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Corresponding author*
E-mail: tbfpr69@hanmail.net

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A Study on the Promotion of National Interest and Development of Korean Judo Athletes in the 1990s

Ilhoon Song

Yongin University, Assistant Professor, Republic of Korea

Abstract

Purpose: *This study aims to reexamine the significance and value of the judo athletes who contributed to the national interest at the Olympics and World Judo Championships through the development of Korean judo in the 1990s, and to examine the historical implications of these achievements. Furthermore, by examining the historical significance of Korean judo's development at the 25th Barcelona Olympics, the 26th Atlanta Olympics, and various World Judo Championships, the study aims to suggest future directions for the sport in Korea and to highlight its historical implications.*

Method: *This study's content, scope, and methodology focused on examining the historical significance of the judo athletes who contributed to the development of Korean judo at the 1990 Olympics and World Judo Championships. This review included newspaper articles, historical papers, and a collection of historical materials from the Korea Judo Association. Through this review, the study presented a concrete direction for the development and identity of Korean judo.*

Results: *This study examines the development of Korean judo in the 1990s and its contribution to enhancing national prestige at the Olympics and World Judo Championships. Through periods of stability and instability, Korean judo has been able to engage in further self-reflection, identify future directions, and make progressive leaps forward.*

Conclusion: *This study examined the development of Korean judo in the 1990s and its contribution to enhancing national prestige at the Olympics and World Judo Championships. Through periods of stability and instability in Korean judo, this study presented the historical value and implications for its development, promotion, and identity. Therefore, this study examined the development of Korean judo in the 1990s and its contribution to enhancing national prestige at the Olympics and World Judo Championships, offering some insights into its historical significance. Furthermore, more detailed and in-depth follow-up research is needed to examine the development of Korean judo in the 1990s and its contribution to enhancing national prestige from a contemporary perspective, focusing on techniques, physical strength, muscular strength, mental fortitude, and strategic tactics.*

Keywords: ***Korean Judo, Olympics, World Judo Championships, Identity, Promotion of National Interest***

1. Introduction

Since its heyday in the 1980s, Korean judo has contributed to the national prestige of judo athletes at the Olympics and World Judo Championships in the 1990s. While Korean judo has achieved strong results, there have also been periods of underperformance. The periods of stability and instability in Korean judo have historical significance, providing a glimpse into the future direction and advancement of the sport.

Notably, at the 25th Barcelona Olympics, Korean judo won one gold, one silver, and two bronze medals. Conversely, at the Atlanta Olympics, Korean judo athletes won two gold, four

silver, and two bronze medals, leaving a significant mark on Korean sports and achieving unprecedented achievements.

Furthermore, at the 18th World Judo Championships, the men's team won two gold medals, and the women's team won one gold and two bronze medals. Furthermore, at the 20th World Judo Championships, the team achieved a remarkable third-place finish with three gold and three bronze medals. However, at the 21st World Judo Championships, Korea suffered the humiliation of not winning a gold medal, winning only one silver and three bronze medals for the first time since 1981. This humiliation, however, provided an opportunity for further development.

The development of Korean judo in the 1990s can be summarized as follows: It contributed to enhancing national prestige at the Olympics and World Judo Championships, and while there were both significant achievements and heartbreaking moments, it is crucial to reaffirm the historical significance of the event for the further development of Korean judo. It left a significant mark on the world and achieved unprecedented achievements.

As a preliminary study on the Olympic and World Judo Championships in Korea, Yoo, Sung-Yeon(2023)[1], A Study on the Changing Process of the Origin Theory of Korean Judo, Song Il-Hoon(2022)[2], The historical value of the re-emergence and heyday of Korean judo in the 1945-1980s, Cho, Yong-Chul(2022)[3], A Study on the Achievement of Judo inKoreaduring the Japanese Colonial Period, Song Il-Hoon(2023)[4], A Study on the Advancement of Korean Indigenous Peoples and Overseas Expansion : Focusing on the people ofKoreaJudo Schools, Jong Hak-Park(2020)[5], A Study on the Influence of the Cheongseok Academy on the Development of Korean Judo, Lee Seung-Soo(2025)[6], Legal Conflict and Change in the Korean Judo Organization: Focusing on the Legal Dispute between the Korean Judo Association and the DaehanYeonmu-gwan in 1956-1957, Lee Seung-Soo(2018)[7], A Study on the Treatment of the Kodokan Chosun Branch under the US Military Government, Lee Seung-Soo(2019)[8], A Study on the Judo activities of Lee Seon-gil during the Japanese ruling period.

However, as seen in the representative existing studies mentioned above, most previous studies have presented the overall historical context of Korean judo. While research on the development and competitive landscape of Korean judo since liberation has been active, there is a dearth of research highlighting the significant contributions and achievements made by judo athletes during the development of Korean judo in the 1990s.

In particular, examining the development of Korean judo in the 1990s is essential to understanding its development. Examining key historical events such as the 25th Barcelona Olympics, the 26th Atlanta Olympics, and the numerous World Judo Championships is crucial for understanding the true nature of Korean judo and studying the developmental processes and competitive landscapes brought about by these events.

Therefore, this study reexamines the development of Korean judo in the 1990s, including the Olympics and numerous World Judo Championships, and illuminates the historical value, significance, and meaning of this development. This study aims to present the historical significance of the judo athletes who contributed to the development of Korean judo at the 1990 Olympics and World Judo Championships. Specifically, the scope of the study was to examine and analyze historical literature related to the 1990 Korean Judo competition and the improvement of performance, including judo textbooks, online resources, and materials held by the Korea Judo Association.

Using a variety of primary and secondary sources, this study conducted a detailed literature review of the historical value of Korean judo at the 25th Barcelona Olympic Games, the 26th Atlanta Olympic Games, and various World Judo Championships.

The specific research objectives of this study, including its method and scope, are as follows: First, the study in-depth investigated, analyzed, and examined the historical value and implications of Korean judo's contributions to national interests at the Olympic Games. Second, the study in-depth investigated, analyzed, and examined the historical value and implications of Korean judo at various World Judo Championships. Based on this background, the study presented the historical value and significance of the development of Korean judo in the 1990s. However, it should be noted in advance that this study focused on the very important competitions held in the 1990s, the 18th, 20th, and 21st World Judo Championships, rather than many other competitions.

2. The Olympic Promotion of Korean Judo and Its Historical Implications

2.1. 25th Barcelona Olympic game

1992 was the year the Korean judo team set sail for the Barcelona Olympics gold medal. Choi Jong-sam was the head coach, along with Choi Kwan-yong, Cho Yong-cheol, Ahn Byeong-geun, and Kim Jae-yeop. The team also included 14 national male and female athletes.

As such, the team was on par with any previous team. It boasted top-tier performance and solid teamwork—essentially, a crucial factor in achieving its goals. A closer look at these athletes revealed their reliability, leading many to anticipate a smooth return to their hometown after achieving their goals. The focus shifted to whether Yoon Hyeon, the star athlete of the Korean judo team in the men's -60kg class, could overcome his past misfortunes and ascend to the top of the world. A closer look reveals the following.

Yun Hyun, with his world-class skills, was consistently considered a contender for international championships, but he would often collapse at the last minute, leaving those around him feeling disappointed. On the Olympic mat, Yun's potential rivals for the title were narrowed down to 1991 World Champion Koshino of Japan, Pradaul of France, and Guseynov of the Commonwealth of Independent States. Of these, Koshino was the most formidable opponent, and barring any upset, a final match was expected. Notably, Yun Hyun lost to Koshino in the 1991 World Championships final. However, he is determined to redeem himself at the 25th Barcelona Olympics. Given his track record, Yun Hyun appears to have the better chance of victory.

Koshino seems to have lost power and agility compared to last year, and he is showing signs of decline, such as losing to a second-tier player in the national team selection match. However, his biggest enemy, weight loss, is going smoothly, and he has completely established a countermeasure against Koshino, who is a short and awkward opponent who digs in from below [9].

Likewise, he is being asked to break away from his previous habit of striking after fully establishing his stance and launch a bold attack.This is in anticipation of Yoon Hyun's wish to pursue a gold medal at the 1992 Barcelona Olympics, the last of his athletic career, with the determination to die for it. This will allow him to proudly face his mother and other family members who have supported him, as well as his admirable junior, Ahn Hyo-kwang, who readily yielded his spot for the national team selection. Furthermore, attention was focused on whether Korea's "Angry" Jeong Hoon could topple Japan's small giant, Toshihiko, in the men's -71kg class and claim the top spot on the podium. This can be confirmed below.

At last year's World Championships, Jeong Hoon was defeated by the rising star of the Commonwealth of Independent States, Djebouache, who settled for bronze.However, he was determined not to back down at the 1992 Barcelona Olympics, and he sweated profusely.Burning with the fighting spirit of rivaling Toshihiko Koga even in his dreams, Jeong prepared to once again topple Toshihiko Koga on the Barcelona mats and claim the crown.

Thus, the match between Toshihiko Koga, a two-time World Championship champion in 1989 and 1991, and Jeong Hoon is expected to be a fiercely contested match, with even a moment of composure potentially determining victory or defeat.His record is 1 win and 2 losses, which suggests he's lagging behind Toshihiko Koga.However, if he can recapture the fighting spirit he displayed at the 1990 Beijing Asian Games, he should have no trouble defeating him.Koga, with his extensive international experience, possesses the confidence and power to win the title.However, Jeong Hoon is on the rise, having won the MVP award at the Paris Open earlier this year.

His form is stable, and his stamina is impressive, making him a solid contender for the gold medal.However, to avoid a second defeat to the dark horse, Djebouace, Jeong Hoon must also devise a thorough countermeasure.In other words, due to the different seedings, an early matchup had to be avoided.However, preparations were necessary.

The men's -78kg class, in particular, is a weight class where European influence cannot be ignored, especially compared to the two previous weight classes.With a Western average physique and a large pool of competitors, many boast exceptional strength. Therefore, a thorough understanding of their judo style is crucial for Asian athletes to withstand this challenge.Furthermore, Korea is hoping that Kim Byung-joo, the 1989 World Championships gold medalist, can reclaim his title.Last year, he struggled, suffering from a knee injury and other factors, resulting in his worst performance. However, he must overcome powerful opponents such as Japan's Yoshida, who halted his winning streak; 1991 World Championship gold medalist Raskau of Germany; and second- and third-place finishers Ratz (Belgium) and Baraev (CIS).

However, he has completely overcome his slump and regained the form he had in his prime.Therefore, he possesses a formidable skill, relying on his tireless stamina to overwhelm opponents.With this skill further refined, a return to the top is highly anticipated.Furthermore, while he was weak against left-handed fighters, his confidence has grown significantly after intensive training during the winter.His natural enemy, Yoshihiko Yoshida, is a left-handed fighter.Among these, the women's -72kg class is a weight class where Korea holds the most certainty of a gold medal, both male and female.

This is due to the presence of 1991 World Champion Kim Mi-jung.Since conquering the world title last year, Kim has enjoyed a string of victories and has demonstrated exceptional skill, making her a recognized Olympic gold medalist.However, the only obstacle standing in his way is Japan's Tanabe, but even he is no match for Kim.Having defeated her in the World Championship final last year and recently winning two straight, she has completely taken control.Moreover, at 27, Tanabe was entering a period of decline, and Kim Mi-jung's landslide victory was all but certain.

Therefore, she vowed to become the first Olympic gold medalist in women's judo and establish a golden milestone in the history of Korean women's judo. Therefore, she possessed world-class skills, winning three titles in the 56kg class at the Fukuoka Games, the world's most prestigious women's judo competition.However, Jeong Seon-yong, who had a tendency to underperform at major competitions, was determined to live up to expectations at the 25th Barcelona Olympics. Furthermore, former male and female representatives, including 1991 world champion Moon Ji-yoon in the women's 72kg+ class, were filled with ambitions to achieve great things. Even if they didn't win a gold medal, they were likely to snag a silver or bronze medal in droves.In particular, they aimed to win at least two gold medals at the 25th Barcelona Olympics.In other words, they aimed to replicate the glory of the Seoul Olympics and enhance the reputation of Korean judo.This was the national team's goal, and to achieve this, they conducted intense early-morning physical training to strengthen speed, agility, and overall endurance. A closer look at this can be seen below.

In the morning, I focused on weight training and circuit training to improve my strength and overall conditioning. In the afternoon, I spent time on technical training to further hone my special skills.Furthermore, I practiced against multiple opponents to improve my game management and tactics. With this in mind, I entered the Olympics with the confidence and motivation to achieve something. However, the results were as follows. Kim Mi-jeong won one gold medal in the 72kg division, Yun Hyeon won one silver medal in the 60kg division, Jeong Hoon won two bronze medals in the 71kg division, and Kim Byeong-ju won two bronze medals in the 78kg division.

These results fell short of the initial goals.Furthermore, there were cases where athletes who had endured difficult and arduous training to compete at the 25th Barcelona Olympics were unexpectedly defeated in the first round. This was a truly disappointing experience for both the coaches and the athletes themselves.However, they were determined to identify the root causes of their failures and use this as a catalyst for the development of Korean judo.So, based on the results of the 1992 Barcelona Olympics, let's take a closer look at the gold medals won by each continent.

Of the 14 total gold medals, Europe dominated with eight (France 2, Spain 2, Commonwealth of Independent States 2, Hungary 1, Poland 1), Asia with four (Japan 2, Korea 1, China 1), and the Americas with two (Brazil 1, Cuba 1). Europe dominated, capturing 57% of the gold medals.Looking at the medal rankings by country, Japan ranked first overall with two golds, four silvers, and four bronzes. France came in second with two golds, one silver, and four bronzes. The Commonwealth of Independent States came in third with two golds and two bronzes.

Korea, on the other hand, performed poorly, finishing in seventh place with one gold, one silver, and 12 bronzes.Specifically, looking at medal counts by gender, Japan took first place in the men's category with two golds, one silver, and two bronzes. The Commonwealth of Independent States (CIS) came in second with two golds and one bronze. Hungary came in third with one gold, two silvers, and one bronze.

Korea, on the other hand, only won one silver and two bronzes.In the women's competition, France took first place with two golds and two bronzes, Spain second with two golds, and Cuba third with one gold, one silver, and two bronzes. Korea finished fifth with one gold, while Japan, which finished sixth, achieved a balanced medal performance across all weight classes, despite not winning a single gold medal. This represents a significant improvement over the past.

Likewise, in women's judo, France's evenly distributed medal haul and the development of Japanese women's judo, which, despite not winning a gold medal, placed in five weight classes, are noteworthy.Britain, previously a powerhouse in women's judo, only won one silver and two bronze medals.Italy also only won one silver, suggesting a shift in the global women's judo scene.

Korea, too, was expected to achieve at least three or four medals, but only managed one.So, a comprehensive assessment of the performances of Korean athletes at the 1992 Barcelona Olympics reveals the following.

First, despite scoring first or having a favorable game, they conceded a big goal late in the game and lost. Second, the women's players failed to fully demonstrate their skills and lost. Third, many players lost unexpectedly due to consolidation. These problems stemmed primarily from a lack of game management skills.Second, due to high expectations for the Olympics, the team played too cautiously and cautiously[10].

Third, there was a lack of tenacity and determination to attack and maintain scoring until the last minute.Solutions include playing in numerous games to cultivate game management skills and tactics and to reduce the pressure of competition. Furthermore, in addition to providing

intensive support to first-tier players, we must also support second-tier players and promising prospects to maintain a broad player base.

Therefore, at the national level, we must carefully select athletes who can achieve such excellent results in international competitions. The results were not as anticipated.However, Kim Mi-jeong's tenacity and fighting spirit, which allowed her to overcome an early disadvantage in the final match against Japan's Tanabe Yoko and maintain her attack until the very end, ultimately securing a 3-0 victory, not only gave great hope to Korean judo but also served as a valuable role model for many athletes and a catalyst for Korean judo's advancement.

2.2. 26th Atlanta Olympic games

The 26th Atlanta Olympic Games, a global sports festival, kicked off with a grand opening ceremony on July 19, 1996. The 26th Atlanta Olympic Games marked the 100th anniversary of the first Olympic Games held in Athens, Greece in 1896, and various commemorative events were held in a grand manner.

