athletes, men account for 81.2% and women for only 18.8% (Sports Support Portal, 2024). In this respect, elite sports in Korea are strongly male dominated. Women's under-representation in elite sports seems to be based upon the stereotyped misperception that women do not fit the athletic roles and images and that women are not strongly enough to compete in high intensity level (Senne, 2016). Just as male athletes dominate the gender ratio of all registered athletes, the coach profession also exists as a very male domain. Male coaches account for 83.8% and female coaches do for only 16.2% (Sports Support Portal, 2024). This is due to the mistaken belief that women do not have sufficient abilities and skills to perform coaching duties. As a result, women's sports are largely coached by male and female sporting bodies are controlled by male.

3. Sport as a male power and a site of unawareness for gender (in)equality

When we look at the leadership field in sports, gender differences are even more noticeable. As of September 2024, women account for only 23.9% of the board members of Korea Sport & Olympic Committee (hereinafter KSOC) in which all presidents have been men and now of the six vice presidents, only one is a woman (KSOC, 2024). There are only two female chairs among 31 commissions (6.5%).

What is unfortunate and sad is that KSOC is not following IOC's philosophy and mission regarding gender equality, even though the KSOC's Articles of Incorporation include a clause requiring compliance with the Olympic Charter such as 'To act against any form of discrimination affecting the Olympic Movement' (IOC, 2024a). As of the end of 2023, women are 37.5% of IOC members and 37% of IOC commission chairs (IOC, 2024b). As a world-leading sports organization for gender equality in sports, IOC has made a considerable progress for gender equality in administrative leadership positions as well as the inclusion of female athletes. On the other hand, KSOC has shown passive progress in realizing gender equality. Its anti-discrimination clause in its Articles of Incorporation looks merely declarative and less meaningful about discrimination against women.

A significant difference between IOC and KSOC is 'the commission of women in sport' but IOC changed its name to 'Gender equality diversity and inclusion commission'. KSOC's women in sport commission has the same missions and roles as the IOC's commission because 'women in sport commission' in KSOC was created following the IOC's commission. The commissions in IOC and NOC advise the IOC/NOC session, the IOC/NOC Executive Board and the IOC/NOC President on the implementation and advancement of the gender equality in sport on and off the field of play (IOC, 2024c). But the core roles and responsibilities of the two commissions are quite different. The IOC commission of gender equality diversity and inclusion is responsible for advocating equal participation, promoting and ensuring gender equality, raising awareness of gender equality, and the IOC's position on gender equality (IOC, 2024c) while the main tasks of KSOC commission are to guide and disseminate women's sports, develop women's sports events and facilities, and review and promote international exchanges of women's sports (KSOC, 2024). Two answers are possible: One is that there might have been no gender inequality in Korean sports at all and the other is that there has been unawareness of gender inequality. But the latter answer is supported. It appears that many people involved in women's sports lack awareness of, or are otherwise indifferent to, gender inequality and gender discrimination against women.

The lack of awareness of gender inequality and discrimination in sports organizations appears to run parallel to the lack of awareness in the government sectors of Korean society. Korea Sports Ethics Center (hereinafter KSEC), which is supposed to prevent and abolish gender discrimination and racial discrimination as a core part of protecting human rights, seems to be indifferent to or to avoid such discrimination issues. The Center which was set up for the protection of athletes' human rights in 2020 has paid attention to anti-corruption in sports organizations, anti-illegal sports betting, anti-bribing the referee, and anti-fraudulent entrance to the university rather than any anti-discriminatory activities in sports settings (KSEC, 2024). The missions of the Center are to ensure fairness in sports and protect human rights and they look far from eliminating and abolishing discrimination in sport and setting up fairness aiming for equality about gender, race, and sexual orientation. About gender, the Center is only interested in sexual harassment and sexual violence and does not specifically address gender inequality and discrimination. The reason the Center does not explicitly mention gender discrimination is believed to be because Korean society has a strong reluctance and even aversion to the term 'sex(gender) discrimination' in the public sphere. In particular, Korean government wants to use the term, 'gender equality,' rather than the term, 'the elimination or abolition of gender discrimination against women.' The government and public agencies tend to avoid using the term 'discrimination' and use the broad and non-specific term, human rights. If the government sector refrains from using the term

‘discrimination,’ then government sports agencies such as KSOC, KSEC and other public-funded sports organizations naturally refrain from using the term, ‘discrimination,’ or ‘inequality.’

4. Sport as a male domain and a site of unawareness of gender issues

In Korea, universities appear to be one of the most male dominant institutions even though almost half of students are female. The proportion of female professors in four-year universities is 27.1% (High Brain Net, 2024). The department of physical education/sports sciences/or sports studies (hereinafter PE/SS) is an absolute male majority unit among many majors in universities. The most extreme example is in the department of PE/SS at so called SKY (Seoul National, Korea, and Yonsei Universities) universities where the proportion of female professors is only 7.1% (3 of 42 professors). Meanwhile, the proportion of female professors among full-time professors in such departments at four-year universities around the country is 16.2% while the proportion of female part-time professors is 29.0% (Higher Education in Korea, 2024). Female sports scholars are a small minority in quantity and are in an unstable position qualitatively. Even in the department of PE/SS majors at 6 women’s universities in Seoul, the proportion of female professors is only 30%; male professors account for the absolute majority. At a women’s university, 100% female students are educated by the overwhelming majority of male professors. In the US, sports sciences and sport management are also men-dominated disciplines. But the proportion of female professors in exercise physiology is 36.4% (Zippia, 2024) and their proportion in sport management is 45.9% of assistant professors and 37.7% of full professors (Sailofsky, Orr, & Darvin, 2023) showing that such figures are much higher than those of S. Korea.

Even though female sports scholars in Korea have made up an absolute minority in PE/SS academics, Korean Association of Physical Education and Sport for Girls and Women (hereinafter KAPESGW), the only sports academic organization for women, has a long history of 70 years, and the Journal of Korean Association of Physical Education and Sport for Girls and Women (hereinafter JKAPESGW) the association has published has a meaningful history of 38 years. It is examined and reviewed how many of JKAPESGW’s research topics published over the past 20 years have included women and gender as core research topic. In JKAPESGW published from 2004 to 2013, the number of papers with women/gender as a topic is 182 out of 564 (32.3%), and from 2014 to 2023, it is 157 out of 446 (35.2%). The interest in women/gender as research topic account for approximately one-third of all published articles without much change over the past 20 years. If these research trends are divided into the humanities/social sciences and the natural sciences, differences are revealed in the two academic fields. From 2004 to 2013, 27.3% (79 out of 289 articles) of papers in the field of humanities and social sciences focused on women/gender issues while 37.5% (103 out of 275 articles) in the field of natural sciences treated women/gender as core issues, showing relatively high interest in women/gender from the field of natural sciences. From 2014 to 2023, 28.6% (99 out of 346 articles) of papers in the field of humanities and social sciences focused on women/gender issues, and 58.0% (58 out of 100 articles) in the field of natural sciences, showing remarkably high interest in women/gender from natural science approaches. The significantly low proportion of papers focusing on women/gender issues in humanities and social sciences research shows that the identity of JKAPESGW is neither women-specific nor meaningful from the perspective of a women-only academic organization. But one positive aspect is that research in the field of natural sciences has shown a high proportion of women/gender issues

(58.0%) over the recent past decade from 2014 to 2023.

However, from 2014 to 2023, the humanities and social sciences field accounted for 77.6% and the natural sciences field accounted for 22.4% of all papers, showing a significant difference. In other words, the number of papers in the field of natural sciences decreased significantly from 275 articles from 2004 to 2013 to 100 articles from 2014 to 2023. It seems difficult for women to advance into the field of natural sciences, which is increasingly perceived as a male domain, so they choose to pursue the fields of humanities or social sciences when entering graduate school. Despite this negative decrease, one positive phenomenon is the increase in feminist approaches to research in the humanities/social sciences. Among humanities/social sciences papers with women as the core topic, papers with feminist approaches to women's (in)equality/gender sensitivity showed a significant increase from 2014 to 2023 representing 25.3% (25 papers out of 99), compared to 15.2% (12 papers out of 79) between 2004 and 2013; the number of papers have doubled from 12 to 25.

III. Future directions for women in sport in Korea

Future directions for women in sport in Korea are well expressed in this 70th anniversary international conference motto: 'Pride, Passion and Strength/Power'. This presentation adds one more motto, 'Challenge' to the above three words which is an absolute element of taking action with pride, passion, and strength/power. It suggests the direction and tasks that KAPESGW and women's sports communities should pursue in the future.

1. Pride

First, we must have pride in women's sports in Korea more than anything else. Women's pride is her joy and ability to love and be loved. Women's pride is to be appreciated because you are a woman. In Korea, where there are absolutely many male athletes, female athletes perform much better than male athletes in major international competitions. That is, although female athletes are a small number, knowing that Korea's elite female athletes are achieving amazing results in international competitions is something great to be proud of. As have been the cases in past Olympics, majority of Korea's medalists at the 2024 Paris Summer Olympics are female athletes; they make up 59.6% of medalists. Even looking at earlier Olympics, Korea's Olympic women's medalists accounted for 43.5% and 47.1% of the 2016 Rio Summer Olympics and 2020 Tokyo Summer Olympics, respectively. This figure significantly exceeds 19% which is the proportion of female registered athletes in Korea. We must be proud of the fact that 19% accounts for about 50%!

Women should be proud of having supported and developed their own sports organization, the KAPESGW, distinct from men's organizations for 70 years. Let us imagine 1954, when this organization was first created, and then picture Korean society in the 1950s, 1960s, and 1970s when the social status of women was incredibly low. Female PE/SS professors and athletes devoted themselves to the development of this organization. Now KAPESGW has a 38-year history of publishing academic journal, which is longer than journals of any other PE/SS societies. In this respect, KAPESGW must develop into an academic organization for female sports scholars on equal footing with the Korean Alliance for Health, Physical Education, Recreation, and Dance (hereinafter KAHPERD), one of the most

male-dominated academic organizations which appears to be lagging in global equality awareness in the 21st century.

Lastly, I applaud all of women in PE/SS departments for persevering and surviving in a male-dominated organization and many outstanding female professors for outperforming male professors, and I think female sports scholars should be proud of themselves because women have broken the stereotype that physical education, sports sciences, or sports studies are not suitable for women. They have now become the pride of Korean sports and key members of the departments of PE/SS. I also salute the female professors, female graduate students and undergraduate students for going through difficult times and persevering in situations where many gender unequal practices existed within the PE/SS departments over the past several decades.

With pride, women must confidently move forward toward gender equality!

2. Passion

Passion refers to having a high motivation to take part actively in organization decision-making process and activities within or outside one's organization. Women's empowerment begins with women's passion. Passion and empowerment go mutually and supportively together. Actually, passion empowers girls and women, and the empowered women can turn their passion into their own professional world in which male privilege and domain exist.

Female sports scholars and sports administrators who become passionate tend to play active roles in the major decision-making process of the PE/SS and sports organizations largely dominated by men. When women have great passion, they are no longer marginalized in the organization. Even if women are a minority within an organization, when it comes to gender issues, women's voices must be heard. And that passion must be directed outside the organization. More actively, they try to harness their passion to not only achieve their own goals, but to empower and inspire further women (International Women's Day, 2024). As passion grows, commitment like dedication and responsibility also increase, and this increase in commitment ultimately leads to change. It started with a passion for realizing gender equality, but the result can be a huge change in achieving gender equality.

According to The Female Passion Project (Ang Around the Globe, 2024), the Project is aimed towards creating a community for ambitious and driven women to empower one another. It is to inspire and empower women and female students while women themselves share interests and encourage each other to build solidarity. What this Project imply is that female sport scholars will advance into various sports organizations such as KSOC committee and diverse commissions, regional sports councils, and athletic federations in greater numbers than they do now. By involving in sports organizations as many women as possible, the goal is to create a community among women, foster solidarity, and provide a strong voice on gender issues.

With pride and passion, we must confidently and actively move forward toward gender equality!

3. Strength/Power

Raising and solving the issues of gender inequality begins with women's empowerment, that is, women's strength and power. Sport is not just a reflection of society but more than a reflection of society.

So, sport can be seen as a vehicle to change the status quo of society. Today many sport studies scholars believe that sport is a vehicle to advance the status, liberty, and well-being of women and girls (Global Sports Mentoring Program, 2024): women can be empowered through sports. School PE classes are important opportunities for girls to increase physical prowess and challenge gender prejudices against girls, which means that girls' participation in sports is an important empowerment tool.

Women's empowerment through sports can be developed in three areas: spiritual, social, and physical. Spiritual strength and power refer to the cognitive ability to acknowledge the differences between men and women, but to be aware of the sexist transformation of physical differences into social discrimination against women. Women's participation in sports is an important opportunity to develop this mental strength/power. In other words, while taking part in physical activities, women understand the unique physical characteristics of women, discover differences from men, and try to physically challenge their own limitations. Female sports scholars studying women's sports will have a good opportunity to expand their critical and feminist epistemology and a meaningful challenge that opens up women's unique academic world. However, the challenge is not to imitate men, nor is it an attempt to be equal to men. Through sports participation and research, women learn that sports are also suitable for women, that women can enjoy sports regardless of their physical and skillful abilities, and that women's sports issues are worth studying. And they are becoming aware of the problem of male monopoly/privilege in the sports field, that is, they are becoming feminist conscious.

Women's empowerment through sports is also important at a social level. While playing sports, women and girls get new networks with colleagues, coaches, and administrators, develop a sense of identity and access new opportunities to become more engaged in school and community life (Global Sports Mentoring Program, 2024). And while conducting research on women's sports, female sport scholars will have a lot of opportunities to address gender issues and collaborate with female research colleagues, male pro-feminist scholars, female coaches, and female sports administrators on gender issues, adding depth and broadening the breadth of feminist epistemology including theories and methodology (Creswell, 2007). These kinds of networking and collaborating improve women's and girls' leadership roles and participation in decision-making and convene women in leadership positions across boundaries. Women's empowerment like social networking can promote women's solidarity which ultimately acts as a force for actions and help to deconstruct gender stereotypes and discriminatory attitudes against women (Global Sports Mentoring Program, 2024). There seems to be a lot of division, fragmentation, or mutual indifference between women in the field of PE/SS. Because women are a small minority in such disciplines, their strength/power must be increased through solidarity. If you are the only female professor in a department, cooperation with female professors from other departments on/off campus is necessary.

Finally, women's physical strength and power need to be based upon their physicality. This physicality does not mean becoming equal to men but requires women to overcome their physical limitations through sports. According to the mission of Women's Tennis Association Foundation (hereinafter WTAF), girls and women are empowered through not only education and leadership but also health & wellness (WTAF, 2024). Challenges for physical strength can in turn lead to mental and social strength. In other words, experiencing physical abilities and challenging physical limits can greatly contribute to maximizing one's social abilities. In this respect, female professors in the PE/SS departments need to prove activeness in physical activity and physical health. This is because their good research also comes

from being physically strong and thus empowers them in their departments in which many graduate students have physically active and excellent research professors as their advisors. If women overpower, they overtake and overcome (Facebook, 2024).

With pride, passion, and strength/power, we must confidently, actively, and vigorously move forward toward gender equality!

4. Challenge

If pride, passion, and strength/power mentioned above are sufficient conditions for realizing gender equality in sport, challenge becomes a necessary condition. In other words, the three are recognizing and questioning the problem of gender inequality in sports and can be a preparatory step to solve the problem, and challenge becomes a practical step for gender equality in sports. Several challenges are presented in the coaching positions, sports organizations, and PE/SS academia.

1) Chasing global gender equality index in sports

We need to chase the global gender equality index in sports. The most important index for gender equality is the participation rate of female athletes in the Olympic Games. The 2024 Paris Olympics was the first to have the goal of achieving gender parity between men and women (IOC, 2024d). This process was difficult, but it was the result of setting a goal and working hard. So, for example, we must achieve gender equality in terms of the quantity of participating athletes by setting targets for the participation rate of female athletes in the National Sports Festival at 40%, 45%, and 50% in the mid to long term. There is a need to raise awareness and strive for gender equality in sports organizations, local sports council and sports federatons.

2) Quota system for women in coaching positions

This system has been a challenge strongly requested by the Korea Women's Sports Association in 2019. But amid criticism that it was unrealistic, it ended up being a verbal request. However, the female coach quota system can be an important policy for the development of women's sports. This policy can be fully realized if implemented in the mid to long term, considering the ratio of female athletes among registered athletes. For example, the goal is to hire female coaches equal to 40% in the long term if the proportion of female registered players is 40%. It is said that there are no female coaches who have coached female athletes, and even if there are, most teams avoid hiring female coaches. There are negative attitudes toward childbirth and childcare leave and gender biases regarding whether female coaches can perform their job competitively and well. But if the female coach quota system is implemented, a desirable structure will be created where many female athletes can pursue a coaching career after their playing career, and with many female coaches in women's sports, the image of a country with global gender equality will appear in the international sports world. In the United States, during the early years of the NCAA and until 1970, most women's sports were coached by men. However, thanks to gender equality policies for coaching positions and women's efforts, the proportion of female coaches in today's popular sports such as basketball and volleyball exceeds 50%, and in soccer, it reaches one-third.

3) Advancement of women into sports leadership positions

Women should actively advance into the leadership field of sports organizations. The capable and conscious female coaches and former athletes, female sports professors, and leaders of women's organizations need to be appointed as executive, committee, or commission members of sports organizations. Rather than just barely keeping up with the IOC proportion of women, Korean sports organizations like KSOC and Korean Sport Federations should show their commitment to gender equality by boldly setting a goal of a higher proportion than that of IOC. As of 2024, the IOC female proportion is slightly less than 40%, but KSOC will set a goal of 40% female proportion of leadership positions by 2025 and 50% by 2030. Korea Sports Federations need to set the same goals. For example, as compared to international volleyball and table tennis federations where the proportion of female leaders exceeds 30%, the proportion of women in leadership positions in Korean volleyball and table tennis federations is only around 10%, showing no gender equality perspective at all. Our challenge is to set a goal of 30% female leaders by 2025 and 40% by 2030. If the number of female leaders increases quantitatively, the next challenge will be sharing awareness and building solidarity among themselves on gender equality.

4) Women's new sport research paradigm

As women, female sports scholars should be more interested in new research paradigms where women's sporting experiences are central to the investigation and research. This paradigm centers around and problematizes women's diverse situations in sports and examines various institutions and structures that frame those situations (Creswell, 2007). This new research is more based upon the inter-disciplinary and multi-disciplinary perspectives so that it will facilitate the collaborative efforts among the subdisciplines of PE/SS and between PE/SS and other disciplines such as humanities, social sciences, and even sciences and engineering, and help the feminine research networks to form and develop. Until now most of female sports scholars have shown research practices like those of male counterpart in PE/SS. This trend is also found in the JKAPESGW, and it is difficult to find papers focusing on women's sporting activities/movements and experiences in other PE/SS journals. Special distinctions can be made in selecting research topics or adopting research methods. It is worth applying some features of feminist research to PE/SS research. Of course, the beginning lies in scholarly awareness of gender equality in sports and then 'Gender Physical Education', 'Gender Sports Sciences' or 'Gender Sports Studies' must set up itself as new mainstream research among female sports scholars.

With pride, passion, and strength/power, we confidently, actively, and vigorously take on the challenge of eliminating gender discrimination against women!

IV. Conclusion & Suggestion

This presentation critically approached women's sports and their sports scholarship in Korea from a feminist perspective. It raised the following issues: Sports in Korea are male-privileged, male-dominated, male-powerful, and an arena where gender issues are neglected in sports organizations, administration and even academics. Some will not agree with these above issues, and some will agree but think there

will be many difficulties in resolving the issues. Because there are many realistic difficulties, we need tough challenges. In other words, we must share the same awareness and consciousness, speak out in solidarity with each other, conduct research, and take active action when necessary. Several challenges were presented: chasing the global gender equality index in sports, quota system for women in coaching positions, advancement of women into sports leadership positions, and women's new sport research paradigm. These challenges look difficult and idealistic but giving up without trying or fighting only shows their weakness. Fortunately, women in Korea are not weak!

Some challenges have already begun. Women's sports groups including KAPESGW hosted a women's sport festival as a celebration of International Women's Day. It is a very meaningful challenge for women in sport to lead sports events to promote women's health and solidarity as the protagonists of International Women's Day. In the field of sports journalism, a book was published to point out women's sports issues and promote women's sports from a new perspective. Some female sports reporters have a highly active interest in gender inequalities in sports, and solidarity and cooperation with sport journalism seem to be necessary. It may be worth considering changing the name of the KAPESGW and JKAPESGW to simpler and clearer names showing 'gender' and symbolizing 'identity.' I thought about 'Korean Women's Society for Women in Sport' and 'Korean Journal of Women in Sport' as new names. Or 'Korean Women's Alliance for Women in Sport' instead of KAPESGW looks good as an equal partner of KAHPERD. It seems much better to use the word 'alliance', which conveys women's power and solidarity, rather than 'association'. 'Women's Society,' or 'Women's Alliance,' just the names alone can make women feel proud. The challenge of changing the names helps clarify the identity of women's alliance and its journal and actively develop the academic discourses on women in sport. Perhaps the most active challenge seems to be 'We Meet Up Sports' as a social enterprise which strives to maximize the positive impacts of women's sport participation on education and society. This enterprise organizes sports programs and events for girls and women under the company's mission: "Women who change the world." The CEOs' interviews have great implications for women's sports organizations and scholarship, and present briefly the issues and future directions of women's sports in the following sentences: "It's not that women can't do sports, it's that they just haven't done it" and "Building a strong body, instead of a pretty body."

Finally, a change in our perspective on sports is needed. IOC declares that sport is one of the most powerful platforms for promoting gender equality and empowering women and girls (IOC, 2024d). Sports are not just a reflection of society any longer. Sports are just more than a game and much more than a reflection of society. Billie Jean King, one of the great activists for gender equality in sport and the greatest Tennis Player, says "I want to use sports for social change." I think King's saying means that "Sports are a great place to show that equality can happen" as Venus Williams mentioned. We need to look at sports as a site for gender equality and women's empowerment as well as women's joy. The claim that sport is a site for production and reproduction of gender inequalities, as argued by a young scholar 30 years ago, must now be withdrawn. Changes and efforts of women in sport toward gender equality have already begun!

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The role of exercise in women's health: old topic but new insight in the era of Salutogenesis

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In recent decades, advancements in medical science and improved living conditions have led to a significant increase in life expectancy worldwide. However, this extension of lifespan has not been accompanied by a corresponding increase in health span—the period of life spent in good health. Paradoxically, as people live longer, they often face more years burdened by chronic diseases and disabilities. This discrepancy between lifespan and health span is particularly pronounced among women, highlighting a critical area of concern in public health and geriatric medicine.

Women, on average, live longer than men but often experience a lower quality of life in their later years due to a higher prevalence of age-related conditions. The incidence of osteoporosis, cardiovascular disease, sarcopenia, depression, and Alzheimer's disease is markedly higher in women, especially post-menopause. These conditions not only significantly impact women's health and independence but also contribute to an increased prevalence of frailty—a state of vulnerability that heightens the risk of adverse health outcomes.

The disproportionate burden of these diseases on women's health span underscores the need for effective preventive strategies and interventions. Among these, exercise stands out as a uniquely powerful tool, offering benefits that span prevention, maintenance, and treatment across various health conditions. The role of physical activity in promoting health and mitigating disease risk has been well-documented, yet its potential in addressing the specific challenges faced by women across their lifespan remains underexplored. Moreover, adopting a salutogenic approach—which focuses on fostering health and resilience rather than merely preventing or treating disease—can further enhance the understanding and application of exercise in women's health.

Salutogenesis, a concept that emphasizes the creation of health through factors that support well-being, shifts the focus from risk reduction to health promotion. It encourages a proactive stance toward health, empowering women to enhance their physiological, psychological, and social resources to cope with the challenges of aging. This approach views exercise not only as a preventive or therapeutic tool but also as a means of reinforcing the body's capacity to maintain and promote health. By embedding the salutogenic approach into the design of exercise programs, we can optimize their potential to improve women's health across their lifespan, regardless of specific medical conditions.

This presentation aims to elucidate the multifaceted role of exercise in enhancing women's health, with a particular focus on its impact on conditions that disproportionately affect women and contribute to the health span-lifespan gap. We will examine how tailored exercise interventions can serve as a cornerstone in 1) mitigating cardiovascular disease (CVD) risk, a leading cause of mortality in

postmenopausal women, 2 combating sarcopenia to preserve muscle mass, strength, and functional independence, 3 alleviating symptoms of depression and potentially reducing the risk of its onset, 4 potentially slowing cognitive decline and reducing the risk of Alzheimer's disease. By exploring the specific benefits of exercise for each of these conditions, this presentation seeks to provide a comprehensive understanding of how physical activity can be leveraged to narrow the gap between lifespan and health span in women. The insights presented here aim to inform healthcare strategies, guide clinical recommendations, and empower women to take proactive steps toward healthier, more fulfilling lives as they age.

The salutogenic approach, applied to exercise, further broadens its scope by focusing on health-enhancing processes rather than simply addressing illness. For example, in osteoporosis management, weight-bearing exercises stimulate bone formation not just to prevent fractures, but also to promote long-term bone health and resilience. Similarly, cardiovascular exercise, through a salutogenic lens, becomes a means of strengthening the heart and improving overall vitality, not merely reducing disease risk. The same holds for interventions targeting mental and cognitive health—exercise serves as a vehicle for promoting well-being, resilience, and cognitive reserve throughout life.

CVD risk increases dramatically in women after menopause, becoming the leading cause of death among postmenopausal women. Exercise is a powerful tool in mitigating this risk. Aerobic exercise improves heart function, reduces blood pressure, and enhances lipid profiles. Calisthenics in the form of high-intensity interval training has shown particular benefits in improving cardiovascular health efficiently, while strength training contributes to better body composition and metabolic health, indirectly benefiting cardiovascular health. Research has demonstrated that women who engage in regular moderate-intensity exercise, such as brisk walking for at least 2.5 hours per week, have a 30% lower risk of cardiovascular events compared to sedentary women. Moreover, HIIT has been shown to improve cardiovascular function and insulin sensitivity more effectively than moderate-intensity continuous training in postmenopausal women.

Sarcopenia, the age-related loss of muscle mass and function, accelerates after menopause due to hormonal changes and often occurs alongside increased fat mass. This condition significantly impacts women's functional independence and quality of life. Progressive resistance training is crucial for maintaining and building muscle mass and strength. When combined with adequate protein intake, especially timed around exercise sessions, it enhances muscle protein synthesis. Functional exercises that mimic daily activities help maintain independence and reduce fall risk. Systematic reviews have found that resistance training significantly improves muscle mass, strength, and physical performance in older adults with sarcopenia, while the combination of resistance exercise with protein supplementation shows synergistic effects on muscle mass and function.

Mental health is another critical aspect of women's overall well-being, with depression being approximately twice as likely to affect women as men. The risk of depression increases during perimenopause and early postmenopause. Exercise has proven to be a powerful intervention for managing and preventing depression. Aerobic exercise releases endorphins, improves mood, and reduces stress. Group exercise provides social interaction and support, crucial for mental health. Mind-body exercises like yoga and Tai Chi combine physical activity with mindfulness, potentially offering additional mental health benefits. Meta-analyses have found that exercise has a large and significant antidepressant effect

among people with depression, while specific studies on women have shown that regular exercise during and after menopause is associated with fewer depressive symptoms.

Cognitive health is another area where women face disproportionate challenges, with nearly two-thirds of Alzheimer's disease cases occurring in women. The risk of Alzheimer's increases significantly after menopause. Exercise offers multiple benefits for cognitive health. Aerobic exercise improves cerebral blood flow and promotes neuroplasticity. Cognitive-motor training, which combines physical and cognitive tasks, may offer enhanced benefits for brain health. Resistance training may improve cognitive function through various mechanisms, including increased growth factor production. Large-scale studies have demonstrated that multidomain interventions including exercise can improve or maintain cognitive functioning in at-risk elderly people. Meta-analyses have found that individuals who engaged in high levels of physical activity had a significantly reduced risk of cognitive decline.

In conclusion, exercise emerges as a powerful, multifaceted intervention capable of addressing the major health challenges faced by women as they age. Through the lens of salutogenesis, exercise becomes not only a preventive tool but a proactive means of building health and resilience. By integrating this salutogenic approach into healthcare strategies, we can empower women to take control of their health, leading to improved quality of life and a narrowed gap between lifespan and health span.



Session 1

Achievements and Challenges in Women's Sports Studies

Presentation 1: History, achievements, and future of studies in women's sports:
Focusing on the activities of Japan Society for Sport and Gender Studies

Presenter: Osamu Takamine Japan Society for Sport and Gender Studies /
Meiji University Japan

Discussants: Jongmi Joo Hoseo University

Presentation 2: Social Science Research in the Field of Women's Sports

Presenter: May Kim Korea University

Discussants: Hyang-Hee Hwang Kangwon National University

Presentation 3: Women's Sport Research with Natural Science Perspective:
Sarcopenia, Menopause, and Exercise Intervention in Women

Presenter: Youngmin Park Incheon National University

Discussants: Na-Young Ahn Keimyung University

History, achievements, and future of studies in women's sports: Focusing on the activities of Japan Society for Sport and Gender Studies

Osamu Takamine

Japan Society for Sport and Gender Studies / Meiji University, Japan

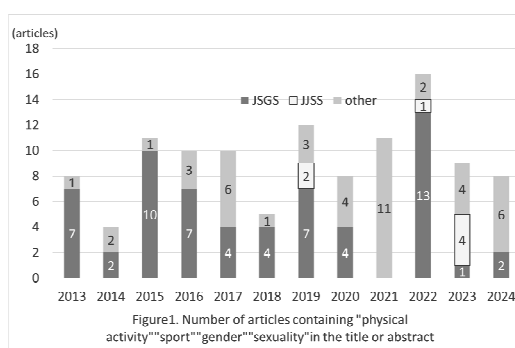
1. Trends of research articles on sports / physical education and gender / sexuality

First of all, we will focus on academic articles to identify trends in sport and gender studies in Japan.