The commercialism of the host nation, the United States, was a subject of controversy.However, the Games were considered fruitful in terms of records, with a flood of new world records set.While Korea failed to achieve its initial goal of fifth place in the world at the 26th Atlanta Olympics, it did manage to secure eighth place in the world in medal count (27) with seven golds, 15 silvers, and five bronzes, ranking it 10th in gold medals.Thus, the 26th Atlanta Olympic Games featured a total of 271 events across 26 sports.

The judo competition took place at the Georgia World Congress Center for a week, from July 20th to 26th. A total of 391 athletes from 83 countries participated.These athletes were carefully selected through regional preliminaries based on a quota system. The largest number of participants came from Europe, where judo has become a popular sport. A closer look reveals the following. Korea achieved a remarkable feat on the second day, with Kim Min-soo (Yongin University) winning a silver medal in the -95kg weight class. Following this, the team secured two gold medals, four silver medals, and two bronze medals.

Notably, six athletes advanced to the finals, sparking fierce competition for gold medals day after day, making the sport one of the most watched by the Korean public.The gold medalists were Cho Min-sun (Ssangyong Cement) in the -66kg weight class and Jeon Ki-young (Korea Racing Authority) in the -86kg weight class, both of whom achieved back-to-back World Championship titles.He demonstrated his prowess as a world-class judoka, winning every match from the preliminaries to the finals with a single-elimination victory.He secured the gold medal with a serious attitude, precise technique, and exhilarating single-elimination victories, garnering praise for his exceptional connecting moves.

In the first round, Jeon Ki-young clashed with Dutchman Huizinga, considered his strongest rival, and the two exchanged blows. The match was a close one, and Jeon Ki-young secured a 3-0 decision victory.From the second round onward, he successfully employed his signature shoulder strike, achieving four consecutive one-bout victories and securing the gold medal.

The star performer, Kim Min-soo (Yongin University), who won the -95kg weight class, garnered much praise for his first medal for Korean judo and a fortunate silver medal. Despite his lack of international competition experience, his aggressive attack and confident play defied expectations and secured a silver medal.Consequently, Kwak Dae-sung (Binggrae), who competed in the -71kg weight class, also earned a silver medal.

In the final, he faced Japan's Nakamura and held the advantage throughout the match, but a caution penalty with seven seconds remaining tied the score. He ultimately lost by a narrow 2-1 decision, securing the silver medal [11].

Furthermore, Jeong Seon-yong, who holds the record for most Olympic appearances with three, lost to his rival, Cuba's Gonzalez, and secured the silver medal. Furthermore, Hyun Sook-hee (Ssangyong Cement), who had been struggling due to injury, displayed a better-than-expected performance to secure the silver medal, once again demonstrating her strength in major competitions, following her performance at the 1994 Asian Games.Jeong Seong-suk (Ssangyong Cement), who was expected to win gold in the -61kg, was defeated by 1993 World Championship champion Gella Vandekeby of Belgium, who counterattacked, forcing her to settle for bronze.

Accordingly, Jo In-cheol, who competed in the -78kg weight class, easily advanced to the semifinals. However, in the semifinals, which determined his place in the final, he faced Japan's star athlete Koga and lost by a 3-0 decision, earning him a bronze medal.In particular, Son Hyun-mi, who competed in the women's heavyweight division, faced a strong Cuban opponent, Rodriguez, from the first round but lost. Meanwhile, in the men's lightweight division, Kim Jong-won (Yongin University) in the -60kg weight class and Lee Seong-hoon (Ssangyong Cement) in the -65kg weight class were eliminated in the preliminaries.

Furthermore, Japan, which finished first overall, one gold medal ahead of Korea, was left feeling uneasy after failing to secure a medal on the first or second day. However, on the fourth day, Yuko Emoto in the women's -61kg weight class and Kenzo Nakamura in the men's -71kg weight class both won, solidifying the status of the dominant nation. They recovered their performance in the latter stages of the competition. However, Yoshida, the star of Japanese judo, was eliminated in the first round.Notably, Kogawa Tamura won silver medals, while Ogawa finished in fifth place. France, a country with a strong judo culture, won three gold medals and three bronze medals, starting with Douillet's gold medal in the men's heavyweight division on the first day, securing second place overall [12].

Cuba, a powerhouse in women's judo, placed in six weight classes but only won one gold medal, placing fourth overall.North Korea, Belgium, Poland, Germany, and China each won a gold medal.

Notably, North Korea's Kye Sun-hui defeated Tamura, a Japanese judo hero and a clear gold medal contender, to win gold.This victory was the biggest upset of the 1996 Atlanta Olympics.Kye Sun-hui was a 16-year-old high school student with no international competition experience and only two years of judo experience, making her a rookie.

3. Promotion of National Interests and Historical Implications of the Korean Judo World Championships

3.1. 18th world Judo championships

The Korean national judo team won three gold medals and two bronze medals at the 1993 18th World Judo Championships, placing second overall. This was the highest number of participants in a world championship at the time. Held at the Cobbs Coliseum in Hamilton, Canada, the 18th World Judo Championships saw 449 athletes from 76 countries compete for the medals. A closer look at the results reveals the following.

Men's -78kg Jeon Ki-young, -71kg Jeong Hoon, and women's -66kg Jo Min-seon won gold medals, while women's -72kg Kim Mi-jeong and unlimited weight class Moon Ji-yoon won bronze medals, achieving their best results in recent times.

In that case, the following interview was left by Director Kim Jeong-haeng (then Vice President of the Korea Judo Association and Vice President of Yongin University), who led the Korean national judo team to second place in the world, which can be confirmed as follows.

With three gold medals and two bronze medals, they achieved the feat of taking second place overall for the first time in eight years since the 1985 Seoul World Championships. The secret seems to be that the players and coaches gave their all in the competition, the status of Korean judo was raised, so there were no disadvantages in judging, and the former Soviet Union, which had always taken one or two gold medals, was greatly weakened, which seemed to be favorable conditions.

Then, regarding the 18th World Judo Championships, the Dong-A Ilbo published a newspaper article titled "World Judo Championships Summary - One Step Closer to Japan with Steady Rising Curve", which can be confirmed as follows.

The 18th World Judo Championships, which concluded in Hamilton, Canada on the morning of the 4th, can be summarized as a rise for Korea, a decline for the former Soviet Union, and a stagnation for Japan. Korea swept three weight classes for the first time in its history at the 18th World Judo Championships, solidifying its position as a judo powerhouse on par with Japan. However, the former Soviet Union, which had threatened Japan by winning one or two gold medals in each competition up until the 17th Games (1991), failed to win a single weight class due to the fragmentation of its strength among 15 independent nations.

Japan, which has dominated the overall rankings since the inaugural Games (Tokyo) in 1956, reaffirmed its status as a judo powerhouse by adding two gold medals on the final day. Most of Korea's athletes who failed to qualify for medals in these Games faced early clashes with the top two ranked teams in their respective weight classes, leading to their potential for world domination. While gold medalists Jeong Hoon (-71kg), Jeon Ki-yeong (-78kg), and Cho Min-seon (-66kg) enjoyed favorable matchups, most female athletes, including Jeong Seon-yong (-56kg), Son Hyun-mi (+72kg), Kim So-ra (-48kg), Jeong Seong-suk (-61kg), Kim Mi-jeong (-72kg), and Moon Ji-yoon (+72kg), faced unfavorable matchups, facing potential champions or runner-up contenders early or mid-game.

In the men's division, Yoon Hyeon (-60kg) and Kim Geon-su (+95kg) also narrowly lost to Switzerland and Gurdjiya, who finished second. Experts predict that if promising athletes in each weight class are identified early and followed by scientific and systematic training, they could achieve even better results than at the 1995 Chaga Games (Tokyo) or the 1996 Olympics. In addition to outperforming Korea's performance at the 1985 Seoul Olympics (where it won two gold medals), the men's judo team has been receiving positive reviews for its ability to win two gold medals overseas for the first time in eight years[13].

However, with the collapse of the Soviet Union, Western powers like Poland, Germany, and the United Kingdom are rapidly growing, and there are concerns that if Korea fails to properly prepare, it could regress to a third-rate judo nation[14].

Korean men's judo is receiving positive reviews from the world's leading sports organizations, and this achievement was made possible by the hard work of Korea Judo Association President Kim Jeong-haeng and his team. Furthermore, it has provided an opportunity for further advancement.

3.2. 20th world Judo championships

The Korean Judo Championships were held at the Bercy Stadium in Paris, France, from October 9 to 12, 1997. At the 20th World Judo Championships, Korea placed third overall with three gold medals and three bronze medals.

All of Korea's gold medals at the World Judo Championships came from the men's team. These included Jeon Ki-young, who achieved a three-peat in the -86kg division, Jo In-cheol, who won in his first World Championship appearance, and Kim Hyuk, the eldest member of the national

team, who unexpectedly won the gold medal in the -60kg division. The most notable achievement at the 20th World Judo Championships was Jeon Ki-young's three-peat in the division. A closer look reveals the following.

Jeon Ki-young, who won the -78kg weight class at the 1993 Hamilton Games and then dominated the -86kg weight class at the 1995 Chiba Games, advanced to the semifinals with a clean sweep of rounds from start to finish, showcasing his seasoned game management and precise technique. In the semifinals, Jeon defeated Lithuania's Merkevicius by a caution. In the final, he dominated Germany's Mark Spitka, the bronze medalist at the 1996 Atlanta Olympics, and defeated him by another caution, becoming the first South Korean to win three consecutive World Championships. Jeon's feat was all the more remarkable because he overcame the mental pressure of a three-peat and poor condition on the day of the competition to achieve it.

In this way, in the -78kg class final, rising star of men's judo, Jo In-cheol, took the thrill of victory by knocking down 1996 Atlanta Olympic gold medalist and home court player Bauras to the mat in just 2 minutes and 55 seconds with a thrilling all-out strike. If we look at this in detail, we can see the following.

Cho In-cheol, who defeated North Korea's Kwak Ok-chol in the semifinals and won the inter-Korean match, displayed a stronger determination to win than ever before and displayed a proactive approach, securing South Korea's second gold medal. With this victory, Cho In-cheol finally avenged his third-place finish at the 1996 Atlanta Olympics and established himself as a true world-class athlete. The two previous gold medals were somewhat expected [15].

In particular, the good news of Kim Hyuk, who flew in on the third day of the competition weighing -65kg, was completely unexpected and surprised the competition officials. A closer look at this can be confirmed as follows. Kim Hyuk was originally a fighter who had good results in the -60kg weight class, but after moving up one weight class to -65kg, it is true that he had not yet proven his skills in a major international competition. However, despite a knee injury sustained during training, Kim Hyuk defeated Brazil's Guimaraps, the bronze medalist at the 1996 Atlanta Olympics, in the first round with a one-on-one hug, and advanced to the finals after a pleasant start.

In the final, Kim Hyuk faced France's Larby Vanbdau, who was met with one-sided cheers from the home crowd, and struggled, conceding a penalty first. However, through skillful game management, he defeated him with a single backhanded strike just 2 minutes and 6 seconds into the match, demonstrating the tenacity befitting the eldest member of the national team. The women's team, in particular, was determined to achieve a third consecutive championship, a goal that can be seen in the following details.

In the -66kg weight class, Cho Min-seon lost to Britain's Howey, the 1997 Paris Open champion, in the semifinals with a surprise leg-grab, finishing in third place. In the -61kg weight class, Jeong Seong-suk enjoyed a favorable match throughout her third-round match against Spain's Sara Alvarez. However, the judges' biased decisions resulted in a 2-1 loss. She then had to settle for a bronze medal after a one-point victory over Australia's Lara Sullivan in the consolation final. In the -52kg weight class, Hyun Sook-hee put up a strong performance against North Korea's Kye Sun-hee in the second round. However, she lost a leg-grab, sending her into the consolation bracket. She then won the consolation final and took the bronze medal [16].

Therefore, Korea finished third overall at the 20th World Judo Championships with three gold medals and three bronze medals, behind Japan (four gold medals, three silver medals, and three bronze medals) and France (four gold medals, three silver medals, and two bronze medals). Furthermore, at the 20th World Judo Championships, Korea's previously strong women's team struggled. Amidst this, the men's team's overall victory marked a significant improvement in their performance. Furthermore, some of the women's team's representative athletes, including

Cho Min-seon, announced their retirement, spurring the urgent need to select talented athletes to succeed them in preparation for the upcoming 1998 Asian Games and the 2000 Sydney Olympics.

3.3. 21th world Judo championships

South Korea's judo competition will be held in Birmingham, England, from October 7 to 10, 1999. At the 21st Hyundai World Judo Championships, South Korea suffered the humiliation of not winning a gold medal, with one silver and three bronze medals, for the first time since 1981. So, at the 21st Hyundai World Judo Championships, with 578 top-tier athletes from 90 countries participating, the South Korean national team, which had undergone a generational change since the 1997 World Championships, aimed for two gold medals in the giant slalom event. However, they only witnessed the disappointing state of South Korean judo. A closer look reveals the following.

Korean judo seemed to get off to a strong start on the first day (the 12th), with Jang Seong-ho (Hanyang University) unexpectedly winning a silver medal in the -100kg class. After advancing through the first round by default, he displayed exceptional offensive prowess, landing a back-swing in the second and third rounds. In the semifinals, his biggest challenge for advancing to the finals, he defeated Russia's Mikhailiev by a caution.

In the final, he faced Japan's Inoue, a world-class Japanese athlete. He gave it his all. However, Inoue, who pushed forward with his extensive experience and skill, conceded a valid backhand, forcing him to settle for silver. In the women's -78kg class match held on the same day, Kang Min-jeong (Yongin University) received a caution against Japan's Anno and was relegated to the consolation finals. She then lost a narrow 2-1 decision to a Cuban athlete in the consolation finals, failing to secure a medal. However, she secured her spot in the Olympics by finishing fifth.

Notably, on the second day of the competition, on the 13th, Jo In-cheol (Yongin University), winner of the -81kg class at the 20th World Judo Championships and considered a strong contender for the 21st Hyundai World Judo Championships, was unable to overcome the aftereffects of shoulder surgery and had to settle for bronze. A closer look at this situation reveals the following. Jo In-cheol suffered a shocking defeat in the fourth round to Trayev of Uzbekistan with a throw, but he won the bronze medal by defeating Delgado of Portugal with a heel-thrust throw in the losers' final.

Yoo Seong-yeon, who was particularly expected to win a medal, dominated the first through third rounds, raising expectations of a gold medal. However, she lost to Kazakhstan's Shakhimov in the fourth round with a shoulder throw and was relegated to the consolation bracket. In the consolation final, Yoo Seong-yeon defeated Brazil's Honorato with an ankle brace, securing third place. A closer look reveals the following. Yoo Seong-yeon consistently placed in the top three at international competitions in 1999, significantly increasing her chances of winning a medal at the Sydney Olympics the following year. However, she was unable to shake off the third-place jinx, leaving her with a disappointing result. On the third day of the competition, the 14th, Han Ji-hwan (Yongin University), a member of the -66kg class from South Korea, showed a severely poor performance, finishing in fifth place and earning her Olympic berth.

Korea's final medal came in the women's unlimited weight class. Choi Sook-yi (Yongin University), who suffered a first-round elimination in the +78kg class, defeated Brazil's Marquess in the unlimited weight class to secure a bronze medal. However, the unlimited weight class was not an Olympic weight class, leaving her with a disappointment.

Park Sung-ja (Yongin University), competing in the -48kg class, faced four-time world champion Ryoja Tamura of Japan in the semifinals and put up a close fight. However, her passive performance resulted in a caution, forcing her into the consolation bracket. She then lost to a

German athlete in the consolation final with a valid backhand strike, finishing fifth and securing her Olympic berth. The 21st Hyundai World Judo Championships could be summarized as "Japan's dominance, Cuba's dominance, and Korea and Europe's weakness." Thus, Japan won eight gold medals, half of the 16 available at the 21st Hyundai World Judo Championships. Cuba, in particular, finished second overall with four gold medals. Conversely, Asian countries, including Korea, excluding Japan, performed extremely poorly, failing to win a single gold medal[16][17][18].