Figure 1 shows the trend in the number of articles containing the words “sports / physical education” and “gender / sexuality” in the title or abstract of the article. The articles were written in Japanese and published from 2013 to 2024, and were found on “J-Stage”.

A total of 113 articles cited in J-Stage were published in Japan over the past 12 years, including the words “sports / physical education” and “gender / sexuality” in the title or abstract. The lowest number was 4 in 2014, the highest was 16 in 2022, the total number of articles was 113, and the average was 9.4 articles published per year.

Among the total number of articles, 53.9% were published in the Journal of Sport and Gender Studies (JSGS) and 6.3% in the Japan Journal of Sport Sociology (JJSS).



<Figure 1>

2. Trends of research articles in JSGS

We will proceed by focusing on JSGS, which has published most of the articles shown in Figure 1. JSGS is a journal published by the Japan Society for Sport and Gender Studies (JSSGS), an interdisciplinary society founded in 2002. In 2022, the year of its 20th anniversary, a project was undertaken to review research trends in articles published in JSGS. Here is a summary of the results.

The project was carried out by seven members, and the total number of articles published in JSGS (from vol. 1 (2003) to vol. 19 (2021)) was 293, of which 15% were “articles,” 9% were “research notes,” and 28% were “conference reports. Project members classified each article into 30 major categories based on their titles, and reviewed seven major themes among them. The seven major themes were

“Theory and Methods,” “History,” “Physical Education in School,” “Participation,” “Health and Fitness,” “Rules,” and “Harassment and Violence. Here I will introduce the research trends in five of these seven themes, excluding "Health and Fitness" and "Rules.”

(1) Theory and Methods (reviewed by Takao M.)

First, let's focus on “Theory / Methods”. Articles published in JSGS tended to emphasize the importance of “relational analysis” (Hall, 1996). In the early years, the articles concerned themselves with the maintenance and reinforcement of the male-centered gender order in modern society by sports, and gradually began to consider diversity in terms of gender identity, sexual orientation, economics, ethnicity, race, etc., from the perspective of intersectionality. More recently, studies have also been published that focus on power relations around sexuality, such as heterosexual norms and homosociality.

Qualitative analysis was the most common method of data analysis at 39%, followed by quantitative analysis at 33% and document analysis at 20%. In qualitative analysis, in addition to the Grounded Theory Approach including modified versions and life history analysis, Computer Assisted Qualitative Data Analysis Software has begun to be used.

(2) History (reviewed by Koishihara M.)

With regard to the second major theme, “History,” results have been accumulated on the debate over the pros and cons of Japanese women's participation in the modern Olympic Games, the actual situation from the birth to the establishment of female physical education teachers, and the relationship between women's sports participation and gender norms in the 1920s and 1930s in Japan. However, due to the limited number of historical researchers, the accumulation of such research is not sufficient.

(3) Physical Education in School (reviewed by Mikami J.)

The third major theme is “Physical Education in School”, which has generally pointed out the existence of latent gender messaging in school physical education and their transmission of a hierarchical gender dichotomy to learners. These studies have focused on the “hidden curriculum” in addition to the regular curriculum such as textbooks. For example, it has been pointed out that there is an imbalance in the gender ratio of PE teachers in schools, and that they tend to have gender perceptions based on gender trait theory. Although there are only a few studies, some of them focus on “Undo-kai”, the school athletic games, or on school sports club activities. Furthermore, in recent years, studies that attempt to clarify the experiences of sexual minorities in school physical education, for example, have begun to be conducted based on the premise of diverse genders.

(4) Participation (reviewed by Shin E.)

The fourth major theme is “Participation”. The study, which explored the causes of gender differences in exercise and sports participation among children, adolescents, and adults in Japan through quantitative data analysis, pointed out that the sports participation of people in each age group is closely related to the sports experience of family members, family encouragement, past sports experience, social life circumstances, and athletic facilities, etc.

A qualitative analysis of “participation” includes fieldwork comparing women's experiences of surfing in Japan, the U.S., and Australia. This study points out that there are differences in women's surfing experiences depending on race, economic status, and the competitive environment in each country, and serves as a case study that includes an intersectional perspective. There have also been interviews with female professional wrestlers about what it means to compete with pain and injury, and an ethnography

of a women's soccer team that explored the social meaning of pain by focusing on menstruation.

(5) Harassment and Violence (reviewed by Takamine O.)

The last major theme introduced here is "Harassment and Violence. This theme has been one that has been addressed since the JSSGS was established, and it can be said that projects conducted by JSSGS members have facilitated research on this topic. The results of two nationwide surveys in 2002 and 2007 conducted by the JSSGS project have revealed the status of sexual harassment experiences in the sports environment, as well as the characteristics of sexual harassment perceptions. Based on the results of these surveys, sample guidelines for sexual harassment prevention have been proposed that could serve as a model for many sports governing bodies. The results of this research have also been reflected in a handbook and video materials prepared by the Japan Sport Association, and have contributed to making the issue of harassment more visible in the Japanese sports world.

(6) Comprehensive review (reviewed by Takamine O.)

Through these reviews, it can be said that sport and gender studies in Japan have produced valuable results unique to the JSSGS. However, in light of gender and sexuality issues in the Japanese sport environment, it is necessary to make further development along both quantitative and qualitative dimensions. Sport and gender studies in Japan need to:

1. incorporate more knowledge from disability studies.
2. make more use of their interdisciplinary nature and deepen collaboration and dialogue with researchers in the natural sciences.
3. accumulate experience in order to develop academic findings and knowledge into "policy".

3. An interdisciplinary review of "sex differences"

I will introduce the result of one more project by JSSGS. This project aimed to empirically understand how "sex" and "sex differences" are treated in the field of physical education, sports, and health science research in Japan. A total of 1,389 articles and research materials were published in eight journals of the field between January 2013 and December 2022. Of these, 1,056 (76.0%), which were selected based on the criteria of "empirical research that conducted various surveys, experiments, and observations on human subjects," were reviewed by seven members of the project.

(1) Type of data

First, when the papers were divided by the type of data used, the majority (82.0%) were papers that "quantified information through experiments or surveys, etc.", while 12.2% were papers that "converted information into text through observations, interviews, etc."

(2) Gender of the subjects

Next, when the papers were divided by the gender of the subjects of experiments, surveys, and observations, 10.8% of the papers were "female-only" papers and 27.0% were "male-only" papers. This confirms the tendency for papers targeting only males to be more common than those targeting only females. In addition to "male" and "female," only 1.3% of the papers explicitly indicated "other," "neither," and "unknown" as sex options, indicating a lack of consideration for gender diversity.

Almost half of the papers, 49.6%, included both female and male subjects in the study. The following

classification was made for these papers.

(3) Method of analysis

There were two perspectives in the classification, the first being “method of analysis”. The six categories used in the analysis and the results of the analysis are listed below.

- A) Consideration of gender differences (13.7%)
- B) Tabulation and analysis by gender (13.3%)
- C) Comparison and testing of men and women (15.6%)
- D) Adjustment and control for gender differences (3.6%)
- E) No analysis by gender (39.4%)
- F) Multiples of the above apply (14.5%)

(4) Interpretation of analysis results

The second classification perspective is “interpretation of analysis results. For this perspective, we have prepared these six categories. The results of the analysis are as follows:

- a. Leaving out the factors of sex differences (18.1%)
- b. No gender perspective (13.7%)
- c. With gender perspective (12.2%)
- d. Mention of no sex difference (6.9%)
- e. Ignoring the absence of sex difference (4.0%)
- f. Ignoring sex differences (45.1%)

From these results, the following points can be gleaned.

First, “sex” is a common variable in research in the field of physical education, sports, and health science in Japan, and the existence of sex differences is also common knowledge. For this reason, sex differences have not been verified, and even when sex differences are confirmed, the reasons for such differences are not questioned.

However, if sex differences are not verified, the sex differences that really exist will not be revealed. If the reasons for sex differences are not questioned, the essentialist interpretation that sex differences are “innate” will prevail.

On the other hand, there is little “perspective on gender diversity,” and the field of physical education, sport, and health science in Japan has not been able to break away from the perception of sex dualism.

These results indicate that the impact of sport and gender studies on the field of physical education, sport, and health sciences remains extremely limited in Japan.

Researchers in sport and gender studies need to engage in dialogue with researchers in the natural sciences.

Acknowledgements: Chapter 2 of this report is based on the content reported at the 20th JSSGS meeting (2021), and Chapter 3 at the 22nd meeting (2023). I would like to express my appreciation to all project members for their dedication and hard work.

<Discussion>

History, achievements, and future of studies in women's sports: Focusing on the activities of Japan Society for Sport and Gender Studies

Jongmi Joo
Hoseo University

First of all, I would like to say that I thoroughly enjoyed Professor Osamu Takamine's insightful presentation. Before I dive into the discussion, I would like to share one thing that surprised me. I was struck by the fact that the name of the organization Professor Takamine introduced, the Japan Society for Sport and Gender Studies(JSSGS), uses the term 'gender' rather than 'woman' or 'girl.' This surprised me because the concept of 'gender' is not merely about distinguishing between man and woman as a matter of 'sex.' Rather, it is a term used to describe a concept that is closely linked to various systems of inequality within our society and exerts a significant influence on both individuals and society. Therefore, I thought that this JSSGS, which deals with issues of sport and gender in a sensitive and specialized way, must be quite progressive. On the other hand, the existence of this JSSGS, led me to wonder if this implies that there are many gender-related issues in Japanese sport society.

Professor Osamu introduced us one of the projects conducted by JSSGS in 2021 to examine trends in 'sport' and 'gender' research. This project involved reviewing articles published in the JSSGS's journal, the Journal of Sport and Gender Studies(JSGS). The review found that, in the early research of this JSSGS, much like in other countries' sports communities, studies primarily focused on critically examining how male-dominated gender hierarchies were maintained and reinforced in Japanese sports society. On the other hand, I find it truly remarkable that JSSGS has gradually begun to conduct research that considers diversity, including 'gender identity, sexual orientation, and race,' and I believe this provides significant insights to Korea. In contrast, in Korea, while research on women's differences and discrimination in sport is quite common, studies on 'gender identity, sexual orientation, and diversity in gender' remain extremely limited.

In terms of research methods, it appears that scholars at JSSGS conduct with 39% of studies being qualitative and 33% being quantitative. In Korea, similarly, there is a tendency to use qualitative research methods more often in gender-related studies. While both quantitative and qualitative research play important roles depending on the topic and purpose of the study, it seems that qualitative research is more commonly conducted because gender-related issues need to be deeply understood in their social, cultural, and personal contexts.

Regarding 'History,' it was noted that although there has been an accumulation of studies on the relationship between women's participation in sport and gender norms in Japan, research on this historical aspect remains insufficient. I believe this is also true for the field of women's sports in Korea. Studying history is crucial as it allows us to diagnose the present and predict the future. However, due to the practical challenges of conducting such research, I think this area

remains underdeveloped in both countries.

Similar to Korea there are latent gender inequalities in Japanese physical education in school, and a hierarchical gender dichotomy is being conveyed to learners. Research has pointed out the gender imbalance among physical education teachers and the tendency to hold gender perception based on theories of gender trait. Meanwhile, some recent studies have been conducted to uncover the experiences of individuals with diverse gender identities, such as sexual minorities in physical education. This area, which has received little attention in Korea, presents significant implications for Korea.

The review of the JSGS revealed that a significant amount of research has been conducted on 'harassment and violence,' which is said to be due to JSSGS having shown a strong interest in this area since its establishment. The JSSGS conducted two nationwide surveys to uncover the characteristics of experiences of sexual violence and perceptions of sexual violence within the sports environment. Based on the findings of these surveys, the JSSGS proposed guidelines for the prevention of sexual violence, which contributed to creating a model for sport governing bodies. The research results have also been reflected in the handbook and video materials produced by the Japanese Sports Association, thereby contributing to greater awareness of harassment issues in the Japanese sports community. I believe this aspect holds significant implications for the Korean Society of Women in Sports Studies as well.

Professor Osamu introduced another project conducted by the JSSGS in 2023. This project involved reviewing studies from eight academic journals in the fields of physical education, sports, and health sciences to examine how 'sex' and 'sex differences' have been treated from January 2013 to December 2022. The conclusion of this project found that 'sex' is a common variable in the field of physical education, and that differences based on sex are generally accepted as common knowledge. However, it noted that there is little perspective on gender diversity in the Japanese physical education field, and that the understanding of a gender dichotomy remains prevalent. This suggests that the Japanese academic field of physical education remains extremely limited in its research on sport and gender, and in my opinion, the situation in Korea is likely not much different.

However, the fact that there are societies and journals within the Japanese women's sports community that professionally and sensitively address 'sport' and 'gender' issues, and that, albeit minimally, there are attempts to view gender from diverse perspectives, shows that the Japanese women's sports field has made significant progress.

Social Science Research in the Field of Women's Sports

May Kim
Korea University

Is research on women's sports different from research on men's sports? Should research on women's sports be different from that on men's sports? Is research in Korea different from research in other countries? Should research in Korea differ from research in other countries?

Sports are fundamentally physical, and women and men are biologically and physiologically distinct. From a sports perspective, the physical differences between men and women are mainly reflected in aspects such as stamina, strength, flexibility, endurance, and metabolism. These differences stem primarily from physiological factors, hormones, muscle structure, and body proportions. Therefore, research focused on women's bodies, functions, and abilities should differ from that on men. Then, should sports research on the social and psychological aspects of women, unrelated to physical abilities, also differ from that of men? The social roles and positions of women, from ancient times to the present, have been different from those of men in most cultures. These societal perspectives and expectations are further reinforced in the world of sports, where traits traditionally viewed as male strengths, such as toughness and endurance, are emphasized (Ross, 2008; Pfister, 2010; Bevan et al., 2021). Thus, social and psychological research on women's participation in sports is being conducted from various perspectives in western countries.

Research on the social and psychological aspects of women's sports often focuses not only on the unique psychosocial benefits gained from sports participation (Shafer & Wittes, 2006) but also on significant issues such as gender stereotypes and norms (Krawczyk, 1973; Chalabaev et al., 2013), body image and related self-esteem (Lowery et al., 2005; Ouyang et al., 2020), disparities in access and opportunities (Saavedra, 2009; Theune, 2019), and cultural/economic barriers (Fleury & Lee, 2006; Parra-Medina & Messias, 2011). In addition, in the United States, research has extensively explored the positive aspects of increased women's sports participation and career opportunities for female sports professionals and coaches resulting from Title IX (von Allmen, 2013). However, studies also address the negative aspects, such as the glass ceiling faced by female coaches and workplace inequalities (Welch et al., 2021; Vaquero-Cristóbal et al., 2024).

While not as extensive as in the U.S. or other Western countries, social and psychological research on women's sports in Korea has been increased and actively conducted. The quantitative expansion of research on women's sports in Korea (Kim, Won, & Kim, 2016) has led to a growing number of studies that examine trends in domestic women's sports research. These studies delve into various aspects, including research topics in the *Korean Journal of Korean Association of Physical Education and Sport for Girls and Women* (Kwak, 2022; Kim, Won, & Kim, 2016; Noh, 2022), investigations into sports participation among older women (Lee & Kwak, 2020), and analyses of women and gender within the context of sports research (Lee, 2024). These studies provide crucial insights into the current status, changes, and limitations of women's sports research in Korea and help illuminate the unique challenges

faced by women in sports and inform future research directions and policy developments. According to Lee's research on women's studies within the humanities and social sciences related to sports, the main research topics include the socio-psychological perceptions related to women sport participation, the identity and self-concept of female athletes and coaches, school sports and physical education, physical activity and sport participation of elderly and middle-aged women, gender inequality and violence, and women's sports policies.

The main research topics are roughly similar to those found in other countries. However, a notable difference is that while studies in the U.S. tend to focus on gender inequality in elite sport participation and women's career development in sports, research in Korea often emphasizes awareness of sexual violence within elite sports culture and policy proposals addressing such issues probably due to different legal frameworks and cultural contexts in two countries. Due to the serious nature of these issues, much of the research tends to focus on practical assessments or preventive guidelines, often resembling policy reports rather than in-depth academic studies. These reports prioritize addressing immediate concerns such as documenting current conditions and proposing solutions, rather than conducting broader, theoretical analyses. Another unique aspect of women's sports research in Korea, unlike in many other countries, is the focus on physical education and female PE teachers. This trend likely stems from the Korean education system where physical education is a compulsory subject in most grade levels and a significant number of graduate students in sport related majors, including those in graduate schools of education, are either current PE teachers or aspiring ones. Although not a dominant topic listed above, the prevalence of dance-related research in sport fields also follows a similar reasoning.

It is true that the volume of research on women's issues has been increasing. However, many of the research efforts tend to focus on similar themes, relying on repetitive methodologies and lacking strong theoretical foundations. A considerable portion of these studies are limited to descriptive surveys and observational reports, which often do not provide deep academic insight. In cases where research does aim for more depth, it often stays within the bounds of reaffirming findings from foreign studies, rather than breaking new ground or providing uniquely Korean perspectives. When we lack comprehensive knowledge of the situation or culture, conducting descriptive research is a necessary first step. As educators and researchers in the field of sports, it is important to propose informed policy recommendations. However, now that *Korean Association of Physical Education and Sport for Girls and Women* has reached its 70th anniversary, there remains a sense of disappointment that more substantial and academically grounded research is still relatively scarce in the field.

In the social sciences, unlike in physical or medical studies that focus on clear physiological differences between men and women, research should be driven by clear theoretical foundations when examining women as a subject or exploring gender differences. Once simple demographic and basic studies have been conducted, it is crucial to advance to the next stage of research that aligns with solid theoretical foundations. If a study's findings are likely to mirror international results, there should be a strong academic justification for why that research must be replicated in a domestic context. Although social sciences are often influenced by societal factors, systems, and culture, it is time for us, as scholars of women's sports in Korea, to focus on strengthening our academic identity. This entails moving beyond mere surveys and descriptive studies to engage in more rigorous, theory-driven research that challenges and expands existing knowledge.

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<Discussion>

Social Science Research in the Field of Women's Sports

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Introduction

This paper provides an analysis of Professor May Kim's presentation (Korea University) on "Social Science Research in the Field of Women's Sports." While sports are inherently physical, the physiological distinctions between women and men necessitate a gender-specific approach to research. However, since sports involve more than just physicality, research on women's sports must also explore psychological and social dimensions that are unique to women. This discussion paper examines the differences between women's and men's sports research, argues for the need for a differentiated research approach, and highlights the contrast between domestic and international research on women's sports.

Main Section 1: Differences Between Women's and Men's Sports Research

1. Biological Differences and the Need for Specialized Research

Men and women exhibit clear physiological distinctions, including differences in muscle mass, metabolism, strength, flexibility, and endurance. For instance, women generally have a higher percentage of body fat but may excel in flexibility and endurance. Additionally, hormonal cycles can significantly affect female athletes' performance, underscoring the need for research tailored to women's unique physical characteristics. The male-centered research framework often overlooks these distinctions, necessitating a separate, gender-conscious approach to women's sports research.

2. Social and Psychological Differences

Beyond physical attributes, men and women differ in their social and psychological experiences related to sports participation. Historically, sports have emphasized male attributes such as strength and endurance, often marginalizing women's participation due to prevailing gender stereotypes. Social norms focusing on femininity, delicacy, and aesthetic ideals have influenced women's body image, self-esteem, and their willingness to engage in sports. Therefore, research on women's sports must delve into these socio-psychological factors, addressing the barriers that limit women's participation and proposing solutions to overcome them.

Main Section 2: Differences in Domestic and International Women's Sports Research

1. International Research on Women's Sports

In Western countries like the United States, legal frameworks such as Title IX have actively promoted women's participation in sports. This has led to a robust body of

research addressing the gender gap in sports opportunities, the dismantling of stereotypes, and the psychological and social benefits of sports for women. Studies often focus on women's career development in elite sports, gender inequality in sports professions, and institutional efforts to combat discrimination. These areas of research have been pivotal in improving the landscape of women's sports.

2. **Domestic Research on Women's Sports (Korea)**

While research on women's sports is growing in Korea, it remains somewhat limited in scope. Topics such as sexual violence and gender inequality dominate the discourse, with a strong emphasis on policy recommendations. For example, numerous studies focus on sexual violence in elite sports and propose policy solutions to address it, reflecting the urgency of this issue in the Korean cultural and legal context. Additionally, there is significant research on the role of women as physical education teachers and the status of school-based physical education for girls.

Main Section 3: Limitations and Future Directions for Korean Women's Sports Research

Although the quantity of domestic research on women's sports has increased, much of it remains confined to repetitive topics and lacks innovative methodologies. Many studies rely heavily on surveys and technical assessments, with insufficient theoretical underpinnings. There is a pressing need to explore new research areas that reflect Korea's unique cultural and social landscape, going beyond merely replicating international studies. Strengthening the academic rigor of Korean women's sports research is crucial, particularly by focusing on theories that foster improvement in women's participation and address gender discrimination in sports.

Conclusion

Women's sports research, particularly in the social sciences, must be approached differently than men's sports research. A robust theoretical framework is essential—one that incorporates not only physiological differences but also the social and psychological factors that uniquely affect women. While insights from international research can offer valuable perspectives, independent studies tailored to the domestic context are crucial. The ongoing challenge for Korean women's sports research is to transition toward more rigorous, theoretically grounded studies that contribute meaningfully to both the academic field and social progress.

Women's Sport Research with Natural Science Perspective: Sarcopenia, Menopause, and Exercise Intervention in Women

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Sarcopenia, the age-related decline in skeletal muscle mass and function, is one of the main contributors to morbidity and physical disability. Menopause in women may contribute to sarcopenia, which not only affects very old women but can also have impact on middle-aged adults. Changes in the sex hormones during the menopause transition appear to be a strong determinant of skeletal muscle mass in women. If the menopausal transition triggers the mechanisms underpinning sarcopenia in women, then menopause may be a critical time to introduce strategies to mitigate the changes in muscle mass and function that contribute to physical disability and frailty later in life. Thus, it is crucial to elucidate the extent to which menopausal transition augments sarcopenia, and whether this muscular deterioration is specifically associated with the loss of sex hormones. Menopause is the consequence of both gonadal and chronologic aging; and the period that both estradiol and testosterone decrease. The complex hormonal changes during the menopause transition make it difficult to isolate the effects of a single cause of sarcopenia in women.

Compared to premenopausal women, cross-sectional studies have demonstrated that lean or muscle mass is lower in postmenopausal women. However, less is known about whether skeletal muscle mass and the prevalence of sarcopenia differ between the menopausal stages. Using a cross-sectional study, we recently determined that perimenopausal transition is a vulnerable period for the loss of muscle mass. One hundred forty four healthy women (aged 30-70 yr) were classified as premenopausal, early and late perimenopausal, and early and late postmenopausal. Appendicular lean mass (ALM) index, calculated by ALM adjusted by the square of height, was assessed using dual-energy x-ray absorptiometry. Compared to early perimenopausal women, ALM index was 10 and 9 % lower in late peri- and post-menopausal women, respectively, with no other significant differences between groups. In line with this data, the prevalence of sarcopenia was 7, 3, 30, 27, and 32% in pre-, early and late peri-, and early and late post- menopausal women, respectively, showing a greater difference between early and late peri-menopausal women. Our findings highlighted the need to investigate the major hormonal factors and its underpinning mechanisms contributing to the menopause-mediated loss of skeletal muscle mass.

Whereas the underlying mechanism of menopause-related changes in body composition are unclear, previous research suggests that reduced level of physical activity likely plays a critical role in developing menopause-related loss of muscle mass and a consequent metabolic dysfunction. Women are more physically inactive than men, and research revealed that about 60% of women fail to meet the guidelines of physical activity. This phenomenon of physical inactivity appears to be more profound in the aged compared to young women. In line with this trend, the number of women 65 years of age and older exhibits a greater prevalence of physical inactivity compared to aged men. Maintaining physically active is very important in aged women as an inverse association between mortality and physical activity has

been reported. Decreased physical activity level is known to impair aerobic fitness, which loss is a high risk factor for mortality.

Menopause impacts physical activity level in women, directly through the deterioration of skeletal muscle function and indirectly through behavioral changes such as reduced physical activity. Due to the incredible plasticity, skeletal muscle can be atrophied and eventually appears to be weak and malfunctioned following the less use of skeletal muscle. Pre-clinical rodent studies using ovariectomy (OVX), a good model to study human menopause, support the menopausal phenomenon of physical inactivity in women. Ovariectomy resulted in a dramatic reduction in physical activity of 30-80% and this was not attributable to the effect of surgery. Physical activity was rescued in OVX rodents treated by estradiol add-back. The estrogenic regulation of physical activity was further supported by the observation that only estradiol but not progesterone add-back rescued physical activity to the normal level in OVX rodents. These previous findings advocate the existence of a primary physiological factor resulting from menopause. Increasing evidence suggest that estradiol might be a major controller in behavioral modifications in women.

Hormone therapy (HT) studies exploring lean body and skeletal muscle mass in postmenopausal women have provided mixed results. Whereas some studies have demonstrated that HT preserves skeletal muscle mass in postmenopausal women, others have shown no effect. However, the loss in estradiol is still believed to be the most important contributor in menopause-associated loss of muscle mass. We recently found that 1-week administration of transdermal estradiol in early-postmenopausal women (≤ 6 yr past menopause) increased the ratio of nuclear to cytosolic estrogen receptor α protein (a surrogate marker of genomic estrogen receptor α activation) by 60% in skeletal muscle, compared to women treated with transdermal placebo. Using those skeletal muscle samples, our recent study suggested that estradiol also reduced skeletal muscle protein breakdown markers, assessed by fork-head box O3 (FOXO3) de-phosphorylation, an activation form of FOXO3, and muscle RING-finger protein 1 (MuRF1) content in early-postmenopausal women; although there was an adverse effect of estradiol on protein breakdown in late-postmenopausal women (≥ 10 yr past menopause). Our data suggest that estradiol may play a role in skeletal muscle protein metabolism, and is associated with genomic estrogen receptor α activation in muscle.

Future studies should further investigate the specific mechanisms by which estradiol and estrogen receptors (ER α and β , and GPER) regulate protein metabolism, which may contribute to increased prevalence of sarcopenia in women.

<Discussion>

The Relationship Between Menopause and Sarcopenia, and the Necessity of Exercise

Na-Young Ahn
Keimyung University

Sarcopenia is the loss of skeletal muscle mass and function that occurs with aging, significantly affecting women's health. Several studies have pointed out that menopause is a crucial period that accelerates sarcopenia in women. During menopause, hormones such as estradiol decrease, and these hormones play an essential role in maintaining skeletal muscle mass. Research shows that the lean body mass and muscle mass of women during the menopausal transition and postmenopausal women significantly decrease compared to premenopausal women, and the prevalence of sarcopenia rises.

However, it is difficult to attribute the primary cause of sarcopenia solely to hormonal changes during menopause. Sarcopenia is caused by various factors along with aging, including decreased physical activity, nutritional status, and genetic factors. For instance, while it is true that physical activity tends to decrease after menopause, this may be a natural phenomenon of aging rather than a direct result of hormonal decline.

Meanwhile, studies have shown that hormone therapy can be effective in preserving muscle mass in postmenopausal women. Estradiol supplementation has been found to inhibit muscle protein breakdown and increase the activation of estrogen receptors in the muscles. This hormone therapy may play a positive role in reducing muscle loss and restoring physical function.

However, there is no definitive conclusion regarding the effectiveness of hormone therapy. Some studies claim that hormone therapy preserves muscle mass in women, while others report no significant effect. Additionally, hormone therapy may be accompanied by side effects, such as an increased risk of breast cancer and cardiovascular disease. Therefore, recommending hormone therapy to all postmenopausal women may be risky, and a cautious approach is required.

Menopause also has a significant impact on physical activity. During menopause, physical activity decreases, leading to muscle function deterioration and metabolic issues. This reduction in physical activity is closely associated with mortality, and women, in particular, show higher rates of insufficient physical activity after menopause. Thus, it is important to maintain skeletal muscle function and prevent sarcopenia through appropriate exercise interventions during this period.

Furthermore, exercise interventions, rather than relying solely on hormone therapy, are presented as the most effective method for preventing sarcopenia after menopause. Various studies have shown that resistance training and aerobic exercise are effective in maintaining muscle mass and function in postmenopausal women. Exercise stimulates the plasticity of skeletal muscles, improving muscle function and helping maintain physical activity levels.

In conclusion, the prevention and treatment of sarcopenia in postmenopausal women require a multifaceted approach, including not only hormonal factors but also exercise and nutrition.