France, which shared the title with Japan at the 20th World Judo Championships, and other European countries also managed only three gold medals. Japan's exceptional performance appears to have been achieved through a relentless effort, driven by a persistent struggle. Japan reportedly assigned coaches for each weight class, conducted thorough analyses of their European and Cuban opponents, and focused their training accordingly. Ahead of the 21st Hyundai World Judo Championships, Japan expressed its opinion that "the blue judo uniform is thicker than the white one, which is disadvantageous to Asian athletes with smaller hands," creating a somewhat ironic result[19][20].

Thus, only six out of 14 weight classes secured Olympic tickets. In other words, Korean judo has faced harsh criticism for its current failures, and now demands a leap forward and a direction for further development, to ensure its place among the world's top athletes at next year's Sydney Olympics.

4. Conclusion

This study examined the development of Korean judo in the 1990s and its contributions to the national prestige at the Olympics and World Judo Championships through a historical review. Drawing on primary and secondary sources, historical papers, the Korea Judo Association archives, and judo books, the study sought to present the historical value and significance of the development of Korean judo through periods of stability and instability, as well as the identity of Korean judo.

At the 25th Barcelona Olympics, Korean judo athletes won gold (Kim Mi-jeong, 72kg), silver (Yun Hyeon, 60kg), two bronzes (Jeong Hoon, 71kg), and bronze (Kim Byeong-ju, 78kg). These achievements fell short of the initial goals. Furthermore, there were cases where athletes who had endured arduous training to compete at the Olympics were unexpectedly defeated in the first round. This was a devastating blow to both coaches and athletes.

However, identifying the root causes of these problems and defeats should serve as a catalyst for the development of Korean judo. Meanwhile, judo at the Atlanta Olympics achieved a remarkable feat, starting with a silver medal by Kim Min-soo (Yongin University) in the -95kg weight class, followed by two gold medals, four silver medals, and two bronze medals. Notably, six athletes advanced to the finals, sparking fierce competition for gold medals day after day, making the sport one of the most watched by the public. The gold medalists were Cho Min-sun (Ssangyong Cement) in the -66kg weight class and Jeon Ki-young (Korea Racing Authority) in the -86kg weight class, both of whom achieved back-to-back World Championship gold medals. Next, at the 18th World Judo Championships held at Cobbs Coliseum in Hamilton, Canada, Jeon Ki-young and Jeong Hoon won gold in the men's -78kg weight class, and Jo Min-sun in the women's -66kg weight class. Kim Mi-jeong and Moon Ji-yoon won bronze in the women's -72kg weight class, achieving their best performances in recent memory. The 20th World Judo Championships were held at the Paris-Bercy Stadium in France from October 9 to 12, 1997.

At the 20th World Judo Championships in Paris-Bercy, Korea placed third overall with three

gold medals and three bronze medals. All of Korea's gold medals at the 20th World Judo Championships in Paris-Bercy, France, came from the men's team, including Jeon Ki-young, who achieved a three-peat in the -86kg division, Cho In-cheol, who won the gold medal in his first World Championship appearance, and Kim Hyuk, the eldest member of the national team, who unexpectedly won the gold medal in the -60kg division. The 21st World Judo Championships in Birmingham, England, took place from October 7 to 10, 1999. At the 21st Modern World Judo Championships, Korea won one silver and three bronze medals, suffering the humiliation of not winning a gold medal at a world championships for the first time since 1981. Therefore, this study examined the development of Korean judo in the 1990s and presented the historical implications of its contributions to enhancing national prestige at the Olympics and World Judo Championships. The following recommendations are made for more specific and in-depth follow-up research.

First, in-depth follow-up research should be conducted from a contemporary perspective to examine the historical significance of the Olympics, Asian Games, and various international judo championships through the development of Korean judo in 1990. Second, in-depth follow-up research should compare and analyze the developmental patterns of Korean judo during its heyday in the 1990s with the identity of Korean judo from a contemporary perspective. Third, more specific and in-depth follow-up research should be conducted from a contemporary perspective on the development of Korean judo in the 1990s, including techniques, physical strength, mental strength, and strategic tactics.

5. References

5.1. Journal articles

[1] Yoo SY. A Study on the Changing Process of the Origin Theory of Korean Judo. *The Journal of Korean Alliance of Martial Arts*, 25(2), 27-36 (2023).

[2] Song IH. He Historical Value of the Re-emergence and Heyday of Korean Judo in the 1945-1980s. *The Journal of Social Convergence Studies*, 6(6), 17-31 (2022).

[3] Cho YC. A Study on the Achievement of Judo in Korea during the Japanese Colonial Period. The *Journal of Social Convergence Studies*, 6(3), 37-49 (2022).

[4] Song IH. A Study on the Advancement of Korean Indigenous Peoples and Overseas Expansion: Focusing on the People of Korea Judo Schools. *Journal of Korean Society for Sport Anthropology*, 18(4), 77-84 (2023).

[5] Jong HP. A Study on the Influence of the Cheongseok Academy on the Development of Korean Judo. *The Journal of Korean Alliance of Martial Arts*, 22(3), 1-21 (2020).

[6] Lee SS. Legal Conflict and Change in the Korean Judo Organization: Focusing on the Legal Dispute between the Korean Judo Association and the Daehan Yeonmu-gwan in 1956-1957. *Korean Journal of History of Physical Education, Sport and Dance*, 30(1), 15-29 (2025).

[7] Lee SS. A Study on the Treatment of the Kodokan Chosun Branch under the US Military Government. *Korean Journal of History of Physical Education, Sport and Dance*, 23(3), 1-15 (2018).

[8] Lee SS. A Study on the Judo Activities of Lee Seon-gil during the Japanese Ruling Period. *Korean Journal of History of Physical Education, Sport and Dance*, 24(4), 1-17 (2019).

[17] Kim DG & Son MS & Jo SG. Study on Guard Organization in Korea and Usability of Judo as Guarding Martial Arts: Based on Ashi-waza and Ura-nage. *International Journal of Martial Arts*, 1(2), 27-37 (2016). [Read More]

[18] Kim JH & Lee DH. The Influence of Experiential Marketing of Judo Gym on Exercise Participation: The Verification of Mediation Effect of Experiential Satisfaction. *International Journal of Martial Arts*, 4(2), 1-13 (2019). [Read More]

[19] Jo SG & Choi SH. A Study on the Application Changes of Judo Techniques Depending on the Winning Experience and being Selected Experience as a Representative Player. *International*

Journal of Martial Arts, 5(1), 14-25 (2020). [Read More]
[20] Choi JK & Kim JP. A Means of Nonverbal Cultivation System in the Oriental Martial arts Performed. *The Journal of Korean Alliance of Martial Arts*, 18(3), 43-57 (2016).

5.2. Books

[9] Korea Judo Association. Judo Quarterly, Vol. 24. Korea Judo Association (1992).
[10] Korea Judo Association. Judo Quarterly, Vol. 25. Korea Judo Association (1992).
[11] Cho Y & Song I. New Judo Theory Reading. Rainbow (2011).
[12] Korea Judo Association. Judo Quarterly, Vol. 41. Korea Judo Association (1992).
[13] Korea Judo Association. Judo Quarterly, Vol. 41. Korea Judo Association (1993).
[14] Korean Judo Association. 100 Years of Korean Judo. Korean Judo Association (2020).
[15] Korea Judo Association. Judo Quarterly, Vol. 29. Korea Judo Association (1993).
[16] Korea Judo Association. Judo Quarterly, Vol. 46. Korea Judo Association (1997).

6. Appendix

6.1. Author's contribution

	Initial name	Contribution
Author	IS	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑ -Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

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Corresponding author*
E-mail: jaebumlee@mju.ac.kr

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The Concept of Non-Medical Health Care Services in Korea and Application of Health Qigong Exercise Prescriptions for Elderly Health Care

Jaebum Lee[1*]

Myongji Convergence Healthcare Research Institute, Professor, Republic of Korea

Yeonsu Byeon[2]

Myongji Convergence Healthcare Research Institute, Researcher, Republic of Korea

Dong Liang[3]

Weifang University, Professor, China

Abstract

Purpose: *The Korean government's definition of health care services is unclear and inclusive. Furthermore, opinions differ among experts, the medical community, consumer groups, and health care service providers regarding violations of the Medical Service Act, hindering the objective reflection of diverse stakeholders. Therefore, this study aimed to explore the applicability of Health Qigong's exercise prescription program for geriatric health interventions in the non-medical health care service sector.*

Method: *This study focused on the non-medical health care service guidelines and casebooks published by the Ministry of Health and Welfare in 2019 and 2021. This study identified the criteria for medical and non-medical practices and examined the applicable content in detail.*

Results: *The study identified detailed examples of providers and institutions by activity through a detailed classification of health care service providers. Furthermore, it proposed four considerations for non-medical health care service provision and seven-level examples of exercise prescription application.*

Conclusion: *Within the concept of non-medical health care services, the most specific aspects of implementing a Health Qigong program are establishing an implementation plan tailored to the user's training goals and implementing and monitoring training in accordance with the principles of exercise prescription. This study has provided an understanding of the procedures and practices of non-medical health care services in Korea, and will serve as an opportunity to identify areas where natural therapies can be utilized.*

Keywords: ***Non-Medical Health Care Service, Exercise Prescription, Health Qigong, Elderly, Health Care***

1. Introduction

Healthcare services are implemented in various forms across countries and institutions, but the blurring of boundaries between medical and non-medical practices has been a common source of institutional debate. In particular, as the concept of healthcare services has become more comprehensive, differences in interpretation regarding violations of medical law have consistently arisen among various stakeholders, including professionals, the medical community, consumer groups, and service providers. These issues are becoming increasingly prominent amidst rapid social change and the increasing prevalence of chronic diseases, leading to a growing demand for services focused on health promotion and disease prevention.

In this context, the Korean government established a public-private joint legal interpretation committee in May 2018 to more clearly define the boundaries between healthcare services and medical practices. This committee conducted case-based discussions, focusing on industry inquiries. This can be understood as a process of social consensus aimed at clarifying the concept of healthcare services and institutionally defining the scope of services available in non-medical settings[1].

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Based on these discussions, the Ministry of Health and Welfare published the "Non-medical Healthcare Services Guidelines and Casebook" on May 21, 2019, establishing criteria for distinguishing between medical and non-medical healthcare services[2]. These guidelines serve as legal guidelines that clarify the concept of medical practice under the Medical Act and assist in judgment. Furthermore, they specifically outline the concept, licensing, and criteria for evaluating practices of non-medical healthcare service providers, thereby providing practical standards for the provision of healthcare services in the non-medical sector.

Furthermore, these guidelines encompass not only face-to-face services that provide consultation and education to users, but also non-face-to-face, self-management-focused services utilizing online applications and automated functions. This reflects the expansion of non-medical healthcare services following the digital transformation, such as the online availability of medical records following the revision of the Enforcement Decree of the Medical Service Act (August 2018). This measure can be seen as an initiative to consider the potential for future development beyond non-face-to-face services into automated services.

Accordingly, this paper aims to propose guidelines for the application of exercise prescriptions in health chi-gong as part of geriatric health care services, based on the concepts and criteria for these non-medical health care services. Specifically, this paper aims to distinguish between permissible and restricted behaviors in the non-medical domain, targeting not only general services for healthy individuals but also older adults, including those with chronic diseases. This will prevent conflicts with medical practices and identify areas where non-medical health care services can be applied for appropriate and practical geriatric health care. This is to clearly recognize that, according to medical practice standards, medical practice by non-medical professionals may be considered unlicensed. Furthermore, even medical professionals performing medical practices in non-medical institutions may be subject to legal punishment. This is to ensure a clear understanding of the scope of healthcare services available at non-medical institutions. Furthermore, this will provide an opportunity to identify the areas where natural healing and natural therapies can be utilized.

2. Aging Society and the Changing Landscape of Elderly Health Care

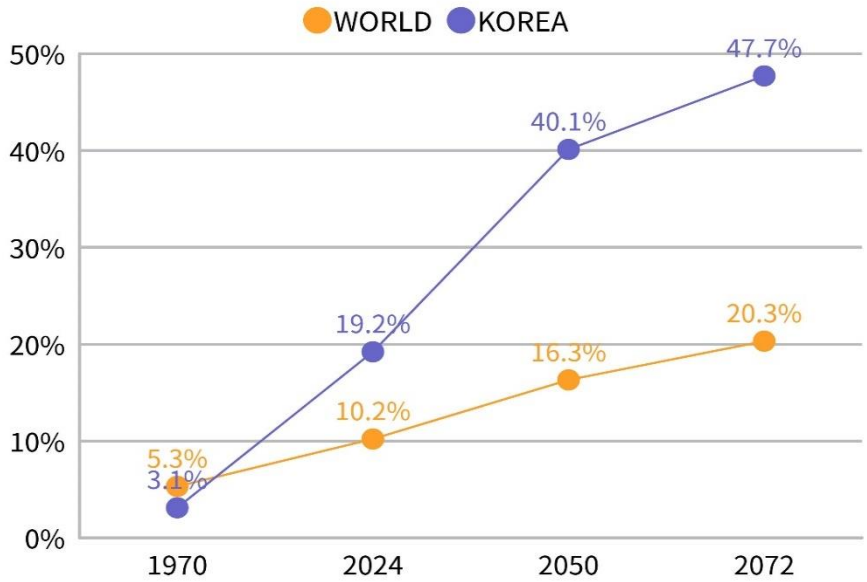
Population aging brings about changes across the social, economic, physical, and psychological dimensions of individuals. The accompanying problems extend beyond specific groups and become structural challenges that require the collective response of society as a whole. These demographic shifts present complex challenges unfamiliar to existing societies, including social balance, resource allocation, welfare system sustainability, and industrial restructuring. These challenges are common across most countries experiencing population aging[3][4].

In particular, older adults are likely to experience a rise in chronic diseases due to physical aging, a loss of economic capacity and social roles due to retirement, and a high risk of exposure to various losses and psychological stress, such as weakened communication with family and children due to the increasing number of nuclear families and changes in social relationships, and loneliness due to the death of a spouse. These factors not only lead to a decline in the quality of life of older adults but also an increase in the burden of social care, and are recognized as major social problems facing an aging society[5][6].

According to recent international population projections and future population projections for each country, while the global population is continuing to grow overall, the proportion of the elderly population is increasing at an even faster rate. In particular, population aging is accelerating in developed countries and some Asian countries, driven by declining birth rates and increasing life expectancy. Consequently, a decline in the working-age population and a rising old-age dependency ratio are emerging as common policy challenges.

Within this trend, Korea is evaluated as a representative country that has transitioned from an aging society to a super-aged society in a short period of time. According to the latest future population projections by Statistics Korea (announced in September 2024), the proportion of the population aged 65 and older in Korea is expected to reach approximately 20% by 2025, entering a super-aged society. The proportion of the elderly population will increase six fold to 19.2% in 2024 compared to 3.1% in 1970, and is predicted to rise to 47.7% in 2072. The trend of rapid aging and population structure changes is presented in <Figure 1> based on the future population projections by Statistics Korea[7].

Figure 1. Future population projections for the world and Korea (Statistics Korea, 2024).



Furthermore, the old-age dependency ratio, which measures the number of elderly people per 100 working-age people, is expected to continue to increase, significantly increasing the social and economic burden in the medium to long term. This shift in population structure suggests that beyond the health of individual elderly individuals, a restructuring of the elderly healthcare system and a response strategy focused on prevention and management are needed at the societal level[8].

Old age, extended by demographic changes, represents the final stage of the life cycle and presents a variety of physical, psychological, and social challenges. Among these, health care is emerging as a key issue. While life expectancy continues to increase globally, simply extending lifespan does not necessarily translate into healthy old age. Therefore, the gap between healthy lifespan and the duration of illness is a significant policy and academic concern[9].

Within this trend, Korea is one of the countries with high life expectancy, with current life expectancy at 79.4 years for men and 85.7 years for women, which is approximately 1.4 years and 2.3 years higher than the OECD average. Furthermore, life expectancy, excluding the period of illness, is also projected to continue increasing. However, according to nationally approved statistics on healthy life expectancy, Korea's healthy life expectancy is at 64.9 years, a gap of approximately 17 years between the average and the expected life expectancy, suggesting that the period of difficulty due to illness or functional decline is increasing along with the extended life span[10].

This imbalance between healthy life expectancy and lifespan highlights the importance of proactive health management and health promotion behaviors in older age. Health promotion behaviors in older adults include regular diet, adequate rest, and consistent physical activity.

These behaviors are closely linked to not only disease treatment and prevention but also the maintenance of a healthy lifestyle. In particular, health promotion behaviors in older age are crucial for alleviating problems caused by declining physical function and preventing the onset and exacerbation of chronic diseases through lifestyle improvements [11][12].

3. Health Qigong as a Traditional and Low-Intensity Health Practice

Qigong (氣功) literally means "effort on qi (氣)." Here, "qi (氣)" refers to the fundamental energy of life activities, including breathing, while "gong (氣)" refers to the continuous effort and training of specific movements. In other words, qigong can be understood as a mind-body training method that promotes harmony between mind and body by replenishing and smoothly circulating energy within the body and regulating imbalances[13]. Due to these characteristics, qigong has been classified as a natural healing exercise therapy, a traditional Eastern health care method.

The term and system of qigong used today were redefined medically and scientifically in China in the 1950s. Founded in 1954 under the leadership of Liu Guizhen, the Tangshan Qigong Nursing Home is known as the first specialized medical institution to systematically study and apply qigong. Liu Guizhen subsequently published "Qigong Treatment Practice" in 1957, laying the foundation for modern qigong theory[14][15]. From this point on, qigong began to be recognized as a method with an academic and practical system that transcended traditional training methods and served as a health care and therapeutic aid.

Meanwhile, the origins of qigong are said to date back to ancient Chinese society. The Chinese Olympic Committee (2016) asserts that physical training forms similar to qigong have existed since ancient times, based on various archaeological artifacts and literary sources. For example, painted pottery from the Magayao culture excavated in Qinghai Province, China in 1957 depicts dance movements involving body extension, which are interpreted as an early form of training similar to Daoyin (導引), which promotes qi and blood circulation. These studies suggest that qigong is a traditional mind-body training method with a long history spanning approximately 5,000 years. The following <Figure 2> is a related drawing showing the prototype of the qigong proposed by the Chinese government.

Figure 2. Health Qigong management center of general administration of sport of china (2011).

The Emperor's Naegyeong, an oriental medicine scripture compiled about 2,000 years ago, is presented as a representative basis for the historical origin of Chinese qigong. The Emperor's

Naegyeong puts human life phenomena at the center of the study, and it is evaluated as a literature that formed the theoretical basis of mechanical engineering as it systematically presents the principles and methods of curing qigong for the purpose of harmonizing the body and maintaining life. In addition, Lee Si-jin (1518–1593), a medical scientist from the Ming Dynasty, wrote about the relationship between qigong and meridians through Boncho Gangmok, showing that qigong has developed in close relation to the traditional medical system.

Material evidence proving the long history of qigong includes the Daoyin Tu(導引圖), a silk painting excavated in 1973 from the Mawangdui Han Dynasty tomb in Changsha City, Hunan Province, China[16][17]. This grave is known to have been sealed around 194 BC; because numerous cultural relics and literary materials were discovered there, it serves as an important source for understanding ancient Chinese life and medical culture[18]. The Taoist painting depicts 44 different physical training postures, encompassing a variety of physical activities, including breathing exercises, physical exercises, exercise using equipment, and medical techniques. This demonstrates the practical efforts of people to prevent and manage disease through physical training as early as 2,000 years ago[19].

In traditional Chinese society, qigong was known by various names, including Taoist Qigong, Yangshengshu, Xingqi, and Tuina, and developed into various schools based on practice methods and purposes. The China Health Qigong Association and the Chinese Olympic Committee categorize these qigong schools into Confucian Qigong, Taoist Qigong, Buddhist Qigong, Martial Arts Qigong, and Medical Qigong. The Chinese government subsequently modernized traditional qigong and unified it under the name "Health Qigong," officially announcing "Body Cultivation Qigong" through Decree No. 4 of the General Administration of Sport on September 11, 2001.

Currently, Qigong is officially registered as a physical education subject in China and has established itself as a lifestyle sport with a wide range of practitioners[20]. Furthermore, with the founding of the World Health Qigong Federation in August 2012, the term "Health Qigong" was established internationally, and it is currently being promoted in approximately 45 countries as a health management exercise based on traditional physical training.

Meanwhile, the principles of health and well-being in Health Qigong are based on the fundamental theories of Traditional Chinese Medicine (TCM). TCM presents the theory of yin-yang and the five elements and the theory of meridians as the basic principles for understanding the human body, and Health Qigong also constructs its exercises based on these theories. In addition, it regards essence (精), energy (氣), and spirit (調心) as the core elements of life activities, and it uses the so-called "Three Treasures of Qigong" as the basic principle of health and well-being. In the training process, it is characterized by integrating physical movement, breathing, and consciousness control through the principles of the three combinations of body regulation (調身), breathing regulation (調息), and mind regulation (調心).

In Korea, Qigong began to be utilized in public health settings in the early 2000s. In particular, the Ministry of Health and Welfare's 2002 launch of qigong classes as part of its Traditional Korean Medicine Community Health Project targeting medically vulnerable populations in rural and fishing villages is credited with establishing qigong as a public health management exercise.

In Korea, Qigong exercises began to be actively introduced in the mid-2000s through public health projects aimed at preventing chronic diseases and improving health management at the community level[21]. In particular, the Korean Medicine Health Promotion Hub (HUB) project, implemented in 2005, aimed to prevent chronic diseases and strengthen health management for local residents. Qigong classes were included as one of five essential programs, along with stroke prevention education, Sasang Constitutional Medicine classes, Korean Medicine childcare classes, and Korean Medicine home visits, and were reported to have received a positive

response[22].

Chinese Health Qigong is known to have been introduced to Korea in earnest around 2008. Since then, the Chinese government's promotional efforts have combined with the activities of domestic practitioners and enthusiasts, creating an environment where Health Qigong-related information and videos are relatively easily accessible online. This diffusion process demonstrates that Health Qigong is no longer a practice confined to a specific culture, but rather is being reinterpreted and popularized as a modern health management movement.

Health Qigong is considered a highly accessible exercise therapy, as it has few time and location restrictions and can be practiced in relatively small spaces. Furthermore, because it is based on traditional Eastern medicine theory, it is perceived as having a higher level of understanding and familiarity with the concept of health compared to Western sports in some cultures[23]. The slow and simple movements, making it easy to learn and not placing significant physical strain, are also cited as key characteristics of Health Qigong. Due to these characteristics, health chi-gong has the potential to be utilized as a slow exercise therapy centered on low-intensity physical activity that alleviates negative perceptions of exercise among the elderly and emphasizes stability and sustainability[24][25].

Previous studies examining the effectiveness and value of health Qigong as a health exercise for the elderly have reported positive changes in physiological indicators, such as increased muscle strength and flexibility, blood pressure, and body composition, through basic medical examinations and physical fitness tests[26]. Furthermore, health Qigong practice has been shown to act as a stress-regulating mechanism and to have a positive effect on reducing pain and alleviating depression in the elderly[27][28]. Furthermore, research has also reported that exercise practice patterns according to gender and training period affect successful aging and health-related quality of life[29][30].

In summary, these previous studies have shown that Health Qigong, as a natural therapy-based exercise therapy, has positive effects on both physical and psychological aspects, and its effects are continuously being verified through scientific research methods.

4. Non-Medical Health Care Services and Practical Application of Health Qigong

4.1. Scope and classification of non-medical health care services

The Ministry of Health and Welfare (2019) presents standards for providers and providers along with detailed examples of each service to distinguish between medical and non-medical healthcare services, and the details are summarized in <Table 1>.

Table 1. Detailed examples of services provided by healthcare service providers and classification of providers/providers (Korea ministry of health and welfare, 2019).

Classification of actions	Example of behavior	Provider	Provider Institution
Check and verify health information	▪ Simple confirmation of health checkup results and data collection based on individual consent (no numerical interpretation of checkup results, etc.)	No restrictions	No restrictions
	▪ Recording and monitoring steps, heart rate, etc.	No restrictions	No restrictions
	▪ Recording of food intake and nutritional analysis/guidance	Health-related personnel recommended	No restrictions
	▪ Measurement of health information and indicators using wellness products (body composition, sleep patterns, etc.)	No restrictions	No restrictions

	▪ Measurement of health information, indicators, and figures using personal medical devices (electrocardiogram, blood pressure, blood sugar, etc.)	Myself	No restrictions
Consultation and advice	Information provision and objective analysis		
	▪ Check whether blood pressure, blood sugar, etc. (based on individual self-measurement) fall within the normal or risk range of credible standards.	Recommendation for health-related personnel	No restrictions
	▪ Present objective statistical results, including disease incidence rates among age and gender groups based on health indicators and conditions. (※Statistical results are scientifically and medically verified or published by credible institutions.)	No restrictions	No restrictions
	▪ Analyzing an individual's health information and calculating health age and other information based on statistical results. (※Statistical results are scientifically and medically verified or published by credible institutions.)	No restrictions	No restrictions
	▪ Providing information on recently prevalent diseases and vaccinations	Recommendation for health-related personnel	No restrictions
	Goal Setting and Management		
	▪ Checkup cycle/hospital visit date alarm and guidance	No restrictions	No restrictions
	▪ (According to the doctor's prescription) Check and notify whether you are taking the medication on time	No restrictions	No restrictions
	▪ Setting health management goals (walking, daily calorie intake, regular checkups) and providing incentives based on achievement.	No restrictions	No restrictions
	Consultation and advice		
	▪ Guidance on general health care precautions for disease prevention (hand washing, eating a low-salt diet, etc.)	Recommendation for health-related personnel	No restrictions
	▪ Counseling and advice for improving lifestyle habits, such as quitting smoking and drinking in moderation.	Recommendation for health-related personnel	No restrictions
	▪ Diet composition and provision based on individual health goals (※Conditional permission is granted on the premise of confirming a prescription from a medical institution in cases where diet may affect a disease such as diabetes)	Recommendation for health-related personnel	No restrictions
	▪ Providing exercise method instruction and exercise programs	Recommendation for health-related personnel	No restrictions
	▪ Counseling for sleep and stress management, and advice on improving lifestyle habits (excluding tests, procedures, and surgeries) (※Use scientifically and medically verified or published materials from credible institutions)	Recommendation for health-related personnel	No restrictions
	▪ Consultation and advice on the possibility of developing a disease based on an individual's specific symptoms ▪ Information on side effects and management precautions after prescription, treatment, procedure, or surgery	Medical personnel, etc.	Medical institutions
Examination/ Diagnosis	▪ Collection of human-derived materials such as blood ▪ Health checkup including questionnaire and urine/blood component tests ▪ Diagnosis of disease names and risk of occurrence based on health status, indicators, and figures	Medical personnel, etc.	Medical institutions
Prescription	▪ Prescription of specialized medicines for the treatment of diseases (Article 2, Paragraph 10 of the pharmaceutical affairs act)	Medical personnel, etc.	Medical institutions

Church	▪ An act of taking certain measures on a patient by using physical methods to treat a disease	Medical personnel, etc.	Medical institutions
Procedure/ Surgery	▪ An act of applying certain manipulations to a patient's body using medical devices, etc. to treat a disease	Medical personnel, etc.	Medical institutions

According to these guidelines, non-medical health management services are centered around the confirmation and inspection of health information, consultation, and advice, and are presented as being able to be performed without any separate restrictions on providers and providing institutions, except for the judgment of the possibility of disease development for specific symptoms of an individual, medical prescriptions, treatments, procedures, surgeries, and management of side effects thereof.

In other words, non-medical healthcare services do not require a separate "healthcare service business" license under the current legal system, and can be understood as encompassing all routine healthcare activities that do not directly treat disease. This is because the current law does not separately stipulate licensing or registration requirements for healthcare service businesses. However, health information utilized in the service provision process must adhere to the scientific and medical standards of credible institutions. Credible institutions, here, refer to international organizations, governments, public institutions, or specialized academic societies in the relevant field. Furthermore, scientific and medical verification refers to cases where the evidence is widely recognized in the relevant field and can be accepted by a large number of experts.

Meanwhile, the guidelines suggest that routine healthcare services provided within the scope of diagnosis, prescription, or referral from a medical institution, even for patients with chronic diseases, can be provided in non-medical settings. In this context, the standards for personnel providing non-medical healthcare services are also a key consideration. <Table 2> below summarizes the current status of professional qualifications and licenses related to health, wellness, and medicine. It also stipulates that non-medical institutions providing healthcare services must comply with applicable laws and regulations that limit the number of personnel providing services.

Table 2. Status of health and medical professional qualifications and licenses (Korea ministry of health and welfare, 2019).

Legal basis	Licenses and qualifications of the personnel provided
National health promotion act	▸ (Article 12-2) Health educator
National nutrition management act	▸ (Article 15) Nutritionist (Article 23) Clinical nutritionist
National sports promotion act	▸ (Article 2, Paragraph 6) Physical education instructors - Sports instructors, Health and exercise managers, Sports instructors for the disabled, Youth sports instructors, and senior sports instructors
Pharmaceutical affairs act	▸ (Article 3) Pharmacist, (Article 4) Herbalist
Medical technician act	▸ (Article 2) Clinical pathologists, radiologists, physical therapists, occupational therapists, and dental hygienists
Medical law	▸ (Article 5) Doctors, dentists, and oriental medicine doctors ▸ (Article 7) Nurses ▸ (Article 80) Nursing assistants

Furthermore, the scope and procedures for utilizing health information collected from individuals must comply with relevant laws and regulations. It is recommended that service models be designed to prevent excessive management from potentially harming health. It is also im-

portant to recognize that even if non-medical institutions employ medical professionals or medical technicians, they cannot perform activities that fall within the scope of the Medical Services Act and the Medical Technicians Act. However, it is recommended that health professionals be responsible for providing disease-related information, counseling, and education. It is suggested that health and wellness professionals should perform the exercise.

Considering these criteria, it is recommended that health and wellness professionals, within the legally permitted scope, participate in providing Health Qigong as an exercise prescription in non-medical healthcare services for the elderly.

4.2 Preliminary confirmation items when providing non-medical healthcare services

Before implementing non-medical health care services for health intervention purposes, providers and institutions need to clearly understand the factors to be considered and considered throughout the service. The Ministry of Health and Welfare (2019) categorizes these pre-screening items into four categories.

First, the verification and collection of personal health information and the calculation of health indicators must be voluntary and conducted within the scope of the Personal Information Protection Act. Accordingly, physical activity (walking, running, cycling, hiking, etc.), dietary habits (food intake, alcohol consumption, smoking, etc.), and health indicators (BMI, blood pressure, blood sugar, glycated hemoglobin, etc.) can be collected based on individual self-measurement. Furthermore, information such as medication intake, hospital visit history, and complication testing based on health checkup results can also be collected with the user's consent and provision. Direct input or automatic transmission via smartphone applications, wearable devices, smart blood glucose meters, etc. is also permitted.

Second, goals for health activities can be set directly by the user or suggested by the provider, taking into account the individual's lifestyle. General health goals, such as step count and weekly exercise frequency, that are not directly related to disease are considered non-medical activities and can be set regardless of the provider's nature. However, for health indicators related to disease, such as weight, blood pressure, and blood sugar, goals set within the normal range recommended by a credible institution are recognized as non-medical activities. Providers are not permitted to arbitrarily set specific values.