Session 2

The Role and Contribution of Women's Sports

Presentation 1: Women, Physical Activity and Quality of Life

Presenter: Steriani Elavsky University of Ostrava, Czech Republic

Discussants: Teri Kim Dongguk University

Presentation 2: Sports, Women's Happiness, and AI

Presenter: Wonseok Jang Sungkyunkwan University

Discussants: Hyeoijin Kim Korea National University of Education

Presentation 3: The Role of Women in International Sports

Presenter: Joo-Hee Park International Sport Strategy Foundation

Discussants: Taehee Kim Sungkyunkwan University

Women, Physical Activity and Quality of Life

Steriani Elavsky

University of Ostrava, Czech Republic

Physical activity is widely recognized as a crucial component of a healthy lifestyle. For women, engaging in regular physical activity (PA) can significantly enhance quality of life (QOL) by improving physical health, mental well-being, supporting life transitions, and fostering social connections. Research on the relationship between women's engagement in PA and their overall QOL is critically important because it helps inform targeted public health policies and culturally sensitive interventions, ultimately promoting healthier, happier lives for women. This paper aims to synthesize research findings from positive psychology and exercise psychology to understand the multifaceted benefits of PA for women by examining how women benefit from PA accordingly across the different developmental stages of their lives, with an emphasis on midlife.

Defining Quality of Life: A Psychological Perspective

Understanding QOL from a psychological perspective has been traditionally rooted in Ed Diener's research on subjective well-being, providing a foundational understanding of how positive emotions, life satisfaction, and the absence of negative emotions contribute to overall happiness (Diener et al., 2009). Diener emphasizes that subjective wellbeing is influenced by various factors, including physical health, which can be enhanced through regular PA (Posadzki et al., 2020). In 2011, Martin Seligman proposed the PERMA model to shift the focus of psychology from merely treating mental illness to enhancing well-being through Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment (Seligman, 2011). Over the years, the model has been expanded to include additional elements like Health, forming the PERMA+ model. This evolution reflects a growing understanding of well-being as a multifaceted construct that includes both hedonic (pleasure-based) and eudaimonic (meaning-based) components. Research has increasingly validated the model's components, demonstrating their independent and collective contributions to human flourishing across diverse populations and settings (Carbera & Donaldson, 2023), with PA exerting numerous wellbeing-enhancing effects across all PERMA+ domains.

Physical Activity Benefits in Key Developmental Phases in Women's Lives

There is robust evidence that PA enhances all aspects of subjective wellbeing, including positive affect and life satisfaction, and reducing negative affect (Marquez et al., 2020). PA also offers opportunities for building quality relationships (Inoue et al., 2023), bringing meaning into one's life and providing

a strong sense of accomplishment (Bailey et al., 2013; Marquez et al., 2020). More concretely, in women, regular engagement in exercise not only fosters physical fitness but also enhances feelings of self-worth (Raudsepp, Neissaar, & Kull, 2013; Reddon, Meyre, & Cairney, 2017; Elavsky, 2010), which can mitigate symptoms of anxiety and depression (Choi et al., 2019). For instance, we have shown that middle-aged women who maintain higher levels of PA report significantly better self-esteem (Elavsky, 2010; Elavsky & McAuley, 2007a) and overall mental health outcomes compared to their less active counterparts (Elavsky & McAuley, 2007b). This suggests that beyond mere physical improvements, PA can play a crucial role in shaping women's identities and societal roles, ultimately contributing to healthier and more positive self-perceptions (Wolin et al., 2007). Building a stronger sense of self through perceived competence and self-acceptance, which PA helps promote, serves as a powerful tool for fostering resilience among women facing various life challenges. As women navigate significant transitions such as motherhood, career changes, or aging, maintaining an active lifestyle not only bolsters physical health but also enhances emotional stability and coping mechanisms in stressful situations.

Adolescence: A Critical Phase for Physical Activity in Women

During childhood and the transition to adolescence, PA plays a crucial role in shaping one's self-concept and self-identity, as well as establishing a sense of self-worth across various domains of functioning (Orth, Erol, & Luciano, 2018; Pfeifer & Berkman, 2018). As young women transition into adulthood, they also face the challenges of identity formation and social integration, which have become increasingly difficult during the COVID-19 pandemic (Marconci et al., 2022), contributing to a rise in mental health issues in both girls and boys (Thorisdottir et al., 2021). Engaging in PA during adolescence can provide valuable opportunities to interact with peers in a healthy and supportive environment, fostering both physical and social competencies. This engagement not only enhances mental health by reducing symptoms of anxiety and depression but also improves self-image and overall quality of life (Li et al., 2024; Marquez et al., 2020). Additionally, reducing sedentary behavior may be beneficial for QOL in youth (Suchert, Hanewinkel, & Isensee, 2015). Unfortunately, adolescence represents a period when PA rapidly decreases in girls (Durmith et al., 2011), presenting a formidable challenge to PA promotion efforts and sustaining high QOL during this period of life (van Sluijs, 2021).

Young Adulthood: Establishing Lifelong Physical Activity Habits

During young adulthood, women face unique challenges such as balancing career aspirations, personal relationships, and, for many, the transition to motherhood. Regular exercise helps manage stress and improve mental health by reducing symptoms of anxiety and depression (Singh et al., 2022). For young mothers, PA offers a valuable opportunity to focus on their well-being, providing a sense of personal achievement and boosting self-esteem, enhancing self-image and overall life satisfaction. Importantly, evidence indicates that exercise during pregnancy can have a positive influence on both the mother's (Cai et al., 2022) and the child's health and wellbeing (Gascoigne et al., 2022). Optimizing affective responses during exercise in the prenatal and postpartum period (Rhodes et al., 2023) and maintaining high levels of positive affect long-term may be one way to maintain high levels of PA and QOL into midlife (Qureshi et al., 2024).

Middle Age: Balancing Responsibilities and Physical Activity

As women transition into middle age, the challenge of balancing multiple responsibilities—such as career demands, family obligations, care taking, and personal health—often leads to a decline in PA levels (Pattee Gabriel et al., 2017). Midlife also coincides with the menopausal transition during which health-risk profiles are altered as a result of hormonal changes. There are also more “acute” manifestations of the menopausal transition in the form of vasomotor, somatic, and psychological symptoms. However, only vasomotor symptoms, such as hot flashes and night sweats, and urogenital symptoms, such as vaginal dryness or atrophy, have been linked to the endocrinological changes occurring during menopause (NIH, 2005). Nonetheless, menopausal symptoms are persistent in significant numbers of women and impact negatively on their QOL (Freeman, Sammel, & Sanders, 2014).

Stable or increasing levels of PA during midlife are crucial for sustaining good QOL (Moilanen et al., 2012) and higher daily PA also enhances resilient resources for menopausal symptom management (Kishida & Elavsky, 2015). Our long-term research on this topic has further concluded that:

- The menopausal experience is idiosyncratic and individual differences exist in how women benefit from behavioral modalities such as PA during menopause.
- PA enhances wellbeing and QOL during menopause, both directly and indirectly through its effects on more proximal outcomes such as affect, self-worth, or coping resources.
- PA effects on menopausal symptoms, vasomotor in particular, warrant further study, but acute exercise is unlikely to exacerbate hot flashes in most healthy women.
- The use of within-person methodologies (such as Ecological Momentary Assessment or EMA) and technology-mediated data collection can meaningfully contribute to increasing our understanding of PA and its effects on wellbeing outcomes.

Concretely, we demonstrated that walking and yoga were effective in enhancing positive affect and menopause-related QOL and reducing negative affect. Nonetheless, the treatment response varied significantly based on changes in menopausal symptoms across the 4-month intervention. Women who experienced decreases in menopausal symptoms benefited more from the interventions, experiencing more pronounced improvements in all positive mental health and QOL outcomes and greater reductions in negative mental health outcomes (Elavsky & McAuley, 2007b). Whether menopausal symptoms increased or decreased across the intervention appeared to be determined in part by whether there were increases or decreases in cardiorespiratory fitness, suggesting that cardiorespiratory fitness may represent a factor modifiable by interventions (Elavsky & McAuley, 2007b). In addition to fitness, we showed that the differential responses in menopausal symptoms to the interventions could be in part explained by individual differences in trait anxiety and optimism (Elavsky & McAuley, 2009), and that there are substantial individual differences in how women benefit from PA (Elavsky et al., 2012b).

In subsequent research, we demonstrated that a single bout of acute exercise does not increase objectively or subjectively assessed hot flashes, but that at the within-person level, increasing levels of moderate-intensity PA performed on a daily basis may be associated with increased reporting of vasomotor symptoms, particularly in women with low levels of cardiorespiratory fitness (Elavsky et al., 2012a). Previously inactive low-fit women may thus be at risk of perceiving their symptoms as intensify-

ing when first initiating behavior changes. For these women, increasing PA levels gradually is essential along with other (behavioral, cognitive) strategies to help ease symptom burden. Managing menopausal symptoms effectively is key to maintaining high QOL during menopause as experiencing these symptoms has been linked to decreases in both QOL and PA. When investigating menopause-related QOL across a 2-year period, for example, we observed an indirect relationship between PA and QOL such that increases in PA and decreases in menopausal symptoms were related to increases in physical self-worth and, in relation to symptoms, also to decreased positive affect, while both physical self-worth and affect directly influenced QOL (Elavsky, 2009). The findings support the position that PA effects on QOL are in part mediated by intermediate psychological outcomes and that PA can have substantial long-term benefits for women during midlife.

In our latest research, we have been applying the EMA methodologies and data collection via smart-phones to capture the associations between daily PA and QOL as well as environmental factors such as air pollution (Elavsky et al., 2024). This study aimed to explore the relationship between PA and menopausal symptoms, considering the roles of obesity, fitness, and air pollution. Women aged 40-60 (n=243) from the Healthy Aging in Industrial Environment Study – Program 4 study (4HAIE; Elavsky et al., 2021) completed baseline assessments of their psychological health, cardiorespiratory fitness, body composition, and menopausal status. Participants were divided based on their exposure to high or low air pollution and monitored for 14 days using a mobile app and Fitbit Charge 3/4 to track menopausal symptoms and daily PA. The findings revealed that peri- and postmenopausal women, particularly those in high-air-pollution areas, experienced more somato-vegetative symptoms (e.g., hot flashes and sweating, heart discomfort, sleep problems, joint and muscular discomfort). Interestingly, increased PA was linked to fewer hot flashes on days when women were more active, especially in polluted environments. However, no significant associations were found between cardiorespiratory fitness, visceral fat, and menopausal symptoms. This suggests that PA can help mitigate hot flashes, particularly for women in high-air-pollution areas, highlighting the importance of maintaining an active lifestyle during the menopausal transition.

Older Age: Maintaining Quality of Life Through Physical Activity

As women enter older age, maintaining an active lifestyle becomes increasingly vital for preserving not only physical health but also cognitive function and emotional well-being. Research indicates that regular PA can significantly reduce the risk of cognitive decline and dementia in aging populations, highlighting its role as a protective factor against neurodegenerative diseases (Mendolesi et al., 2018; Erickson et al., 2019). As women age, engaging in strength and balance-promoting physical activities becomes increasingly important due to the onset of age-related muscle loss, known as sarcopenia (Cruz-Jentoft et al., 2019). Fear of falling is a prevalent concern among older women, often leading to reduced PA. This creates a vicious cycle where the fear of falling discourages activity, thereby increasing the actual risk of falls due to diminished physical strength and balance (MacKay et al., 2021). To break this cycle, strategies that enhance self-efficacy are essential in supporting PA among older women (Soh, 2022). Moreover, self-efficacy has been shown to positively impact their quality of life (McAuley et al., 2006). Additionally, engaging in social forms of exercise—such as dance classes or walking groups—can enhance mental stimulation while fostering community connections, which are essential for com-

bating feelings of isolation often experienced in later life (Steinhoff & Reiner, 2024). By prioritizing these types of activities, we empower older women to sustain their independence and quality of life, ensuring they remain engaged participants in both their personal lives and broader societal contexts.

Summary

Existing evidence strongly supports the beneficial effects of PA on QOL for women across their lifespan, in line with public health guidelines. As women navigate key life stages, the role of social support systems becomes increasingly crucial in promoting a culture of active living. By prioritizing these supportive frameworks, we can create sustainable pathways that empower women to adopt healthier lifestyles, ultimately benefiting both individuals and society. When women engage in regular exercise, they often become role models for younger generations, fostering values of health and wellness within their families and communities.

Acknowledgements

The preparation of this paper was supported by the project “Research of Excellence on Digital Technologies and Wellbeing CZ.02.01.01/00/22_008/0004583” which is co-financed by the European Union.

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<Discussion>

Physical Activity for Cognitive and Mental Health in Women

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Higher Prevalence of Depression and Dementia Coupled with Physical Inactivity

Throughout their lifespan, women consistently engage in lower levels of physical activity compared to men (Caspersen et al., 2000). Reduced level of physical activity is closely linked to mental health issues such as depression and anxiety (Peluso & De Andrade, 2005). Research indicates that women experience higher levels of perceived depression, anxiety, and stress than men (Arenaza-Urquijo et al., 2022). Statistically, women have approximately twice the risk of depression, dementia, as well as mild cognitive impairment compared to men, establishing an important link between mood disorders and cognitive function. Prior studies have highlighted that earlier-life depression (or depressive symptoms) is associated with a more than twofold increase in dementia risk (Byers & Yaffe, 2011), while individuals experiencing depression during midlife face a 70% increased risk of developing Alzheimer's disease (AD) later in life (Kim, et al., 2021). In particular, recent depression was predictive of AD development in females. Both depression and dementia are influenced by a complex interplay of factors, including biological, genetic, and sociodemographic influences, which makes their interpretation challenging. Furthermore, it remains unclear whether depression acts as a prodrome (a preceding symptom), consequence, or risk factor for dementia. Nonetheless, a strong association has been established between depression and dementia, along with compelling evidence that physical activity is highly effective in preventing cognitive decline and improving depressive symptoms.

Depressed Brain vs. Active Brain

Depression impairs a range of cognitive functions such as memory, attention, information processing speed, and task-switching, which can disrupt daily life (Rock et al., 2014). This cognitive impairment can manifest as reduced neural efficiency in the brain even before behavioral symptoms appear. That is, individuals with depression may require greater cognitive effort to perform the same level of tasks as those without depression (Jeong et al., 2021). Research shows that depressive symptoms can predict which older individuals will experience cognitive decline in the future, even among the most high-functioning individuals (Chodosh et al., 2007).

In individuals with depression, the brain exhibits several notable characteristics, including an

imbalance of neurotransmitters, lower levels of brain-derived neurotrophic factor (BDNF), a reduction in both white and gray matter, atrophy of the hippocampus and prefrontal cortex, and/or diminished connectivity among various brain regions (Sacher et al., 2012). Exercise acts to reverse each of these characteristics. Specifically, even a single bout of exercise immediately promotes the release of neurotransmitters such as dopamine, serotonin, and norepinephrine, all of which are involved in mood regulation and cognitive function. Exercise also stimulates the release of BDNF, which plays a crucial role in the preservation and growth of neurons in the brain, as well as the generation of new neurons (i.e., neurogenesis). Regular exercise helps maintain the brain's structure and function, increases neuroplasticity, and enhances connectivity (Vecchio et al., 2018). These changes not only contribute to improvements in mood and emotional well-being but also promote brain health, strengthening cognitive function and delaying the onset of dementia (Lin et al., 2018). Furthermore, exercise helps regulate cortisol levels and improve the body's stress response and stabilize the overactive amygdala, which is crucial for managing anxiety. It also promotes balance within the autonomic nervous system (ANS), enhancing its stability and adaptability in stressful situations (Lee et al., 2024). In a 40-year longitudinal study involving 191 Swedish women with an average age of 50, researchers found that women with strong physical fitness and good heart function in middle age have nearly a 90% lower risk of developing dementia later in life compared to their less fit counterparts (Hörder et al., 2018). This significant finding highlights the crucial role of maintaining physical health to potentially mitigate the risk of dementia in older age.

Uncovering the Potential of Mind-Body Exercises

There has been a growing body of research focused on the effects of mind-body exercises, also known as mindfulness-based exercises, including practices like yoga, tai chi, and qigong. For example, yoga is a practice that combines postures (asana), regulated breathing (pranayama), and meditation (dhyana). This holistic approach has been shown in some studies to offer greater affective and cognitive benefits compared to traditional forms of exercise. Although the exact mechanisms remain unclear, it is hypothesized that the positive effects of breathing, movement, and meditation may work synergistically to enhance overall well-being. In a recent study conducted with smokers who have nicotine dependence, we found that even a single 30-minute session of yoga, which is relatively low in intensity compared to aerobic exercise, significantly reduced negative affect and craving to smoke. Moreover, yoga was associated with greater neural efficiency during inhibitory control performance (Kim et al., 2022). In another study, we found that an 8-week yoga intervention positively impacted self-reported muscle pain, mental health measures (stress, resilience, depression, fatigue, and frustration) and heart rate variability among mothers raising children with disabilities and experiencing chronic stress (Lee et al., 2024).

Scientific research on mind-body exercises is still in the early stages, but the growing body of evidence highlights the potential for accessible, low-intensity activities to offer meaningful cognitive and affective improvements. For girls and women who typically engage in less physical activity, these exercises present a practical and effective way to support mental health and well-being. Unlike pharmacological interventions, which may involve side effects and delayed

benefits, exercise provides an immediate, natural boost to both mood and cognitive function, reinforcing its role as a valuable tool in the prevention and management of depression and cognitive decline.

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Sports, Women's Happiness, and AI

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Despite women traditionally being less valued in sports, they now play an important role. In the 2024 Paris Olympics, the number of women athletes has significantly increased with the number of women and men athletes being almost equal for the first time in Olympic history. In the past, the percentage of women athletes participating was very low (e.g., less than three percent in the Olympic held in 1990) (Olympics, 2024). The increase in the number of women participants in sports is valuable because sport activities offer several meaningful benefits to women. For example, this advantage is shown by a recent survey that found the majority of women CEOs of Fortune 500 companies played sports during their early stage of life (UNWOMEN, 2024).

This presentation focuses on several different perspectives, including the benefits associated with sports activities, how women participate in sports differently compared to men, and the emerging role of AI in helping women have a positive sports participation experience. Despite the numerous benefits associated with sports participation, women are less likely to participate in sports globally (Statista, 2004). A similar pattern is observed in Korea. A recent report showed that from 2012-2019, Korean men participated more actively in sports in comparison to women. However, the trend in Korea has shifted slightly with more women beginning to participate in sports recently. For the first time in 2020, more women participated in sports than men with 60.3% of women identifying as sports participants compared to 59.9% of men (The Ministry of Culture, Sports and Tourism, 2024). Another interesting phenomenon is that Korean women participate in sports more regularly, consistently, and steadily than men. For instance, the report indicated that 7.5% of men participated in sports fewer than three times a week compared to just 3.5% of women in 2023. However, if we look at the data for daily participation, 4.2% of women played sports every day while only 2.2% of men played sports daily (The Ministry of Culture, Sports and Tourism, 2024). Overall, the report suggests that although both Korean women and men actively participate in sports these days, women often show more passion and a steadier commitment to sports participation compared to men.

This presentation highlights the important role of sports activities for women, as sports participation helps them experience better mental health, including a happier and more meaningful life (Cho, Cho, & So, 2013). For example, a meta-analysis conducted by Kuykendall et al. (2015) showed that sports participation leads to stronger subjective well-being, particularly among older individuals. Similarly, Min et al. (2017) found that even irregular engagement in sports activity helps Koreans experience greater psychological well-being. From this perspective, this presentation further focuses on how sports benefit women in achieving greater happiness and how AI may play a vital role in this relationship.

In particular, this presentation divides sports activities into two different perspectives: (1) process and (2) outcome. The process refers to the actual experience of participating in sports while the outcome

focuses on the end state of sports activities. I believe AI can enhance the enjoyment and effectiveness of sports activities from both perspectives. Personalization is a key feature of AI-operated platforms that can maximize the positive outcomes of sports activities by tailoring participants' needs to the characteristic of sports activities (Chatterjee et al., 2023). Specifically, if algorithms analyze both the characteristics of participants and specific sports, AI-operated platforms can offer a more personalized experience from a process perspective and help participants manage the outcomes of sports activities more effectively from an outcome perspective (Chatterjee et al., 2023). From a process perspective, the experience of engaging in sports activities can be personalized using AI technology by analyzing the characteristics of each woman, thereby personalizing their experiences to be more engaging. For example, an AI-operated platform can collect and analyze participants' data regarding their preferences for sports activities and personal characteristics, and thus recommend specific sports or personalized activities that may bring them greater happiness by making the experiences more enjoyable. On the other hand, from an outcome perspective, AI-operated platforms enable users to effectively record and analyze data generated from sports activities (Jang et al., 2022). Thus, AI-operated platforms can assist users in efficiently tracking their progress and developing effective plans for future sports activities based on past performance (Jang et al., 2022). These features of AI-operated platforms may help women experience greater happiness from sports as enjoyable and engaging experiences (the progress of sports activity) and personal achievements (the outcome of sports activity) are key sources of individual happiness (Kim & James, 2019).

As I discussed through this presentation, both the process and outcome of sports activities are key drivers of happiness. By utilizing AI technology to manage sports activities in more enjoyable and efficient ways, I believe women can gain more benefits, such as increased achievement and happiness from sports activities. I hope this presentation provides valuable insights for both scholars and practitioners by guiding the effective utilization of AI technology in sports.

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<Discussion>

Sports, Women's Happiness and AI

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The topic of AI has become a key issue in various fields, including industry, education, and now sports. In this context, a presentation on the importance of women's participation in sports and how AI technology can enhance women's sports experiences is more relevant than ever. The presentation clearly explains the recent increase in women's participation in sports, the physical and mental benefits gained from participation, and the new role AI plays in facilitating these experiences. It offers valuable insights and a fresh perspective on the development and future of women's sports.

In the discussion, I would like to delve a bit deeper into some of the points raised in the presentation.

First, the increasing participation of women in sports is highly encouraging. The fact that gender ratios among athletes will be equal at the Paris Olympics and that women's participation in sports in Korea is on the rise is a significant milestone in the development of women's sports. However, beyond participation rates, we also need to discuss the specific types of sports, the forms of participation, and particularly the age groups involved. According to WHO reports, physical activity among Korean adolescents remains among the lowest globally. The lack of physical activity and declining fitness levels, especially among teenage girls, are ongoing concerns. Given that habits formed during adolescence often extend into adulthood, I wish there had been more discussion around suggestions for increasing physical activity and sports participation among youth. As mentioned in the presentation, the positive influence of sports, which we typically associate with the success stories of men, is now increasingly visible in women CEOs, reflecting the beneficial aspects of sports. Therefore, I believe there should be a stronger emphasis on the need for early participation in sports among women.

Second, the presentation's argument that AI technology can personalize and enhance women's sports experiences is a fresh and practical approach. AI can serve as a valuable tool that helps women receive recommendations for exercises suited to them, allowing them to experience greater enjoyment and accomplishment through sports. The claim that AI can make sports participation more effective and sustainable, ultimately leading to happier and healthier lives for women, is highly persuasive. It would also be beneficial to explore how sports activities can positively impact women's social connectedness and community building. Sports not only provide individual achievement but also bring satisfaction through interaction within a community, which warrants further discussion.

Third, the presentation highlights the positive impact of sports on women's mental health and well-being, emphasizing that sports are not just about physical exercise but also contribute to emotional and mental wellness. Including more case studies or practical examples of how AI functions in sports would strengthen the argument's persuasiveness.

In conclusion, the presentation effectively demonstrates that the combination of women's sports participation and AI technology is a powerful tool for enriching women's sports experiences. It also offers a positive vision for how women can experience greater happiness and fulfillment in the future sports environment, making it a presentation that can inspire both academic circles and sports practitioners alike.

The Role of Women in International Sports

Joo-Hee Park

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Gender equality is a crucial keyword not only in sports but also in international society, with various movements and activities being carried out in different fields to promote it. According to the Framework Act on Gender Equality, gender equality is defined as "ensuring equal human rights and allowing equal participation and treatment in all areas without discrimination, prejudice, demeaning actions, or violence based on gender." In other words, it refers to enjoying equal opportunities and rights based on one's abilities.

Gender equality is considered a top priority of the Olympic Movement by the International Olympic Committee (IOC), which stands at the center of international sports. Two key goals are to increase the participation of women in both the Olympic Games and in sports administration.

Rule 2.8 of the Olympic Charter outlines the IOC's mission and role regarding gender equality, stating that it "encourages and supports the promotion of women in sport at all levels and in all structures to implement the principle of equality between men and women." This reflects a shift from the past perception of the Olympics as a male-dominated domain exclusive to men, aiming to achieve gender equality by encouraging women's participation in sports in line with the changing times.

Women's Participation in the Olympics

In the past, there was no place for women in the Olympics. In the ancient Olympic Games, women were not even allowed to watch the events. Even after the establishment of the modern Olympic Games, women did not participate in the first Olympic Games held in Athens in 1896. The first time female athletes participated in the Olympics was at the Paris 1900, the second edition of the modern Olympics. Out of 997 athletes, only 22 were women, and their participation was limited to sports like tennis and golf. At the 1904 St. Louis Olympics, archery was the only event women could compete in, and only 6 female athletes participated. In the London 1908, 36 women competed in figure skating and tennis. Following the London Olympics, the British Olympic Committee proposed expanding women's participation to include swimming, diving, and gymnastics. As a result, the organizing committee of the Stockholm 1912 allowed women to compete in two swimming events and one diving event.

In 1991, a clause prohibiting gender-based discrimination was added to the Olympic Charter, and a new rule was introduced stating that any newly established Olympic sport must include both men's and women's events. However, barriers for women in the Olympics remained high, and progress towards inclusion was slow. Despite this, the participation of women in the Olympics started small, but the proportion of female athletes has gradually increased over time.

In particular, the 2012 London Olympics was a historic event for gender equality. For the first time, three Middle Eastern countries—Saudi Arabia, Qatar, and Brunei, which had not previously sent female athletes—participated in the Games, making it the first Olympics in history where female athletes competed from all participating nations. Additionally, with women's boxing approved as an official Olympic event, it became the first Olympics in which women competed in all sports.

Subsequent changes and ongoing efforts by the IOC can be seen in the "Olympic Agenda 2020," adopted in December 2014. The IOC stated that it would promote women's participation in sports by collaborating with international sports federations to achieve a 50% female participation rate in the Olympic Games and by creating more opportunities for women to participate. Over the past 25 years, the IOC has encouraged female participation in both the IOC and international sports federations. Female participation rates have increased from 9.6% in the 1928 Amsterdam Olympics, to 20.7% in the Montreal 1976, 34% in the Atlanta 1996, 44.2% in the London 2012, and 48.7% in the Tokyo 2020. In the recent Paris 2024, out of approximately 10,500 athletes, 5,250 were women, achieving exactly 50% female participation in the Olympics.

Women's Leadership in International Sports

At this point, where the representation of female athletes in the Olympics has reached 50%, it is essential to pay attention to women's participation in important decision-making roles in the international sports arena. Although the history of women's participation in the Olympics spans over 100 years, it wasn't until 1981 that two women IOC members (Flor Isava Fonseca from Venezuela and Pirjo Häggman from Finland) were elected for the first time. Subsequently, in 1990, Flor Isava Fonseca became the first woman elected to the IOC Executive Board, and in 1997, Anita De Frantz was elected as the first female IOC Vice President.

As the importance and necessity of female leaders in the sports world continue to be emphasized, in 2016, the IOC set a goal for organizations involved in the Olympic Movement—such as National Olympic Committees and international sports federations—to increase the proportion of women in key decision-making positions to 30% by 2020. They urged these organizations to make concrete efforts toward this aim. As a result, according to the IOC Women in the Olympic Movement Factsheet(2024), the proportion of female IOC members is 40.6%, the percentage of female IOC Executive Board members is 46.7%, the ratio of female chairs in IOC commissions is 42%.

In this context, the IOC emphasizes "education" for the continuous development of women's sports internationally, providing various educational opportunities—including mentoring and networking—to ensure that more women hold decision-making powers within National Olympic Committees and international sports federations.

Efforts in International Sports

At the core of these efforts is the IOC Gender Equality, Diversity, and Inclusion Commission. Chaired by Lydia Nsekera from Burundi, with HRH Prince Feisal Al Hussein from Jordan serving as vice-chair,

the commission is composed of both men and women members. Its role is to advise the IOC President and the IOC Executive Board on promoting women's participation in the Olympics and sports, empowering women to occupy decision-making positions, and raising awareness of gender equality to drive positive change.

Since its establishment in 1995, the commission has made various efforts to implement gender equality in international sports, resulting in a sustained increase in the participation of female athletes in the Olympics and significant improvements in awareness regarding gender equality in international sports. As a result of these efforts, in 2015, IOC President Thomas Bach was appointed as a He for She Ambassador by the United Nations.

The "Olympic Agenda 2020" has directly impacted the recent increase in female participation in the Olympics through educational support for female athletes and strategic collaboration with the UN, its affiliated organizations, and other relevant entities. The 'IOC Women and Sport Award', initiated in 2010, honors contributions to the development of women's sports internationally and establishes partnerships for future collaboration. A notable example of this partnership is the collaboration with 'UN Women'.

Additionally, one of the most significant recent initiatives is the "IOC Gender Equality Review Project." Launched in March 2017 through a joint effort of the IOC Women in Sport Commission and the Athletes' Commission, this project involves a working group of 11 members, including IOC members and representatives from National Olympic Committees and international sports federations across various continents. In 2018, they presented 25 recommendations across five areas. Through this initiative, the IOC aims to move away from the past notion that the Olympics were exclusively for men, encouraging female participation in sports and paving the way for gender equality through sports in a changing era.

Subsequently, the IOC unanimously approved a new reform plan, "Olympic Agenda 2020+5," in March 2021, introducing 15 recommendations that focus on digitalization, the acceptance of e-sports, enhancing athletes' rights and responsibilities, promoting clean sports, and strengthening the sustainability and uniqueness of the Olympics. Among these recommendations, there are specific measures related to gender equality, demonstrating a continuous effort to promote diversity, equality, and inclusion throughout the Olympic Movement.