Third, counseling and advice on nutrition, exercise therapy, and lifestyle improvement are core non-medical health management services provided for the purpose of health promotion. They are recommended to be performed by relevant professionals, such as nutritionists and physical education instructors. This includes comprehensive nutrition and exercise counseling for health promotion, education and advice on diet and exercise programs, reminder services for smoking cessation and moderation, sleep management, and counseling on improving daily life habits to manage stress. Nutrition and diet therapy can provide advice based on the user's dietary intake or support self-management through nutrient and calorie analysis. Exercise therapy can also be provided within the scope of education and guidance on appropriate exercise frequency, intensity, and methods, taking into account the user's physical condition and goals. Furthermore, counseling on overall lifestyle patterns, such as smoking cessation, moderation, sleep, and stress management, are also included within the scope of non-medical health management services.

Fourth, information on specific diseases and guidance on general prevention methods must be based on materials published by credible institutions, widely recognized academic papers, government data, and professional books. Such information should be limited to guidance on possible complications, major symptoms, and general prevention methods. Expressions suggesting diagnosis, treatment, or alleviation of the disease are not permitted. Furthermore, based on user-provided health promotion activity information, it is also permissible to provide approved

information on pharmaceutical ingredients, efficacy, effects, and side effects, as well as notifications via apps that provide information on the name of the drug, preparation date, and medication schedule. This is being proposed as an area that can be provided not only through non-face-to-face online services but also through face-to-face consultations.

4.3. A seven-step Health Qigong intervention model for older adults

Most chronic diseases are non-communicable, and symptoms are often alleviated through lifestyle modifications and ongoing management, rather than direct treatment of the underlying cause. In particular, predisposition to disease gradually emerges after the age of 30, and if this condition persists, it can develop into a chronic disease of the elderly as they age [31].

Furthermore, a significant proportion of the elderly population is taking one or more medications, and the risk of falls during exercise has been reported as a major factor hindering participation in physical activity among older adults [32].

Considering these characteristics, the goal of physical activity programs for older adults should go beyond simple physical fitness or health promotion to focus on health interventions. The most important factor in this process should be exercise safety. In other words, rather than aiming to treat disease, health exercise programs for older adults should be designed to minimize physical function decline and the risk of complications, while maintaining and improving the ability to perform daily activities.

Accordingly, this study proposes a seven-step implementation model that applies Health Qigong as a key health intervention program, based on the Ministry of Health and Welfare's (2019) standards for permitted and restricted behaviors in non-medical healthcare services for the prevention and management of hypertension and diabetes. This model revises and supplements these standards. Considering the physical characteristics of older adults and the unique needs of chronic disease management, this model is designed to be implemented within the scope of non-medical healthcare services. The specific details for each step are presented in <Table 3>.

Table 3. Example of the 7-step application of the health qigong reverse root kyung program for health intervention for chronic diseases (hypertension/diabetes) in the elderly.

Division	Key points	Prohibited acts
1. Confirmation and collection of personal health information	① Collect user health-related data, disease status and disease-related information, and checkup results within the scope of the Personal Information Protection Act, and verify exercise activity (walking, running, cycling, hiking, etc.). ② Collect information on eating habits (food consumed, alcohol consumption, smoking, etc.) and health indicators (BMI, blood pressure, blood sugar, glycated hemoglobin) based on the user's self-measurement. ③ Collect health checkup results, information on medications related to the individual's disease, hospital visits, and complication testing. ④ Calculate user health status indicators (health age, etc.) based on diagnoses (checkups) received at hospitals, etc.	
2. Setting blood pressure and blood sugar measurement and management levels	① Patient self-measurement and recording using personal medical devices. ② Determination of normal/caution/risk levels based on the ranges recommended by credible institutions and target setting within those ranges. ③ Normal/caution/risk alarms based on target levels set by the patient according to the doctor's prescription. ④ Periodic monitoring of blood pressure and blood sugar levels (e.g., every 7 days) and notification of "caution required" if levels deviate from the average.	① Directly measure and record the patient's blood pressure. ② Diagnose the patient as hypertensive or diabetic based on the values. ③ Non-medical institutions independently assess normal/cautionary/risk levels and set target levels.

3. Diabetes/High blood pressure prevention and management consultation	① Information and guidance on diabetes and hypertension prevention and management provided by credible organizations. ② Services that regularly monitor blood pressure and blood sugar levels and recommend hospitalization if risk factors arise.	① Blood pressure target based on the situation ② Medication explanations by non-pharmacists or physicians
4. Diet management and control consultation	① Explanation of general dietary guidelines and food groups that patients with diabetes and high blood pressure should be aware of. ② Presentation of various diets based on physician recommendations, allowing patients to choose. ③ Designing a diet tailored to the patient's preferences (e.g., a low-salt diet). ④ Guidance on the effectiveness and methods of dietary treatment. ⑤ Counseling and advice on lifestyle changes, such as quitting smoking and drinking.	① Actions similar to medical prescriptions, such as dangerous blood sugar levels, carbohydrate intake guidelines for blood pressure levels, and other dietary guidelines. ② Medical consultation, such as measures to take in case of rapid drops or increases in blood pressure.
5. Setting the target level of health chi training	① Guidance on the effectiveness and methods of Health Qigong exercise therapy ② Monthly, weekly, and daily exercise time and intensity settings ③ Guidance on Health Qigong's reverse root movement method and explanation of the characteristics of the 12 movements ④ Guidance on precautions for practice and guidance on appropriate training attire	
6. Health Chi-gong training and inspection	① Explanation of the Three Jewels and Three Jo Methods of Health Qigong practice ② Postural practice of the Health Qigong Reverse Geun-gyeong method ③ Keep a daily, weekly, and monthly exercise log ④ If you have a muscle or joint disorder, avoid excessive movements and practice modified movements	
7. Adjust exercise prescription cycle based on feedback	① After health Qigong training, health-related data and health checkup results are provided directly to the user. ② Health intervention status is assessed and health status indicators are recalculated. ③ New health Qigong training target levels are set based on current health status. ④ Health promotion content is presented through objective indicators.	

5. Conclusion and Suggestions

This study was conducted to examine the applicability of Health Qigong exercise prescription as a health intervention program for the elderly in the non-medical healthcare service sector. To achieve this, we examined the issues facing the elderly due to demographic changes and reviewed the theoretical background and effectiveness of Health Qigong as a natural therapy-based physical activity through literature and prior research. Furthermore, we comprehensively reviewed existing research to determine the physiological and psychological effects of Health Qigong.

Furthermore, this study examined the criteria for distinguishing between medical and non-medical practices based on the Non-medical Healthcare Service Guidelines proposed by the Ministry of Health and Welfare of Korea and specifically analyzed the scope of applicable healthcare services within these guidelines. This analysis identified a classification of healthcare service providers and providers by activity and systematically outlined key considerations for providing non-medical healthcare services.

Based on this review, this study proposed a seven-step exercise prescription application example for Health Qigong as a health intervention program for the elderly, including those with

chronic diseases. These steps include verifying and collecting personal health information, establishing management levels for key health indicators such as blood pressure and blood sugar, counseling on chronic disease prevention and management and dietary adjustments, setting Health Qigong training goals and levels, implementing and monitoring training, and adjusting the exercise prescription cycle based on feedback. This application model is designed to be implemented within the scope of non-medical health care services, taking into account the physical characteristics and safety of the elderly.

Specifically, when implementing a health Qigong program in a non-medical healthcare service environment, a key element is establishing an implementation plan tailored to the user's training goal level and continuously monitoring the training process and outcomes based on the fundamental principles of exercise prescription. Furthermore, a systematic feedback process should be implemented, including adjusting exercise intensity based on target achievement and recalculating health status indicators. To achieve this, natural therapy-based health Qigong instructors should manage an individualized health intervention process based on accurate data collection and documentation. Furthermore, establishing a measurement system with proven validity and reliability is essential to objectively assess the physiological and psychological effects of interventions.

This study is significant in that it demonstrates the institutional and practical feasibility of utilizing health Qigong as a health intervention program in non-medical healthcare service settings. Furthermore, the application framework presented in this study offers implications that can be expanded and applied in a similar manner not only to health Qigong but also to other natural therapy-based health management programs.

6. References

6.1. Journal articles

[2] OH YM. Current Status and Future Direction of Health Care Services in the Non-face-to-face Era. *Korean Journal of Health Education Promotion*, 40(4), 21-32 (2023).

[3] Guo SH. Preliminary Study on the Theory of Production-oriented Social Welfare and the Welfare System in East Asia. *International Journal of Education and Humanities*, 16(2), 357-361 (2024).

[4] Wang L & Wang M. The Impact of Population Aging on Regional Economic Growth and Adaptive Reforms of the Social Security System. *Journal of Cross-disciplinary Sustainability Innovations*, 1(1), 16-20 (2025).

[5] Sung K & Kim EJ. Factors Influencing Elderly Care Burden of A Working Family in Korean Nursing Facilities: A Convergence Approach. *Journal of Digital Convergence*, 18(2), 333-342 (2020).

[6] Shin OJ & Park SJ & Amano T & Kwon ES & Kim BR. Nature of Retirement and Loneliness: The Moderating Roles of Social Support. *Journal of Applied Gerontology*, 39(12), 1292-1302 (2019).

[8] Song KM & Kim YW & Kim YS. A Study on Improvement of the Korean National Health Insurance(NHI) Reimbursement System to Prepare the Aged Society. *Journal of the Korean Society of Aging-friendly Industries*, 5(1), 27-37 (2013).

[9] Lee CI & Hong GJ & Lee WW. The Effects of Participating Senior Exercise Program on Successful Aging -Focusing on the Mediating Effect of Lifestyle Changes. *Korean Journal of Care Management*, 13, 47-67 (2014).

[11] Jee YJ & Kim KN. Physical Activity of Elderly People, Mental Health and Quality of Life. *Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology*, 7(5), 625-632 (2017).

[12] Yun HS. A Study on Relationship between Physical Activity, Diet Pattern and Mental Health of Korean Elderly. *Journal of the Korean Society of Convergence*, 9(12), 313-319 (2018).

[13] Wang YT & Huang GY & Duke G & Yang Y. Tai Chi, Yoga, and Qigong as Mind-body Exercises. *Evidence-based Complementary and Alternative Medicine*, n8763915 (2017).
[15] Cohen K. Spirit and Life in Balance: Zhao Bichen's Lasting Influence on Qigong and the Martial Arts. *Journal of Daoist Studies*, 7, 179-194 (2014).
[16] Wang SM & Barrett P. Profile of a Daoyin Tradition: The Five Animal Mimes. *Asian Medicine*, 2(2), 225-253 (2006).
[17] Tavor O. Ritual, Rejuvenation Practices, and the Experience of Aging in Early Chinese Religion. *Body and Religion*, 1(1), 31-47 (2017).
[18] Shaw V & Diogo R & Winder I. Hiding in Plain Sight-ancient Chinese Anatomy. *Anatomical Record: Advances in Integrative Anatomy and Evolutionary Biology*, 305(5), 1201-1214 (2022).
[20] Xinzhe H. Zhiweibing (Preventive Treatment of Disease) and Qi: Taking the Practice of Qigong in Contemporary China as an Example. *Ars Vivendi Journal*, 14, 19-43 (2022).
[21] Han CH & Jung DS & Park SJ. Vitalization Measures of the Class for Qi-gong Gymnastics in the Public Health Center. *Korean Institute of Oriental Medicine*, 13(1), 115-124 (2007).
[22] Byeon Y & Lee J. Chinese Health Qigong's Healing Principle and Kinematic Discourse. *International Journal of Martial Arts*, 5(2), 31-37 (2020). [Read More]
[23] Lee J & Byeon Y & Liang D. The Universality and Specificity of Health Qigong from a Beginner's Perspective. *International Journal of Martial Arts*, 9(0), 37-46 (2024). [Read More]
[24] Heo IW & Kim EJ & Kim JS. Effects of Health Qigong (Jianshen Qigong) Training on Body Composition, Physical Fitness, and Life Satisfaction in Older Adults. *Journal of the International Society of Complementary and Integrative Medicine*, 4(1), 25-37 (2008).
[25] Lee J & Liang D. Suggestions for using AI in Preparation for a Super-aging Society. *Robotics & AI Ethics*, 5(2), 57-64 (2020). [Read More]
[26] Rogers CE & Larkey L & Keller C. A Review of Clinical Trials of Tai Chi and Qigong in Older Adults. *Western Journal of Nursing Research*, 31(2), 245-279 (2009).
[27] Toneti BF & Barbosa RFM & Mano L & Sawada LO & Oliveira IG de & Sawada NO. Benefits of Qigong as an Integrative and Complementary Practice for Health: A Systematic Review. *Revista Latino-Americana de Enfermagem*, 28, n3370 (2020).
[28] Chang PS & Knobf TM & Oh B & Funk M. Physical and Psychological Health Outcomes of Qigong Exercise in Older Adults: A Systematic Review and Meta-analysis. *The American Journal of Chinese Medicine*, 47(2), 301-322 (2019).
[29] Kim EY. Influence of Stress on Self-esteem and the Moderating Effects of Physical Activities in Korean Elderly People. *International Journal of Sport*, 1(1), 8-13 (2016). [Read More]
[30] Park JS & Park JH. Effect of 12-week Senior Qigong Training on Blood Pressure and Blood Lipid Concentration. *International Journal of Sport*, 3(1), 29-36 (2018). [Read More]
[31] Bai XF & Shin HB. A Scientometrics Research on Physical Activity and Health Risks of the Elderly. *International Journal of Crisis & Safety*, 6(2), 46-55 (2021). [Read More]
[32] Shende EJ & Gosavi PM & Anandh S & Pawar YA. Effect of Exercise Program in Reducing Risk of Fall in Elderly People. *Indian Journal of Public Health Research & Development*, 11(1), 359-364 (2020).

6.2. Books

[1] Korea Ministry of Health and Welfare. Non-medical Health Care Services Guidelines and Casebook (1st edition) (2019).
[7] Statistics Korea. Population Status and Outlook for the World and Korea (2024).
[10] National Statistical Office. Life Table, National Accreditation Statistics No. 101035 (2017).
[14] Health Qigong Management Center of General Administration of Sport of China. Health Qigong: Jianshen Qigong Zhishi Huicui. People's Physical Education (2011).
[19] Yang D. Therapeutic Exercise in the Medical Practice of Sui China (581–618 CE). Routledge Handbook of Chinese Medicine (2022).

7. Appendix

7.1. Author's contribution

	Initial name	Contribution
Lead Author	JL	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑
Corresponding Author*	YB	-Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑
Co-Author	DL	-Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

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Corresponding author*
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A Study on the Establishment of Professional Players and Clubs in Korean Judo: From Professional Soccer and Baseball to AI Judgment

Sunggu Jo

Kyungwoon University, Assistant Professor, Republic of Korea

Abstract

Purpose: *This study analyzes the structural limitations that have prevented Korean judo from establishing itself as a professional sport despite its international success. To achieve this, it compares the development of professional soccer and professional baseball to examine the institutional characteristics of Korean judo. Furthermore, it examines the potential application of artificial intelligence (AI), which is expanding in the field of sports judging, to the sport of judo. Furthermore, it envisages the future of Korean judo amidst Korea's low birth rate and transition to a multicultural society, and proposes a direction for Korean judo suited to the era of professional sports and AI judging.*

Method: *This study compared Korean judo with professional soccer and baseball teams. It also analyzed institutional and technological changes, focusing on the adoption of artificial intelligence (AI) technology in sports judging.*

Results: *While Korean judo maintains high competitiveness in the elite sports system centered on international competitions, it has been revealed that institutional gaps exist in the professional sports structure. Unlike professional soccer and baseball, the absence of a regular league and market base has limited player job security and the popularization of the sport. Furthermore, the lack of a systematic strategy for developing star players and promoting media exposure has been revealed. Issues regarding the fairness of sports judging have been repeatedly raised in judo, negatively impacting audience trust. Furthermore, analysis of cases involving the introduction of AI judging systems suggests that technology-based judging has the potential to simultaneously enhance fairness and reliability. Furthermore, the low birth rate and shift toward a multicultural society were identified as factors requiring structural changes in the recruitment and management of Korean judo athletes. In summary, the need for Korean judo to move beyond its traditional performance-based development model and adapt to the new sports environment was identified.*

Conclusion: *This study analyzed the structural limitations facing Korean judo from the perspective of professionalization and the changing technological environment. The results confirmed that expanding the league base and improving the athlete career structure are essential for the sustainable development of Korean judo. In particular, the introduction of AI refereeing is evaluated as a key strategy to enhance the fairness and reliability of judo competitions. Furthermore, the need for an open and integrated athlete development policy that responds to changes in social structure was raised. In conclusion, Korean judo must secure future competitiveness through a systematic transformation suited to the era of professional sports and AI refereeing.*

Keywords: ***Professional Sports, Judo, Soccer, Baseball, The Era of AI Refereeing***

1. Purpose

Korean judo was first introduced to Korea in 1906 by Japanese educators. During the Japanese colonial period, judo gradually began to spread, and was especially influenced by Japanese judo in the 1910s and 1920s, but after Japan was liberated in 1945, Korean judo began to seek

independent development[1][2][3][4]. In 1947, the Korea Judo Association was established, and in the 1950s, it began to participate in international competitions and gain international recognition[5][4]. It has developed into one of Korea's most representative martial art sports, and especially in recent years, the world Judo contest has been revitalized to earn much love from the people[6][7].

Starting with the gold medal at the 1981 World Championships, Korea's Judo is leading the way in promoting national prestige by consistently winning medals at various international competitions[8][9].

Korean judo are traditional martial arts that have achieved excellent results in various international competitions. Many athletes have won prizes in these events at the Olympic Games, World Championships, Asian Games, etc., introducing Korea's martial arts skills to the world[10][11][12][13]. Korean judo athletes have won many medals in international competitions, demonstrating their skills and ability to stand out on the international stage. In particular, the Korean National Judo Team has excelled at the Olympic and World Championships, demonstrating the country's judo prowess on the international stage[14][15][16][13].

Judo is a world-class sport and representative martial arts sport that utilizes various technological systems using our entire body. Judo originated in the background of Eastern culture and has been practiced in the form of martial arts for hundreds of years. It was a traditional Korean martial art in terms of physical education, but as a modern sport, it was systematized by Kano Jigoro in Japan in 1882, and later changed to a form of modern sports[17][18][19][20].

It takes a lot of time and effort to fully utilize technique through judo training. For this reason, compared to other general sports, the general public has low accessibility and has professional characteristics[20][21]. In addition, Judo's technical system resembles the form of other martial arts, which overpowers the other person and protects oneself by using various body parts, such as hands, hip, and feet. However, it has a unique system that reverses the strength of the opponent and various factors such as height, weight, habit, and shape. In addition, as a representative elite sport, judo techniques and performance are measured in the form of competitions in the country, region, or even a stadium or studio[22][23][24][20].

For this reason, judo in Korea enjoys fervent national popularity whenever the Olympics are held. However, interest is limited to international competitions, and unlike baseball and soccer, there is no professional team. In this context, the Korea Professional Baseball Association (KBO) has recently been embracing the Korean societal value of "fairness" by using AI to interpret ball-strike and swing-noswing calls, thereby gaining more popularity. Citing a newspaper column by the author of this paper, this paper seeks to discuss the similar growth of judo.

2. Cultivating Judo Stars Like Soccer Player Son Heung-min and Scientific Player Management[1]

Among various sporting events, judo is reported to be trained among men and women of all ages and has a positive effect on emotional development, as well as physical strength and character development[7][17][25][26][27][28][29][30][31]. For this reason, judo is a good sport to start during adolescence. However, in Korea, it has a unique disadvantage in that it is overshadowed by taekwondo and fails to attract a wide range of young athletes. Therefore, the Korea Judo Association and local judo associations should not only dedicate significant efforts to discovering and nurturing promising young athletes, but also actively monitor international trends

[1] Sunggu Jo. We need to create a judo star like Son Heung-min in soccer...., Korea Youth Newspaper, August 19 (2024).

through exchanges with judo powerhouses like Japan and Europe, starting from adolescence. The success of such international exchanges during adolescence is evidenced by the development of the Korean soccer industry following the success of Tottenham Hotspur's Son Heung-min. Korean judo has traditionally possessed distinct characteristics, with Japanese athletes possessing superior strength despite lacking technique, and European athletes possessing superior technique despite lacking strength. However, scientific athlete management, including data and video analysis, has recently begun to significantly impact international performance, potentially undermining the competitiveness of Korean judo, which currently holds a leading position in the world. Therefore, as the saying goes, "Know your enemy, and you'll win every battle." Judo must also actively foster international exchanges among young athletes to maintain Korea's competitiveness and foster its transformation into a familiar sport accessible to young people, much like taekwondo.

3. Preparing for a Multicultural Society in Korean Professional Sports[2]

Judo among Martial Arts sports can be said to be a great sport that develops both physical and mental aspects, and it is an exercise that can strong physical strength, morality, and social skills through perseverance and self-denial in the training process. Judo aims to create and enjoy the beauty of human beings who can properly adapt to various situations by harmonizing physical strength and spirit[32][33][34]. Especially in adolescence, sports activities affect physical, mental, social, psychological growth and personality development. Adolescents' physical activity is not just a game, but an opportunity of valuable learning and development. Therefore, the experience of physical activity in adolescence can be an opportunity to promote personal physical, mental, and social development throughout life[34].

South Korea currently boasts one of the world's lowest total fertility rates. This low birth rate, which represents the average number of children a woman will bear in her lifetime and is far below the 2.1 children required to maintain a healthy population, is contributing to the country's transformation into a multi-ethnic and multicultural nation. Ultimately, South Korea must also consider the potential for a multi-ethnic nation, like the United States, Canada, and Australia, to thrive.

However, recent player rankings in the KBO professional baseball league show that the top positions, both pitchers and hitters, are occupied by foreign players. Korean professional sports have actively recruited players of different races, and fans have unbiasedly supported them, leading to a positive influx and integration of foreigners in sports. For this social change to become an opportunity rather than a crisis, meticulous policy design from the outset is crucial. Above all, greater attention to youth judo athletes is crucial.

4. Entering the AI Era in Sports Judging[3]

With the development of science and technology, we must expand international exchange programs and seriously discuss the introduction of artificial intelligence referee judgments to increase the objectivity of judo judgments, which has been controversial to this day. To this end,

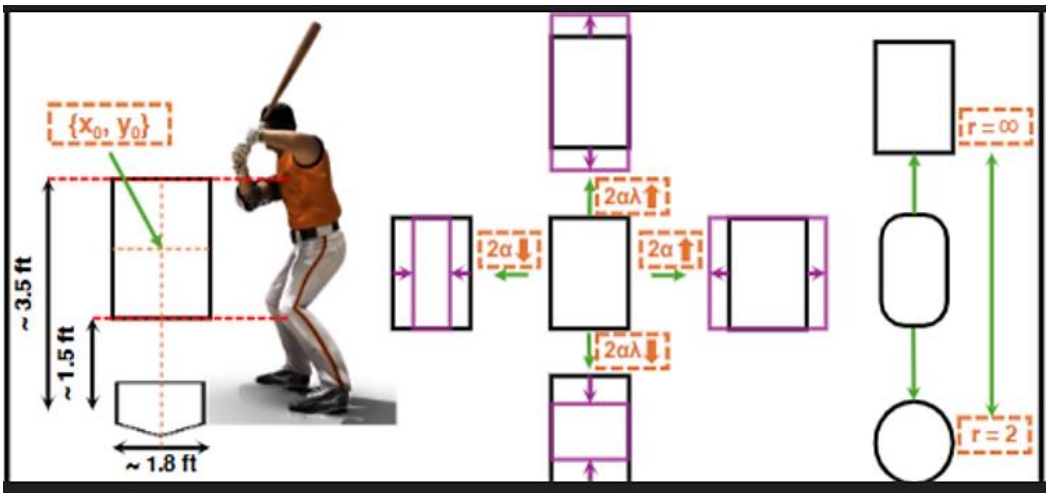
[2] Sunggu Jo. A glimpse into the KBO's top rankings, preparation for a multicultural society?, Korea Youth Newspaper, August 12 (2024).

[3] Sunggu Jo. Entering the AI Era in Sports Judging, Korea Youth Newspaper, August 5 (2024).

we must further expand sports culture exchanges that can lead to international judo infrastructure. I believe that we can properly navigate the sports era of the artificial intelligence era brought about by the 4th industrial revolution[4].

In Korea, artificial intelligence (AI) is bringing innovation, alongside the technological advancements of global companies like Samsung Electronics and Hyundai Motors. Starting in 2025, the KBO (Korean Professional Baseball League) will be the first in the world to introduce the ABS(Automatic Ball-Strike System), which uses AI to replace ball-strike calls. This system will create a more dynamic baseball environment with more runs scored, drawing more fans to the stadium. In the US Major League Baseball, umpire bias and misjudgments are frequently exposed in sports broadcasts, leading to complaints from baseball fans. Therefore, the successful implementation of the ABS(Automatic Ball-Strike System), which can be considered an AI referee system in Korean baseball, is expected to expand not only in the US Major League Baseball but also in international competitions such as the Olympics. The core of artificial intelligence (AI) sports judging is to secure the trust of players and fans through more accurate and fair judgment than humans, and to expand to more sports events in the future through quick decision-making during the game. In line with this paradigm shift, systematic education on what kind of relationship Korean youth will have with artificial intelligence (AI) from adolescence will be an important task in the future development of athletes in order to secure sports competitiveness in international competitions such as the Olympics.

Figure 1. ABS(Automatic ball-strike system) simulation model[35].



5. Argument

This study began by recognizing the fact that, despite its accumulated achievements on the international sports stage, Korean judo has lagged behind in its transition to a professional sport system. In particular, it critically highlighted the fact that judo remains confined to the framework of elite sports and Olympic events, while professional soccer and baseball have already established industrialized, popularized, and media-friendly structures. This suggests that while Korean judo has succeeded in establishing a performance-centered national team system, it has struggled to build a sustainable sports ecosystem. This is because we live in a market economy, where athletes' rigorous training and competitive performance must be rewarded within the market economy. We already know that such compensation ultimately forms the foundation for maintaining performance in international competitions like the Olympics.

The core of professional sports lies beyond the mere presence of professional athletes. It lies in the stability of league operations, the expansion of a fan base, the symbolic value of star

athletes, and institutional mechanisms that ensure fairness and trust. Furthermore, the examples of soccer and baseball demonstrate that public support can be gained not only through the enhancement of a specific sport's performance, but also through the organic integration of culture, industry, and technology surrounding sports. From this perspective, the problem with Korean judo can be interpreted not as a lack of popularity, but as a lack of structural change.

Furthermore, recent changes in sports judging, namely the introduction of an artificial intelligence (AI)-based judging system, have been highlighted as a key topic of discussion. The KBO's ABS(Automatic Ball-Strike System) case clearly demonstrates how important fairness and transparency are to modern sports consumers. Given that judo has also repeatedly faced controversies over the subjectivity of referee decisions, the introduction of AI judging technology holds strategic significance not only in ensuring fairness but also in enhancing the credibility of the sport. This should be understood not simply as a matter of technology adoption, but as a call for the modernization of sports governance. Many Korean judo coaches have pointed out the problems with judo competitions. First, they complain that the annual changes in rules make it difficult for athletes and coaches to adapt. Second, they emphasize the absolute influence of referee subjectivity on the outcome of the game. Therefore, this study holds academic significance in that it structurally analyzes the stagnation in Korean judo within the context of macroeconomic environmental changes such as professionalization of the sport, response to a multicultural society, and adoption of AI technology, rather than reducing it to a problem of individual athlete or coach capabilities.

6. Suggestions

Based on the analysis findings of this study, the following policy and institutional recommendations can be drawn for the sustainable development of Korean judo. First, a phased introduction of a professional judo league is necessary. This would maintain the existing national team system centered on elite athletes, while also alleviating the career gap for athletes after retirement and establishing a structure that connects their competitive experiences with the public. A gradual approach, initially starting with independent leagues based on regional ties, would be realistic.

Second, star athlete development and storytelling strategies should be strengthened. As seen in soccer and baseball, the public enters the sport through "characters" rather than the sport itself. Judo also needs to cultivate a fan-friendly image through media exposure, youth role models, and documentary and digital content production, focusing on athletes with international competition achievements.

Third, a mid- to long-term roadmap for the introduction of an AI judging system is required. In the short term, expanding judging assistance technologies (video interpretation, sensor-based data collection) is essential. In the long term, Korean judo can become a leader in technological innovation by proactively proposing AI judging standards aligned with the International Judo Federation (IJF) standards. Fourth, player development and league management policies must be aligned with a multicultural society. The influx of foreign players goes beyond simply enhancing athletic performance; it holds the potential to serve as a catalyst for integration as Korean sports transitions into a multicultural society. To achieve this, fair contract structures, cultural adaptation programs, and policies linking with youth judo systems must be designed together.

7. Conclusion

This study analyzed the structural challenges facing Korean judo in the era of professional sports and the changing landscape of AI refereeing from various perspectives. Despite its long history and international achievements, Korean judo has maintained a relatively conservative development path in terms of professionalization, popularization, and technological innovation. This demonstrates that short-term, performance-focused policies do not necessarily align with long-term sport development.

The examples of professional soccer and baseball, in particular, suggest that for sports to transcend mere competition and become established as an industry and culture, the organic integration of systems, technology, media, and fan participation is essential. The discussion on the introduction of AI refereeing can also be understood as a process of embodying the social value of fairness in sports, which will become a crucial competitive advantage in the future international sports environment.

In conclusion, the future of Korean judo lies not in "maintaining tradition and achievements," but in "structural and paradigm shifts." The discussions and recommendations presented in this study can serve as a theoretical and policy starting point for Korean judo to transcend the framework of elite sports and leap forward as a professional and future-oriented sport. The future direction of Korean judo goes beyond simply maintaining competitive performance or winning medals at international competitions. Judo must now seek a structural transformation that proactively responds to the changing sports landscape while maintaining its traditional identity as an elite Olympic sport. This represents a paradigm shift from a "performance-focused sport" to a "sustainable sports ecosystem."

First, Korean judo must establish an integrated development model that connects elite athletes with the professional sector. Currently, judo is overly focused on a system where some college students advance to the national team, rather than transitioning from high school to the professional ranks. This system significantly limits the sport's ability to engage with fans. Therefore, a structure that fosters a mutually beneficial relationship with the judo fan base is crucial, both expanding the sport's base and ensuring a stable athlete supply.

Second, institutional experimentation and a phased approach are required, predicated on professionalization. The absence of a professional league in Korea hinders the diversification of career paths and job security for athletes. In the mid- to long-term, the creation of an independent professional judo league should be considered. This process should be designed to go beyond mere box-office appeal and consider both the protection of athletes' labor rights and the public interest of the sports industry. Tickets for popular sports like soccer and baseball are incredibly difficult to obtain in Korea. While stadiums easily fill over 20,000 seats, local government-sponsored judo stadiums, while free, often feature only athletes, their families, and coaches. Furthermore, organizers sometimes demand that even these individuals leave the stadium, citing the distraction of fans from the game.

Third, a transition to a future-oriented judo system that combines scientific training and AI technology is essential. Video analysis, big data-based match strategies, and AI refereeing assistance systems are already widespread across international sports. Judo should also actively embrace scientific analysis and technological support, rather than relying solely on traditional techniques and sensory-based coaching methods. In particular, the introduction of AI refereeing can serve as a strategic tool to not only ensure fairness in competitions but also strengthen the status of Korean judo as a leader in international standards.

Fourth, an open development strategy that takes into account a multicultural society and the international sports environment is required. Amidst the low birth rate and demographic changes, coexistence with foreign athletes and coaches has become an inevitable challenge for

Korean sports. Judo, too, must move beyond a closed system centered on nationality and institutionally establish international exchange and the acceptance of multicultural talent. This approach is not simply about enhancing athletic performance; it also aligns with the public value of social integration and cultural exchange through sports.

Overall, the future of Korean judo lies not in upholding tradition, but in creating a new structure based on that tradition. The era of professional sports and AI refereeing is not a crisis, but a historical turning point that will allow Korean judo to take a leap forward. By proactively responding to these changes, Korean judo can maintain its intern.