In relation to these efforts, the IOC published the "Gender Equality & Inclusion Report 2021," which reviews the outcomes of the "IOC Gender Equality Review Project" released in 2018 and outlines 21 new goals for 2021-2024 across three responsibility areas and five focus areas in alignment with Olympic Agenda 2020+5.

Transformations in Asian Sports

Recently, women's sports in Asia have been undergoing rapid changes. In particular, Saudi Arabia, known for its conservative application of Islamic law across all areas of society, has seen significant shifts. The country has long imposed strict restrictions on women's attire and behavior, and even prohibited the mixing of men and women in public places or events. Moreover, Saudi Arabia was the only

country in the world that banned women from driving, and it required even foreign visitors to wear a hijab.

In recent years, Saudi Arabia has undergone significant changes. Saudi Crown Prince Mohammed bin Salman, in his 30s, is leading a national transformation project called 'Vision 2030.' This initiative aims for comprehensive social and economic reforms by 2030, with a key focus on increasing women's social participation and educational opportunities in preparation for a post-oil era. In 2015, regulations were relaxed to allow women to work in the legal and education sectors, which led to the recognition of women's voting rights for the first time and the election of the first female public officials. In 2017, women were permitted to drive, and further measures to promote their social activities were introduced. That same year, women were also allowed to enter sports stadiums. Thus, the participation of women in social activities, particularly in sports, invigorates the national economy.

In particular, the participation of women in society and their presence on the international stage through sports has become increasingly prominent. At the 2020 IOC General Assembly, a Saudi princess was appointed as an IOC member in her personal capacity, and the chair of the Athletes' Commission of the Saudi Arabian Olympic Committee was also a female equestrian who participated in the first Youth Olympic Games. Furthermore, opportunities for both young men and women to participate in sports have been expanded.

Although the Middle East is often recognized as one of the regions most vulnerable to women's issues, it is currently undergoing a transformation to expand opportunities for women's participation in sports. Efforts are being made to promote a more equitable society through sports, uniting people of all genders and ages from a young age. While various human rights issues still persist in the region, these countries—often identified as the most vulnerable in terms of gender equality—are beginning to acknowledge the need for social change and are preparing for transformation across all sectors, including sports.

Future Pathways for Sports in South Korea

Brackenridge (1995) defines the stages of women's sport development as progressing from exclusion to inclusion, equality, and transformation, in which women and men work together across gender lines to achieve true progress in sport.

Based on this definition, the current status of international women's sports, centered around the Olympic movement promoted by the IOC, indicates significant progress in the efforts to achieve equitable status for women, with visible results. Achieving a 50% participation rate for women in the Olympics and increasing the representation of women as key decision-makers, such as IOC members, highlight the importance of promoting gender equality in sports and supporting the development of women's sports. While these efforts have yielded substantial results at the international level, particularly within the IOC, there remains a considerable gap at the national level (NOC, National Olympic Committee) and the sport-specific level (IF, International Federation), where the goals have not yet been fully realized.

In South Korea, the achievements of women in sports, represented by participation rates and medal acquisitions at the Olympics, still fall short in terms of women's decision-making power. Despite the

IOC's requirement for a minimum of 30% female representation in decision-making positions within National Olympic Committees, gender equality has yet to be realized across various sectors of sports in South Korea. With the hope that more proactive efforts will be implemented for the development of women's sports, we also look forward to the day when we can take policy and organizational initiatives to play a leading role in international sports.

<Discussion>

**Women's Role in International Sports:
Agents of Change Beyond the Field**

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The role of women in international sports has increased dramatically compared to the past. Their influence extends far beyond the sporting arena, as their activities play an important role in promoting women's rights and driving social change throughout society.

The international sports stage is becoming an essential platform for discussing and practicing gender equality. Many international sports organizations are implementing policies to advance gender equality, with organizations such as FIFA and the IOC focusing on elevating the standards of women's sports competitions and ensuring equal distribution of prize money and resources. These changes not only promote gender equality within the sports arena but also contribute to raising awareness of gender discrimination issues and improving the overall social atmosphere for gender equality. For example, at the 2012 London Olympics, some countries that had previously barred women from competing permitted them to participate for the first time, thus strengthening expectations and pressures for gender equality worldwide. This marked an important turning point that altered cultural and institutional norms, enabling women to assume greater roles in various sectors of society.

Traditionally, sports have been perceived as a male-dominated field, but women have challenged this perception by achieving outstanding results across diverse events. The success of female athletes on international stages such as the Olympics, the Women's World Cup, and Grand Slam tennis tournaments serves not merely as victories in sports, but as significant examples of breaking stereotypes about gender roles in society. For instance, in Korea, the number of female athletes competing and their medal-winning rates exceeded those of male athletes at the 2024 Paris Olympics, providing a new perspective on the capabilities and potential of women in our society. Such achievements are raising expectations not only within sports but across society as a whole, fostering an environment where women can engage more actively.

The success of women in international sports extends beyond mere athletic accomplishments; it symbolizes a challenge to social inequality and gender discrimination. Notable figures such as Serena Williams, who has courageously denounced racism and gender bias, and Megan Rapinoe, who leads a movement advocating for gender equality and the rights of sexual minorities, exemplify this vital shift. Additionally, prominent athletes like Billie Jean King and Danica Patrick have made significant contributions to advancing female leadership and empowerment. The voices of these women resonate beyond the sports arena, playing a crucial role in raising awareness of

inequality and discrimination in society.

Moreover, female athletes are not just winning competitions; they are vital role models inspiring young women to pursue challenging and self-directed lives. Their influence extends beyond sports, contributing to the advancement of female leadership in various fields, including politics, economics, and culture. World-class athletes such as Williams and Mia Hamm are dismantling social barriers through their achievements, creating an environment where more women can take on leadership roles across diverse domains. This empowers women to overcome limitations in their fields and strive for even greater goals.

In summary, women's impact in international sports transcends the field of sports; they are influential globally and serve as agents of change across society. We must recognize that their achievements on the international sports stage are not merely about winning games but also about playing a vital role in fostering a better society. It is imperative that we strive to strengthen this role with greater responsibility.

Poster Session

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 - 10** Outdoor Recreationists' Place Attachment to Namsan Park and the Environmentally Responsible Behaviors
Jee In Yoon, Eunseo Kim, Chang Mi Lee, Na Young Kim Kyung Hee University

A Qualitative Study On The Participation Experiences Of Female Participants in Mixed-Gender Futsal Club

Dong Han Kim, Jung-Rae Lee* (Kyungpook National University)

Purpose: The aim of this study is to explore the participation experiences of female members in mixed-gender futsal clubs and to identify the challenges and limitations they encounter in mixed-gender matches.

Method: Eight female participants, who had been actively involved in mixed-gender futsal clubs for over a year, were selected as research subjects. Data were collected through in-depth interviews and supplementary materials, and a textual analysis was conducted.

Result: The findings of the study are as follows: First, female participants experienced a sporting environment characterized by mutual respect and consideration, opportunities for skill development, a shift towards a more active role in male-dominated sports, and increased levels of achievement and satisfaction. Second, the study identified the challenges faced by female participants in mixed-gender futsal, which included physical limitations, diminished interest due to skill discrepancies, covert discrimination disguised as consideration, and societal prejudices regarding women's participation in sports.

Conclusion: In conclusion, mixed-gender futsal offers women a crucial platform for equal participation in sports and an opportunity to develop into empowered athletes. Despite these positive effects, challenges such as physical limitations, societal biases, and covert discrimination still persist, requiring systematic solutions. To address these issues, improvements in the mixed-gender sports environment, the establishment of equitable rules, and the strengthening of gender equality education are recommended. This study suggests that mixed-gender sports can significantly contribute to enhancing women's participation in sports and promoting gender equality, but continuous efforts are needed to reinforce these positive experiences and overcome existing barriers.

Key words: Mixed-gender futsal club, Gender equality in sports, Mixed-gender match

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The Current Status and Future Directions of the Neulbom School Physical Education Program: Focusing on the 2022 Revised Integrated Curriculum

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Purpose: Neulbom School is a customized educational care service that links various educational resources from schools and local communities to support the growth and development of elementary school students beyond regular classes. Neulbom School aims to not only increase the scope of care services but also to improve their quality by providing targeted, student-specific interventions. Since its pilot operation in 2023, Neulbom School has provided various programs in physical education, arts and culture, social studies, and creative science to 6,186 first-grade elementary schools across the nation as of October 2024. Among these, the physical education program is the most in-demand by both parents and students and holds significant educational importance when considering the developmental stages of children. This is because the first grade of elementary school is a crucial period where children transition from early childhood education (Nuri Curriculum) to the elementary physical education curriculum. During this time, the acquisition of Fundamental Movement Skills (FMS) plays a pivotal role in enabling children to actively and effectively engage in sports throughout their lives. This study aims to examine the current status of the Neulbom School physical education program, based on the 2022 revised integrated curriculum, and to provide insights into future directions for education.

Method: In this study, 44 physical education programs registered on the Neulbom School online platform as of 2024 were selected for analysis. The alignment of these programs with the goals of the Neulbom School physical education curriculum was examined by assessing their connection to the achievement standards outlined in the “Joyful Life” component of the “2022 Revised National Curriculum”. As an integrated curriculum for 1st and 2nd graders, Joyful Life encompasses achievement standards across various categories, including health and safety, body awareness, sensory development, and active living.

Result: The primary findings of this study are as follows: First, the physical education programs in Neulbom School are predominantly focused on 'play' and do not fully integrate connections with cultural and artistic activities, covering only some of the achievement standards of the “Joyful Life” curriculum. Second, while there is some alignment between Neulbom School and the “Joyful Life” curriculum, there is a lack of detailed explanation on how Neulbom School’s programs meet specific achievement standards. Third, there are discrepancies in understanding the connection with the achievement standards depending on the institutions managing the physical education programs. Specifically, 18% of the programs did not

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document any alignment with the achievement standards, or only made superficial references to curriculum connections. This could be attributed to a lack of understanding of the curriculum's relevance, insufficient recognition of its importance, and inconsistencies in documentation methods.

Conclusion: As concerns over the lack of integration of physical education in elementary school integrated education and insufficient physical activity were raised, the National Education Commission decided to establish and revise the national curriculum by introducing a new subject focused on physical activity for 1st and 2nd graders. As a result, the Neulbom School physical education programs will need to be improved to support both quantitative and qualitative expansion of the physical education curriculum. In particular, it is necessary to implement structured programs based on Fundamental Movement Skills (FMS) to help younger students build a solid foundation for physical activity. Additionally, efforts are needed to address the gaps between programs caused by varying levels of instructor competence. Rather than relying solely on the skills of individual instructors, a standardized program planning system should be established to ensure the consistent implementation of curriculum-linked programs.

Key words: Neulbom School, Joyful Life Curriculum, Physical Education Curriculum

A Discussion on Married Women's Participation in Sports and Its Impact

Na Young Kim, So Jung Kim* (University of Suwon)

Purpose: In modern society, there is a growing interest in married women's health, and the importance of exercise has been proven through various studies. Married women, in particular, experience physical and mental changes throughout their life cycle, including pregnancy, childbirth, and menopause, making regular exercise essential. However, married women's participation in exercise remains low, which can lead to serious health issues. Additionally, married women's mental and physical health is closely linked to the development of their children, making exercise not only a personal health matter but also an essential factor that influences their children, family, and society as a whole. For these reasons, promoting married women's participation in exercise has emerged as an important social issue, and this study aims to address the need for it.

Method: This study employed a literature review to systematically analyze existing research. Key sources included studies that examined the relationship between women's physical health and exercise, studies on the impact of exercise on women's mental health postpartum, and studies on how mothers' exercise habits affect their children's development. Data were collected from domestic and international journals, reports, and government publications, and the conclusions were compared and analyzed.

Result: Our literature analysis identified three main categories. First, physical health: exercise improves cardiovascular health, strengthens muscles and bones, prevents obesity, and aids in physical recovery, particularly after pregnancy. Second, mental health: exercise helps relieve stress, prevent depression, and boost self-esteem, especially postpartum. Third, child development: studies show that healthy, mentally stable mothers positively influence their children's emotional development and learning, and exercise encourages children's participation in sports, benefiting their long-term growth.

Conclusion: This study reaffirms that married women's exercise is not just an individual health matter but plays a crucial role in the well-being of families and society as a whole. Given the vital role exercise plays in married women's physical and mental recovery after childbirth, and its direct link to the healthy development of their children, promoting married women's participation in exercise is urgently needed. In particular, policies and social support are essential to overcoming barriers such as time constraints, economic limitations, and social stereotypes. Increasing married women's participation in exercise will be a key challenge in improving the health of women, their families, and society at large.

Key words: Women's participation in exercise, physical health, mental health, child development

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Exploring the Management Experiences of Female Leaders in Special Olympics Unified Sports Club

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Purpose: The Special Olympics Unified Sports program provides individuals with and without disabilities opportunities to improve their sports skills and gain social experiences (Bota et al., 2014). While university Unified Sports clubs offer an ideal environment for promoting inclusion, students often face challenges in establishing and sustaining these clubs (Hassan et al., 2012; Schulenkorf & Sherry, 2021). This study aims to explore the perceptions and experiences of former leaders of university Unified Sports clubs in South Korea regarding the establishment, maintenance, and operation of these clubs. Through this exploration, the study aims to suggest institutional and administrative approaches to promote the activation of Unified Sports as university clubs and to enhance their value.

Method: Semi-structured interviews were conducted with 8 former leaders ($M = 23.25 \pm 2.43$ years) of a university Unified Sports Club in South Korea. Two researchers with experience in Unified Sports developed the semi-structured interview questions based on previous studies concerning capabilities of sports organizations. One-on-one interviews were conducted using open-ended questions to explore various aspects of each participant's club management experiences. Each interview, lasting between 45 and 85 minutes, was electronically recorded. The interview transcripts were analyzed using the constant comparative method (Corbin & Strauss, 2008) to derive implications.

Result: The Unified Model for a Sports Event Management Course (UMSEMC; Butler & Duchac, 2023), the factors influencing the operation of Unified Sports clubs at domestic universities include 'University Hierarchy Support,' 'Relationships,' 'Education,' and 'Unified Sports Competitions.' These factors encompass 8 intermediate themes and 20 sub-themes.

Conclusion: To promote the growth of Unified Sports clubs at Korean universities, the following actions are essential: (a) Incorporating Unified Sports into both major-related courses and general education to offer intentional exposure and learning opportunities, (b) Hosting Unified Sports events that facilitate interaction between students with and without disabilities, thereby strengthening social integration, and (c) Developing educational programs through SOK to raise awareness and understanding among athletes, coaches, parents, and staff.