8. References

8.1. Journal articles

[1] Song IH. The Historical Value of the Re-emergence and Heyday of Korean Judo in the 1945-1980s. *The Journal of Social Convergence Studies*, 6(6), 17-31 (2022).

[2] Cho YC. A Study on the Achievement of Judo in Korea during the Japanese Colonial Period. *The Journal of Social Convergence Studies*, 6(3), 37-49 (2022).

[3] Yoo S. A Study on the Changing Process of the Origin Theory of Korean Judo. *The Journal of Korean Alliance of Martial Arts*, 25(2), 27-36 (2023).

[4] Jo S. Analysis of Korean Judo Athletes Use of Offensive and Defensive Techniques: Discussion on Scientific Training and Artificial Intelligence Judgment Support. *International Journal of Martial Arts*, 9(0), 11-23 (2024). [Read More]

[5] Song IH. A Study on the Advancement of Korean Indigenous Peoples and Overseas Expansion: Focusing on the people of Korea Judo Schools. *Journal of Korean Society for Sport Anthropology*, 18(4), 129-154 (2023).

[7] Kim BC. A Study of Changes in Sporting Confidence of Judo Athletes Following the Extent of Physical Training. *International Journal of Martial Arts*, 4(1), 1-9 (2019). [Read More]

[8] Kang SK. Analysis of Judoist' Game Technic Contents Analysis in Korea National Judo Team: 2012, London Olympic. *The Korean Journal of Measurement and Evaluation in Physical Education and Sport Science*, 16(1), 121-130 (2014).

[9] Kim JH & Lee DH. The Influence of Experiential Marketing of Judo Gym on Exercise Participation: The Verification of Mediation Effect of Experiential Satisfaction. *International Journal of Martial Arts*, 4(1), 1-13 (2019). [Read More]

[10] Koh E . South Korea and the Asian Games: The First Step to the World. *Sport in Society*, 8(3), 468-478 (2005).

[11] Ahn JD & Hong SH & Park YK. The Historical and Cultural Identity of Taekwondo as a Traditional Korean Martial Art. *The International Journal of the History of Sport*, 26(11), 1716-1734 (2009).

[12] Choi SK. Analysis of and Suggestions for the Formal Adoption Process of Martial Arts for the Olympic Games. *International Journal of Martial Arts*, 4(1), 18-28 (2019). [Read More]

[13] Jo S & Kim B & Choi B. Followership, Stress, Empowerment, and Organizational Commitment in Leaders of Korean Martial Arts Athlete. *International Journal of Martial Arts*, 8(0), 8-19 (2023). [Read More]

[14] Cho JH. Life after Judo: An Examination of the Life Experience and Post-retirement Career Choices of South Korean Judo Olympic Medallists. *Asia Pacific Journal of Sport and Social Science*, 1(2-3), 156-165 (2012).

[15] Kim KS & Park KJ & Lee JK & Kang BY. Injuries in National Olympic Level Judo Athletes: An Epidemiological Study. *British Journal of Sports Medicine*, 49(17), 1144-1150 (2015).

[16] Park J & Hong C & Cheon W. Application of Functional Training to Improve the Performance of Elite Judo Athletes. *Kinesiology*, 6(1), 20-29 (2021). [Read More]

[17] Jo SG & Kim BC & Park JS. Self-protection Sport: An Analysis of the Connection between the Experience of Winning a Competition and the Experience of Being Selected as a Representative

Player of Middle and High School and College Judo Players. *Protection Convergence*, 5(2), 27-37 (2020). [Read More]
[18] Jeon MC & Kim TW & Han SC & Ahn BK & Kim EH. Muscle Activities of Upper Extremity during Kuzushi(Balance-breaking) by Kumikata(Engagement Positioning) Types in Judo. *The Journal of Korean Alliance of Martial Arts*, 10(1), 159-172 (2008).
[19] Kim JY & Kim EJ. Transformation into Physical Education and Sports of East Asian Martial Arts: Focused on Western Influence of Judo. *Korean Journal of History of Physical Education, Sport and Dance*, 21(2), 125-136 (2016).
[20] Lee C & Kim J & Jo S. Analysis of the Use of Defense Techniques of Korean Judo Athletes according to their Gender and Grade. *International Journal of Martial Arts*, 6(4), 53-66 (2021). [Read More]
[21] Kim B & Cheon W & Jo S. Comparative Analysis of Offensive Skills according to Gender and Grade of Judo Athletes in Middle, High, and University. *Kinesiology*, 6(2), 19-30 (2021). [Read More]
[22] Jeon SH & Choi GY. The Relationship between Self-management and Performance Strategies according to the Maturity of Judo Athletes. *Journal of the Korean Society of Sports Science*, 22(6), 1031-1042 (2013).
[23] Park SB & Jeon YT & Kang H. Effect of the Exercise Passion of Middle School and High School Judo Players on the Psychological Needs and Coaching Effectiveness. *Journal of the Korean Wellness Society*, 14(4), 317-329 (2019).
[24] Kim KH & Park JS & Kim JY & Jang SH. The Development and Effect Analysis of Psychological Skill Training Program for Performance Improvement of National Judo Player. *The Journal of Korean Alliance of Martial Arts*, 12(3), 185-203 (2010).
[25] Choi SK. An Analysis of and Recommendation for the Japanese Karate's Process of Flowing into Korea. *International Journal of Martial Arts*, 3(1), 1-4 (2018). [Read More]
[26] Lee SI & Yang JH. The Relationship between Eitquette Awareness and Development in Sociality according to Judo Practice of Adolescent. *Korea Sport Research*, 18(5), 907-918 (2007).
[29] Park TW & Cho SR. The Effect of Personality Types of Elite Judo Athletes on Athletic Satisfaction and Perceived Performance. *Journal of the Korean Sports Association*, 14(3), 139-149 (2016).
[30] Kim SG & Son WI. The Influence of Achievement Goal Orientation of Judo Athletes on Exercise Passion and Exercise Motivation. *The Journal of Korean Alliance of Martial Arts*, 19(1), 123-135 (2017).
[31] Choi HS & Kim BC. The Effect of Martial Arts Training of Noncommissioned Officer Cadets on Leadership Skills and Innovative Behavior. *International Journal of Military Affairs*, 5(1), 48-55 (2020). [Read More]
[32] Jeong S & Jo J & Ha H & Yoo S. Lifetime and thought of Seok Jingyeong with the 10th Dan in Judo for the First Time in Korea. *Korean Journal of Physical Education*, 49(1), 25-36 (2010).
[33] Lee Y & Kim T & Park S & Chang K. Predicting Future Intentions to Participate in Sport from Attitudes and Subjective Norms of Childhoods Sport Participation. *Korean Journal of Sport Science*, 17(3), 103-112 (2006).
[34] Jung Y. Effect of Middle School Students' Participation in Judo Training on Social Development. *International Journal of Martial Arts*, 6(2), 51-61 (2021). [Read More]

8.2. Books

[6] Kim YS & Kim BH & Go JH. Development of a Psychological Skills Training Program for Athletes to Develop a Strong Mentality. Korea Sports Promotion Foundation (2000).

8.3. Thesis degree

[27] Lee WH. A Study on Effect of Yudo Training of Elementary School Children on Their Emotional Development and Ability of Self-control. Yongin University, Master's Thesis (2005).
[28] Kim SH. The Relationship among Adolescent Judo Player Sport Orientations, Hopeful Thinking and Personalities. Yongin University, Master's Thesis (2016).

8.4. Additional references

[35] Lee K & Han K & Ko J. Analyzing the Impact of the Automatic Ball Strike System in Professional Baseball through a Case Study on KBO League Data. Cornell University (2025).

9. Appendix

9.1. Author's contribution

	Initial name	Contribution
Author	SJ	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑ -Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

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Corresponding author*
E-mail: jaebumlee@mju.ac.kr

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Proposal for a Non-Face-to-Face Health Qigong Program to Strengthen the Intrinsic Capabilities of Active Seniors

Taeeun Kim[1]

Balance De Labo, Instructor, Republic of Korea

Jaebum Lee[2*]

Myongji Convergence Healthcare Research Institute, Professor, Republic of Korea

Abstract

Purpose: *This study focuses on "Health Qigong", a traditional Eastern mind-body training method, as a solution to the problem of hyper-aging faced by Korean society. The purpose of this study is to examine the effectiveness of Health Qigong for healthy aging and propose specific non-face-to-face program implementation strategies.*

Method: *This study analyzed previous research findings using triangulation to determine inter-rater agreement. The data collection primarily focused on research papers on Health Qigong and healthy aging published in the Korea Citation Index (KCI) within the past 10 years (2015-2025). For policy data analysis, the "Non-medical Healthcare Service Guidelines and Casebook" published by the Korean Ministry of Health and Welfare was analyzed to assess its applicability.*

Results: *The study identified the anticipated advantages and disadvantages of a non-face-to-face Health Qigong program and proposed a Health Qigong program to strengthen intrinsic capacity. Furthermore, a detailed implementation strategy and evaluation indicators, applying a non-medical healthcare service model, and a specific safety training manual for the Health Qigong program were developed.*

Conclusion: *Health Qigong can be safely applied within non-medical healthcare service guidelines. In particular, it is understood that non-face-to-face implementation of health information verification, prevention and management consultation, training goal setting, training implementation and monitoring, feedback, and adjustments is feasible. To ensure future sustainability, a cultural approach should be developed that integrates with the healthy pleasure trend and fosters a perception of Health Qigong as a fun and sustainable lifestyle habit for older adults, rather than a forced exercise.*

Keywords: ***Health Qigong, Non-Face-to-Face, Intrinsic Capabilities, Active Seniors, Strengthen***

1. Introduction

Korean society is experiencing a rapid demographic shift of unprecedented scale. The elderly population is growing explosively, with the baby boomers born immediately following the Korean War in the 1950s entering the elderly population in large numbers starting in 2020. Notably, Korea's total fertility rate is projected to reach 0.72 in 2023, significantly lower than the global average of 2.25. This is leading to a serious national crisis, with a sharp decline in the working-age population and a decline in economic vitality[1][2][3]4].

In Korean society, the gap between life expectancy and healthy life expectancy presents several challenges. Extended life expectancy does not necessarily translate into improved quality of life. As of 2022, the life expectancy of Koreans will be 82.7 years, 10.1 years higher than the global average. However, "healthy life expectancy," which refers to the period of time a person lives healthily without illness or injury, is only 64.9 years. This means that Koreans will spend

the last approximately 17.5 years of their lives suffering from various chronic diseases or functional decline, often ending up in a pre-existing condition. This gap between life expectancy and healthy life expectancy causes serious problems for individuals, including physical pain and alienation, and for the nation, increased medical expenses and rapidly increasing social costs[5][6][7].

Amidst this demographic shift, a new segment of society is emerging in Korean society: the "Active Senior." Active Seniors are independent individuals in their 50s to 70s who invest heavily in their health and appearance, and who continue to participate in social activities and leisure activities even after retirement[8][9]. They are generally highly socially active, readily adaptable to social networking services, and actively incorporate them into their daily lives. Furthermore, unlike seniors of the past who passively pursued a reduced social role after retirement, Active Seniors pursue a healthy lifestyle[10].

This study focuses on Health Qigong, a traditional Eastern mind-body practice, as an alternative to the problem of hyper-aging society facing Korean society. Health Qigong has the characteristics of "slow exercise," which is easy for the elderly to learn due to its slow and simple movements and has excellent effects on promoting physical and psychological health[11][12][13][14]. Therefore, this study analyzed recent academic literature on Health Qigong published in Korea and the Ministry of Health and Welfare guidelines to confirm the effectiveness of Health Qigong for healthy aging and suggest specific non-face-to-face program application plans in non-medical healthcare services.

2. Research Background

2.1. The concept of intrinsic capacity

A scoping review The World Health Organization (WHO) declared 2020 the "Decade of Healthy Aging," declaring that improving the quality of life in old age goes beyond the simple treatment of diseases and is a task that requires collaboration among individuals, society, and nations[15]. "Healthy aging" means strengthening intrinsic capacity to prevent rapid decline in physical, mental, and social functions with age, and maintaining a state in which one can continue to engage in activities one deems valuable.

OECD and EU countries are also encouraging the social participation of older adults to promote "active aging" and are shifting their policy paradigm from a treatment-centered to a prevention-centered one. The World Health Organization (WHO) first proposed the concept of intrinsic capacity in its 2015 "World Report on Ageing and Health," and it is now recognized as a core concept for healthy aging. In other words, it encompasses an individual's functional potential, transcending the mere absence of disease[16][17].

Intrinsic competencies are the composite of all physical and mental abilities an individual can utilize at any point in their life. They are considered essential for becoming a self-valued being and maintaining and strengthening the "functional abilities" that enable them to perform such tasks. This is consistent with the SOC strategic model of selection, optimization, and compensation experienced throughout life[18].

Intrinsic competencies are broadly divided into five areas, each comprised of specific sub-elements. First, cognition, which includes memory, intelligence, and problem-solving skills. Second, vitality, which includes hormonal function, energy metabolism, and cardio-respiratory function. Third, sensory, which refers to the ability to perceive and utilize vision and hearing for communication. Fourth, psychological state, which refers to mood, an overall state of emotional well-being, leads to a will to live and positive emotional vitality. Fifth, locomotion, which refers

to the ability to generate movement and support the body using balance and muscle strength, leads to the ability to walk and move independently (gait)[17][19].

2.2. Health issues and non-medical health care services in Korean society

South Korea is certain to enter a super-aged society, with the elderly population exceeding 20% by 2026. The proportion of the elderly population is projected to reach 47.7% by 2072. Due to the decline in the working-age population, the proportion is projected to drop from 54.4% in 1970 to 46.1% in 2070, exacerbating the burden of support. The complexity of the elderly problem is expected to persist[20][21][22][23]. This is emerging as a complex social problem, not only due to chronic diseases caused by physical aging, but also due to loss of social role after retirement, economic poverty, and loneliness resulting from the rise of single-person households. In response, the Korean government presented the concept and application methods of non-medical healthcare services twice, in 2019 and 2022[24].

According to guidelines from the Ministry of Health and Welfare of Korea, non-medical health management services encompass all activities that do not directly treat disease but are intended to "maintain daily health" and "prevent the worsening of chronic diseases." Permitted activities include checking and monitoring health information, setting goals, and providing nutrition and exercise counseling and education without violating the Medical Service Act. Regarding the application of health services to patients with chronic diseases, patients with conditions such as hypertension and diabetes can also receive routine health management services at non-medical institutions within the scope of a doctor's diagnosis and prescription. It is recommended that these services be provided by qualified professionals, such as health and exercise managers and senior sports instructors[25].

3. Research Methods

A scoping This study employed triangulation to ensure objectivity and validity. The data collection primarily focused on research papers related to Health Qigong and healthy aging published in the Korea Citation Index (KCI) within the past 10 years (2015-2025). For policy data analysis, the "Non-medical Healthcare Service Guidelines and Casebook" published by the Ministry of Health and Welfare in 2019 and 2021 were analyzed to clarify the distinction between medical and non-medical healthcare services and to examine their applicability within legal frameworks. Based on this, an expert consensus process was conducted. Specifically, a research team comprised of doctoral-level experts in convergence healthcare and sports science classified and reclassified prior research findings according to the scope of the analysis. Only data with confirmed inter-rater agreement were reflected in the final analysis.

4. Research Results

4.1. Physiological and psychological effects of Health Qigong for healthy aging

Health Qigong is a mind-body practice based on the principles of Traditional Chinese Medicine that simultaneously cultivates both the body and mind. Its effectiveness has been proven through various scientific studies[26][27][28][29]. Physiological benefits include increased muscle strength and flexibility, blood pressure control, and improved body composition, all of which have a positive impact on the prevention of chronic diseases. Furthermore, its slow movements have been shown to reduce the risk of falls and promote stability. Psychological interventions have been shown to significantly reduce depression, enhance stress resilience, and enhance resilience. Educational benefits include improved self-directed learning and problem-solving skills in older women, which have been shown to contribute to their independence in later life.

Social benefits include the ability to create a space for "partnership-based participation," where participants can make new friends and engage in social interaction[30].