Key words: Unified Sports, University Club, Special Olympics, Female Leader

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A Study on the Revitalization of Leisure Culture through Professional Sports Viewing: Focusing on Women's Professional Volleyball

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Purpose: Leisure culture has become a significant factor in enhancing the quality of life for modern individuals, and professional sports viewing, in particular, stands out as a representative form of leisure activity, possessing various social and economic values. However, the leisure culture of professional sports viewing in Korea is skewed toward specific sports and genders, highlighting the need for research and policy support from more diverse perspectives. Women's professional volleyball, despite its growing spectator numbers and media exposure, still faces a relative lack of research and support compared to men's sports. Thus, exploring strategies to revitalize the leisure culture centered around women's professional volleyball is a timely and crucial research topic.

The purpose of this study is to diagnose the current state of leisure culture focused on women's professional volleyball by analyzing the characteristics, motivations, and satisfaction of spectators, and to propose strategic measures for revitalizing the viewing culture and ensuring sustainable growth of women's professional volleyball. This study aims to provide foundational data to promote the balanced development and expansion of the entire professional sports viewing culture, not limited to women's professional volleyball.

Method: To achieve this, a Focus Group Interview (FGI) was conducted with a group of experts, including two former professional volleyball coaches, two professional team staff members, and a professor specializing in sports management. The collected data was analyzed using inductive category analysis, and the following key conclusions were derived:

Result: First, strengthening viewing motivation centered on game performance and player fandom. Female professional volleyball spectators tend to continue viewing based on high engagement in the game and the appeal of individual players. Therefore, strategies to enhance interactions between players and fans and expand fandom culture are essential.

Second, improving viewing environments tailored to family spectators. Women's professional volleyball has established itself as a family-oriented leisure activity, making it necessary to create a more comfortable viewing environment and expand facilities catering to family spectators. This approach will encourage repeated family visits and enhance the quality of their viewing experience.

Third, establishing differentiated events and marketing strategies. By utilizing distinctive elements that set it apart from male-dominated sports, it is necessary to develop events and promotions targeting diverse

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generations and female audiences, while providing fan experiences beyond the game to increase the visibility of women's professional volleyball.

Fourth, strengthening the brand image of the women's professional volleyball league and teams. To position women's professional volleyball as more than just a sporting event but as a cultural brand, it is crucial to implement branding strategies that emphasize the unique characteristics of each team and the league. This will enhance re-visit intentions and foster long-term growth.

Conclusion: For the revitalization of the leisure culture surrounding women's professional volleyball, it is important to secure a diverse audience base and establish a sustainable growth foundation through strategies such as strengthening viewing motivation centered on game performance and player fandom, improving the viewing environment for family spectators, implementing differentiated marketing strategies, and enhancing the brand image of the league and teams. Through these measures, women's professional volleyball can solidify its position as a cultural content

Key words: Leisure Culture, Professional Sports, Women's Professional Volleyball, Revitalization

Qualitative Study on Reducing High-Risk Drinking Rates among Female Residents in Ongjin-gun*

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Purpose: Ongjin-gun is characterized by limited living environments due to its geographical location, and its residents, especially women, experience high-risk drinking rates due to a lack of medical access and opportunities for leisure activities. According to the Community Health Survey, the high-risk drinking rate among female residents in Ongjin-gun is significantly higher than the national average, posing both health and social problems that require systematic intervention strategies. Previous studies have primarily focused on educational approaches to address drinking behaviors; however, they have not adequately considered the underlying causes related to the lack of leisure opportunities and environmental factors in the region. Therefore, this study aims to develop intervention strategies centered on physical activities and leisure programs to reduce high-risk drinking behaviors among female residents in Ongjin-gun.

Method: To achieve this, we conducted in-depth interviews and Focus Group Interviews (FGI) to analyze the perceptions and behaviors related to drinking among female residents, and based on the results, proposed alternative physical activity and leisure programs.

Result: This study confirmed that the drinking problem among female residents in Ongjin-gun is not merely an individual habit but is closely linked to the regional and cultural environment. The following key findings were derived: First, the lack of leisure and alternative activities was identified as one of the primary causes of high-risk drinking. Due to the geographical constraints of Ongjin-gun, opportunities for cultural and social activities are limited, creating a structural issue where alcohol consumption becomes the only viable leisure activity for residents. Second, the need for awareness improvement and educational programs on alcohol consumption emerged as a critical factor. Female residents did not fully recognize the negative health impacts of alcohol, and accessibility to cessation or moderation programs was also low. This lack of support systems exacerbated the high-risk drinking rates. Third, the strong social acceptance of the drinking culture was evident. In Ongjin-gun, drinking is regarded as an essential social tool, and there is a fear that attempts at abstinence or moderation might lead to social isolation or strained relationships. Thus, instead of focusing solely on restrictive drinking policies, it is necessary to develop social interaction and leisure programs that can replace the role of alcohol in social settings. Fourth, physical activities and sports-based intervention programs were suggested as effective strategies. Participants indicated that engaging in physical activities and sports could provide positive experiences that serve as alternatives to drinking, and building social networks through such activities could positively influence

* This work was supported by the Research Program funded by the Korea Disease Control and Prevention Agency(2023-13-001).

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drinking behaviors.

Conclusion: In conclusion, this study proposes tailored intervention strategies centered on physical activities, sports, and leisure activities to address high-risk drinking among female residents in Ongjin-gun. These approaches are expected to contribute not only to reducing alcohol consumption but also to enhancing the overall health of the local community.

Key words: High-Risk Drinking Rates, Ongjin-gun, Female Residents

A Phenomenological Study on the Leisure Experience of Women after Childbirth

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Purpose: The leisure experiences of women after childbirth, addressed in this study, were crucial for providing foundational data not only for understanding individual lives but also for addressing the societal issue of low birth rates. Therefore, this research aims to comprehend the intrinsic meaning derived from the leisure experiences of women after childbirth. In accordance with the necessity and objectives of these studies, this study was conducted by applying a phenomenological methodology to explore the individual experiences of women and the essential meanings emerging from their experiences.

Method: The study participants, selected based on their childbirth experiences and consistent engagement in leisure activities for more than a year, consisted of seven women chosen with input from experts and data were collected through one-on-one in-depth interviews. Using Giorgi's phenomenological analysis method, the participants' statements were organized and 21 central meanings and 6 essential meaning components related to leisure experiences after childbirth were derived as follows.

Result: Firstly, women after childbirth experience the central meaning of <Finding Myself> through leisure. This indicates that these women perceive leisure as a time to find their own identity within the role of 'mom.' Secondly, women after childbirth experience <Living as Myself, Not Just a Mom> through leisure. They are motivated to engage in leisure activities by experiencing positive emotions using personal time and gaining physical satisfaction and vitality. And they explore and choose leisure activities suitable for their situations. Thirdly, the leisure experiences of women after childbirth involve <Changes and Challenges in Daily Life>. They use leisure to relieve stress from daily life, have positive experiences, and engage in new challenges, gaining social satisfaction through interactions with leisure companions. Fourthly, women after childbirth exhibit <Changes in My Life after Childbirth>. They feel a lack of personal time in the changed daily routine, prioritize family over themselves, and lead a daily life filled with the responsibilities and sacrifices of motherhood. They also experience leisure constraints due to psychological, physical, and parenting-related reasons. Fifthly, women after childbirth experience <Efforts to Live My Life>. They make efforts to secure leisure time, coordinate roles within the family, and demonstrate determination to continue their leisure activities. Lastly, the leisure experiences of women after childbirth are the <Driving Force for Personal Change>. For them, leisure not only includes the typical meanings associated with leisure experiences but also becomes a meaningful act contributing to life satisfaction. Through leisure experiences, they pursue happiness for both themselves and their families and show a positive attitude toward life. Therefore, the intrinsic meaning derived from the leisure experiences of women after childbirth lies in their ability to navigate the changed life after childbirth, find their identity as

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mothers, and confirm another aspect of themselves. These leisure experiences are inherently meaningful for women after childbirth, enhancing positive experiences and improving the quality of life and, socially, they contribute to the spread of positive perception of the lives of women after childbirth.

Conclusion: As such, women after childbirth were experiencing leisure in a situation closely connected to the happiness of both individuals and families and they continued to experience positive emotions and enhance their life satisfaction by overcoming constraints within the family. These research findings are significant in confirming the importance of leisure use and leisure experiences to address concerns about the decline in the quality of individual lives as a cause of the low birth rate in our society. Additionally, they can serve as foundational data for future policies aimed at improving the quality of life for the 2040 generation, especially in understanding and providing effective alternatives for women after childbirth in response to the societal issue of low birth rates.

Key words: women after childbirth, leisure experiences, quality of life, phenomenological study

The Exploration of Health Behaviors in Employees with Developmental Disabilities

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Purpose: According to a survey conducted by the Korea Employment Agency for Persons with Disabilities (2023), successful employment of individuals with developmental disabilities (DD) requires both health management to improve physical abilities and the enhancement of job performance skills. This study aims to explore the health behaviors of employees with DD and provide foundational data for designing workplace physical activity programs that improve both their health and job performance.

Method: A total of six employees (four women), aged 20–30, were recruited from a specialized workplace for individuals with DD. These participants were involved in the workplace's welfare program, specifically a sports club, from September 2023 to May 2024. Their daily physical activity levels and nutrition/dietary habits were assessed using the International Physical Activity Questionnaire (IPAQ) and a survey developed by the Korean Academy of Clinical Health Promotion, respectively. Additionally, qualitative data were also collected through one-on-one interviews and photos of regular meals taken by each participant to gain deeper insight into their health behaviors.

Result: The average physical activity level of participants was 1,841 METs (SD=926.73), with variations depending on work-related movements and additional personal exercise. Participants made efforts to maintain their current employment by engaging in physical activity and self-directed learning. Physical activities outside work included participation in sports clubs, individual exercises after work, and weekend walking. In terms of nutrition and dietary habits, participants scored an average of 61 points (SD=10.69) on a dietary habits questionnaire, indicating low consumption of fruits, vegetables, and seaweed, alongside frequent intake of delivery and fast food, as well as cholesterol-rich foods. Qualitative data were categorized into four themes: "Health Management as an Employee", "Overall Health Status", "Physical Activity", and "Nutrition and Dietary Habits". Both physical activity and dietary habits were influenced by the involvement and concern of the participants' parents.

Conclusion: This study identified the health behaviors of employees with DD, including their levels of physical activity and dietary habits, as well as their needs for future health management. Personalized exercise guidance is necessary to increase the frequency and variety of physical activities. Additionally, ongoing nutritional education for both participants and their parents is important to foster healthier dietary habits.

Key words: Developmental Disabilities, Employees, Physical Activity, Nutrition/ Dietary Habits

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Narrative Study on the Experience of Student Athletes Participating in Double Tutoring

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Purpose This study aims to deeply explore the experiences and meanings of mentoring for student athletes who participated in the Double Tutoring program, reflecting on Dewey's concept of "an experience," and to derive educational implications. Double tutoring is a flexible learning method where peer students take turns being both the teacher and the learner, engaging in cooperative activities. It is based on the theoretical foundation of peer tutoring (Vygotsky, 1994). The purpose of Double Tutoring is to provide student athletes with the opportunity to teach their sport, such as baseball, soccer, or basketball, to other students in different departments, thereby improving their confidence and allowing them to explore a potential path as a coach. In return, they learn essential skills required for university life, such as major-required subjects, English, computer skills, and general education, helping them break away from the perception of being in an isolated "island culture" (Hong Deok-gi & Ryu Tae-ho, 2007) and enabling a more flexible university life. While traditional tutoring for student athletes focused solely on the role of tutees, Double Tutoring provides an opportunity for them to experience both the roles of tutor and tutee, which could serve as important data for understanding and improving the lives of university student athletes.

Method: This study employed narrative research, a traditional qualitative research method using in-depth interviews, to understand the meaning of the Double Tutoring participation experiences of the research participants. From September to December 2023, tutoring was conducted, and each week, questions about their "experiences" were continuously asked to examine their tutoring experiences and educational implications in depth. After the tutoring was completed, semi-structured interviews were conducted. Pre-arranged questions included topics such as "motivation for participating in Double Tutoring," "perception of the experience," and "the meaning of the experience." To ensure reliability, member checks and peer debriefings were conducted on the collected data.

Result: The results showed that participants felt a positive refreshment from the constrained sports culture. The program provided an opportunity to broaden their horizons, helping student athletes who struggled with interpersonal relationships expand their social networks. They experienced positive changes in academic adjustment, leadership, emotions, and social aspects. In particular, as tutors, they had the opportunity to design their future path as leaders, while as tutees, they experienced a change in perception through meeting friends from different majors.

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Conclusion: This study empirically verified that the experience of participating in Double Tutoring brought about positive impacts and changes in perception among the participants. It was found that through the new environment and atmosphere, they explored aspects of life they had never experienced before. This highlights the importance of voluntary reflection and consideration of personal experiences, as these interactions between members lead to problem-solving, the creation of new knowledge, and continued experiences and learning. Future research could benefit from a longitudinal study examining the life and experience changes after participating in Double Tutoring.

Key words: Double Tutoring, Student Athletes, Participation Experience, Narrative, Qualitative Research

Outdoor Recreationists' Place Attachment to Namsan Park and the Environmentally Responsible Behaviors

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Purpose: Outdoor recreation sites should be managed considering the direction of coexistence that can protect the environment while ensuring the enjoyment of leisure participants, as they are based on natural resource. This study aims to analyze the 'Conservation Recreation Model (CRM)' (Larson et al., 2018) to identify the Environmentally Responsible Behavior (ERB) of outdoor recreationists and explore the socio-psychological variables affecting the ERB. In the CRM, it is assumed that place attachment mediates the relationship between the place meaning and ERB. Since CRM has yet to be analyzed among Korean outdoor recreationists, its application to the domestic environment would have theoretical meaning and practical value.

Method: Data collection was conducted on-site during October and November of 2023. Using purposive sampling, we distributed a survey to the respondents who agreed to participate. We yielded a total of 357 completed questionnaires. Data analysis was performed to explore the relationship among place meanings, place attachment, and pro-environmental behaviors. Using SPSS and LISREL, we conducted descriptive statistical analysis, reliability analysis, confirmatory factor analysis, and structural equation modeling.

Result: Results showed that environmental and social place meanings positively influenced place attachment dimensions (i.e., place identity, place dependence, and place social bonding). Ultimately, place identity negatively predicted one type of ERB (i.e., environmental norms). In contrast, place social bonding positively predicted two types of ERB (i.e., daily behavior and environmental norms). Thus, we found the mediating role of place attachment dimensions in the relationship between place meanings and ERB.

Conclusion: This study empirically verified that the environmental and social meaning of place of people who visited outdoor leisure places predicted pro-environmental behavior through place attachment. In particular, place attachment promoted the ERB of outdoor recreationists. Furthermore, it was found that the source of place attachment was the environmental place meaning, which refers to Namsan's natural environment as essential, and the social place meaning, which shows that Namsan is an excellent place to be with others. Among various ERB indices, environmental norms were most influenced by place attachment. Future research should examine how other people's perception of the environment affects ERB or attitude toward outdoor recreation sites.

Key words: outdoor recreation, leisure, place attachment, place meaning, pro-environmental behavior

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