4.2. Potential advantages and disadvantages of a non-face-to-face Health Qigong program

The anticipated benefits of a non-face-to-face Health Qigong program include, first, accessibility. Elderly individuals with mobility issues or living in areas with poor transportation can practice in the safety of their own homes, eliminating location constraints. Second, safety and infection control. In situations where infectious disease spread is a concern, practicing without face-to-face contact can provide psychological reassurance to high-risk seniors. Third, digital empowerment. A non-face-to-face environment can foster a more self-directed learning attitude, and the process of watching videos, learning, and operating smart devices can stimulate cognitive abilities in older adults. Fourth, data-driven management allows for objective verification of personalized data. Wearable devices can monitor heart rate, calories burned, and other data in real time during practice, enabling scientific exercise prescriptions in accordance with "non-medical health management service" guidelines.

In contrast, the potential drawbacks of a non-face-to-face Health Qigong program are as follows. First, compared to in-person training, the instructor's hands-on approach makes immediate posture corrections impossible, which can limit precise posture corrections. Furthermore, Health Qigong movements are considered "slow exercises" that prioritize angles and center of gravity. Therefore, depending on the angle of the camera lens, it may be difficult for the instructor to accurately assess the practitioner's posture, potentially leading to incorrect movements and joint strain. Second, the home environment can make it difficult to fully immerse oneself in the practice due to surroundings like household chores or family interruptions, potentially reducing concentration. Furthermore, non-face-to-face training can lead to feelings of loneliness for participants, as it lacks the direct physical contact and presence of peers. Third, older adults who are unfamiliar with smart devices may experience stress before the start of the practice or even drop out midway due to connection errors or microphone setup issues.

4.3. Health Qigong program overview and target setting

The program's primary target audience is active seniors who are adept at using mobile devices and applications, such as smartphones and smartwatches, and who pursue active social participation and self-development even after retirement. The program's core values are "Healthy Pleasure," which involves enjoyable exercise rather than forced exercise, and "Intrinsic Capacity" enhancement in later life. The program operates through real-time, interactive training via video conferencing platforms (such as Zoom) and non-face-to-face, personalized feedback utilizing wearable device data. The detailed curriculum by week is shown in <Table 1> below.

Table 1. Examples of Health Qigong programs by week.

Week	Theme	Key content & activities	Related intrinsic capacity domain
Week 1	Smart onboarding	Program orientation and digital training environment setup (platform access and smartwatch synchronization check)	Cognition
Week 2	Building foundations	Understanding the universal characteristics of Health Qigong and beginning practice	Locomotion
Week 3	Awakening vitality	Learning physical universality and accurate movements	Vitality
Week 4	Breath & synchronization	Strengthening cardiopulmonary function through synchronized movement and breathing exercises	Vitality

Week 5	Inner peace	Stress reduction and psychological stability through moving meditation	Psychological
Week 6	Pattern completion	Stimulating cognitive function and improving flexibility through movement memorization	Cognition
Week 7	Digital communion	Inducing 'psychological communion' and 'companion-style participation' through small-group remote training and experience sharing	Psychological
Week 8	Smart achievement sharing	Remote presentation and verification of changes in health indicators based on data (sharing self-directed learning outcomes)	Integrated (all domains)

4.4. Detailed implementation strategies and evaluation indicators for Health Qigong using a non-medical healthcare service model

Seniors in their 60s and 70s often have one or more chronic conditions, so exercise safety should be prioritized during interventions. It's especially important for those with metabolic disease to stimulate energy metabolism through regular, rhythmic, full-body exercise. Since practicing on an empty stomach carries a risk of hypoglycemia, it's important to check whether they've consumed a light meal beforehand. Those with cardiovascular disease should avoid movements and breathing techniques that cause rapid increases in blood pressure. They should also avoid holding their breath and instruct them to breathe naturally, always with their mouths slightly open.

The core of the detailed implementation strategy for Health Qigong, which utilizes a non-medical healthcare service model, is to utilize self-measurement records using personal medical devices (such as blood pressure monitors and blood glucose meters). Consultations should be limited to providing "general precautions for disease prevention," rather than treating specific conditions. Furthermore, when experiencing muscle and joint problems or specific symptoms, it is crucial to avoid excessive movement and instead encourage practice with modified movements.

To scientifically verify the effectiveness of the Health Qigong program for active seniors, we developed the "Health Qigong-specific Intrinsic Capacity (IC-HQ) Index" based on the WHO's five areas of intrinsic capacity (IC). In the physical domain, this index measures improvements in muscle strength and flexibility, as well as the stable maintenance of chronic disease indicators (hypertension and diabetes). In the psychological domain, this index confirms increases in resilience and improvements in quality of life (QOL) in old age. Finally, in the educational domain, this index examines changes in self-directed learning skills and the establishment of independent living attitudes through the use of digital devices. <Table 2> below presents the three-step detailed implementation strategy. <Table 3> presents the IC-HQ measurement tool.

Table 2. Detailed execution strategy for Health Qigong program.

Stage	Strategy item	Description
Step 1: data-driven customized management	Smart check	Check physical condition before training by analyzing daily step counts, average heart rate, and sleep pattern data collected via smartwatches
	Individual goal setting	Adjust training intensity for individuals and provide precautions based on blood pressure and blood sugar levels in accordance with standards from authoritative institutions
Step 2: training methods for	Pattern memory learning	The process of remembering and performing standardized movement patterns of Health Qigong helps maintain cognitive power in seniors

strengthening intrinsic capacity	Slow exercise	Comprised mainly of slow movements with a low risk of falls; ensure safety by implementing modified movements (e.g., chair-based training) in case of muscle or joint abnormalities
Step 3: Enhancing fun and resilience	Healthy Pleasure elements	Incorporate a positive spirit by establishing a culture of verifying training processes in online communities and complimenting each other
	Social support	Enhance psychological resilience by resolving feelings of isolation and improving interpersonal skills through communication in non-face-to-face spaces

Table 3. Intrinsic capacity evaluation indicator (IC-HQ) measurement tool.

Domain	Measurement item (indicator)	Measurement method & tool	Connection with Health Qigong training
Locomotion	Lower body strength and balance	30-Second chair stand test, tandem gait test	Measuring the effects of movements emphasizing flexibility and lower body support
Cognition	Movement memory and concentration	Health Qigong movement sequence recall test, digit span backward	Reflecting the learning characteristic of having to remember and memorize the patterns of each method
Psychological	Resilience and emotional vitality	Korean resilience quotient (KRQ-53), geriatric depression scale (GDS) survey	Verifying the effects of stress relief and psychological communion through training
Vitality	Cardiopulmonary endurance and metabolic indicators	Smartwatch-based heart rate changes during training, resting blood pressure measurement	Confirming improvements in blood pressure and blood lipid concentrations through breathing exercises
Sensory	Visual and auditory receptivity	Identification of instructor movements during training and synchronization with musical rhythm (Self-report survey)	Confirming the ability to perform movements in harmony with music and the acceptance of visual feedback

4.5. Creating a safety training manual for a non-face-to-face Health Qigong program

Instructors of remote Health Qigong programs must constantly monitor the screen. This means regularly checking to see if the practitioner's entire body is visible on the screen. If a practitioner stops moving or disappears from the screen, they must immediately confirm this with a voice. Furthermore, they should provide one to two minutes of rest during the practice session to manage practitioner fatigue. <Table 4> below summarizes the contents of the safety training manual. This manual was developed to overcome the limitations of remote training, which lacks direct guidance from an instructor, and to safely strengthen intrinsic capacity in older adults.

Table 4. Safety training manual for remote Health Qigong program.

Phase / Category	Safety training manual details
Stage 1 (safe space)	• Secure space: prevent fall risks by removing objects (rugs, wires, thresholds, etc.) that can be tripped over within a 2-meter radius • Prepare support: it is recommended to practice near a wall or a sturdy chair with a backrest in preparation for movements that are difficult to balance
Stage 2 (digital safety)	• Eye-level focus: position the screen at the front eye level to avoid excessive bending or lifting of the head • Audio check: Adjust the speaker volume so that the instructor's commands and music can be heard clearly
Stage 3 (self-check)	• Condition check: check for dizziness, chest tightness, or acute joint pain • Metric verification: patients with hypertension or diabetes should measure their blood pressure and blood sugar levels immediately before training
Stage 4 (training rules)	• Moderation (quality over quantity): focus on moving gently within your range of motion rather than making large movements. • Application of modified methods: if knees or the lower back are uncomfortable, lower the posture or perform mainly upper body movements while sitting in a chair
Stage 5 (emergency protocol)	• Immediate halt: stop movements immediately and rest in a chair if severe thirst, cold sweats, facial pallor, or pain occurs during training • Reporting to instructor: inform the instructor of your condition through the "Raise Hand" feature or voice on the real-time remote platform
Stage 6 (cool-down)	• Cool-down exercise: finish with light stretching and meditation to stabilize the qi and blood activated during training • Sharing records: record physical changes or discomfort felt after training in a smart health log to use as data for adjusting the intensity of the next training session

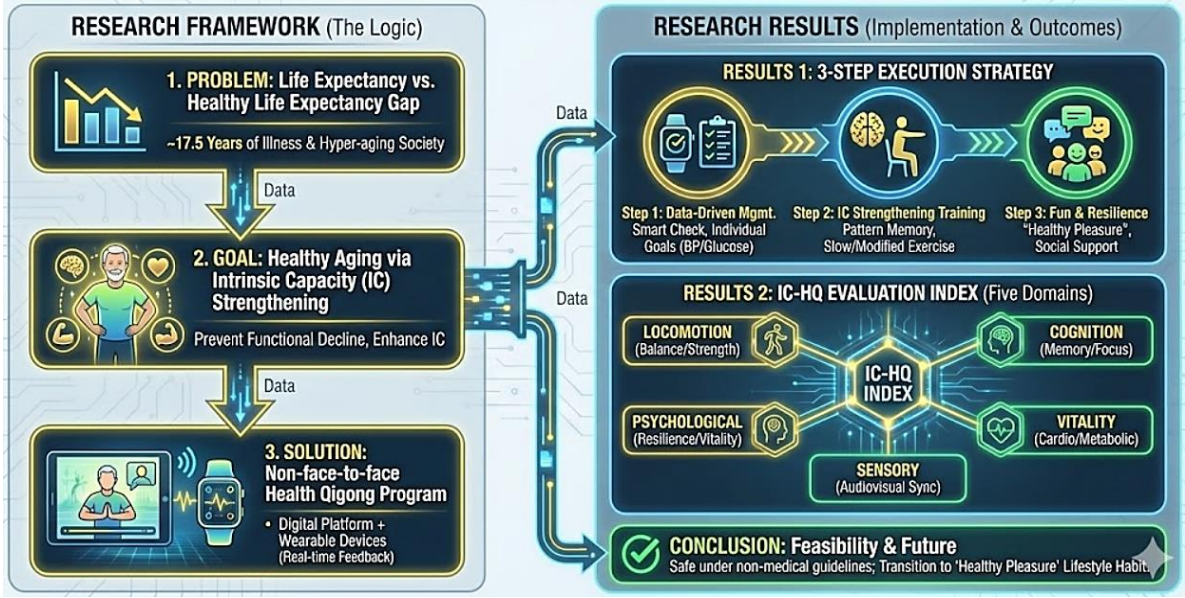
4.6. Proposal for a 3-step detailed program implementation strategy and an internal competency evaluation index (IC-HQ)

This study was conducted to develop and propose a non-face-to-face Health Qigong program to strengthen the intrinsic capabilities of active seniors. To achieve this, a systematic implementation model is proposed, divided into three phases, to maximize the program's effectiveness and safety. Phase 1 involves data-driven personalized management. Available smartwatches are used to analyze data (step counts, heart rate, and sleep), and individual goals are set based on blood pressure and blood sugar levels. Phase 2 involves implementing a Health Qigong program to strengthen intrinsic capabilities. This program includes "pattern memory learning" to maintain cognitive function and safe "slow exercise" (including chair-based modifications) for those with joint problems. Furthermore, the program incorporates Health Qigong's unique practice method, the Three-Jo method (synchronizing body, mind, and breathing), along with modified practices designed to strengthen intrinsic capabilities. Phase 3 focuses on fostering enjoyment and resilience: Through online community activities and social support, a culture of "healthy enjoyment" is fostered, which can alleviate feelings of isolation and enhance psychological resilience

Second, to scientifically measure the program's effectiveness, we propose an evaluation index (IC-HQ) based on five domains of intrinsic competency. Motor ability is assessed through lower body strength and balance (chair stand test, tandem walk test), while cognitive ability is assessed through the Health Qigong motor memory and recall test. Psychological ability is assessed using scales already developed and used in research to measure resilience and emotional

vitality. Vitality is assessed through metabolic indicators such as heart rate and blood pressure, as well as cardiopulmonary endurance. Sensory ability can be measured through auditory receptivity to music used during Health Qigong practice and visual synchronization with the instructor. This three-step strategy and the use of intrinsic competency evaluation indexes can be safely applied within non-medical healthcare service guidelines and are considered to enable remote health monitoring and exercise counseling without violating medical laws. <Figure 1> below visualizes the framework and findings of this study.

Figure 1. 3-step detailed program implementation strategy and proposed Intrinsic Competency Evaluation Index (IC-HQ).



5. Conclusion and Suggestions

This study confirmed that Health Qigong can be utilized as an effective non-face-to-face intervention to address the challenges of Korea's hyper-aging society and promote healthy aging. Health Qigong can be safely applied within non-medical healthcare service guidelines, and in particular, it can be used remotely for personal health information verification, prevention and management consultations, training goal setting, training implementation and monitoring, feedback, and adjustments.

This study offers several policy and academic recommendations. First, it is necessary to expand integrated Health Qigong programs that promote self-directed learning by considering the internal characteristics of older adults. Second, it is necessary to develop Health Qigong guidelines utilizing non-face-to-face automated services for "smart active seniors" familiar with various mobile devices and applications. Third, it is necessary to systematically train qualified Health Qigong instructors to enable professional health management while avoiding violations of medical laws. Fourth, emergency contact information should be verified before each session, and the "fall detection" function of smartwatches should be integrated into the program to prevent accidents.

This study proposes implementing a non-face-to-face Health Qigong program to strengthen the intrinsic capabilities of active seniors. To complement the limitations of these non-face-to-face programs and maximize the effectiveness of "Healthy Aging," a hybrid model is needed, incorporating periodic (e.g., monthly) in-person training sessions to precisely correct posture and foster camaraderie among colleagues. Furthermore, the implementation of digital supporters, where senior digital instructors provide one-on-one training on device operation during the

initial access stage, is also considered necessary to lower the barrier to entry. Furthermore, to ensure future sustainability, Health Qigong should be combined with the "healthy pleasure" trend, fostering a cultural approach that fosters a perception of it as a joyful and sustainable lifestyle, rather than a forced exercise routine

6. References

6.1. Journal articles

[1] Park S & Lee J & Byeon Y. A Phenomenological Study on the Elderly's Experience of Participating in National Based Health Exercise. *Public Value*, 5(2), 23-31 (2020). [Read More]

[2] Lee HJ & Jeong DH & Yim SM. How do Metropolitan/Provincial Governments Deal with the Super-aged Challenge?: The Significance of Local Environmental Impact on Elderly Life Satisfaction. *The Korean Journal of Local Government Studies*, 27(4), 163-198 (2024).

[3] Lee J & Liang D. Suggestions for using AI in Preparation for a Super-aging Society. *Robotics & AI Ethics*, 5(2), 57-64 (2020). [Read More]

[4] Liang D & Lee J & Kim H. Analysis of Differences in Fun, Flow, and Self-directed Learning according to the Background Variables and Characteristics of the Senior Citizens Participating in the Health Qigong Program. *Protection Convergence*, 6(3), 32-41 (2021). [Read More]

[5] Han JT & Jeong YC. Big Data Analysis of Elderly-friendliness of Residential-based Daily Living Facilities for a Super-aged Society: Focusing on Dobong-gu, Seoul. *Journal of Advanced Engineering and Technology*, 17(3), 145-152 (2024).

[6] Yeo I & Lee J & Kim J. Effect of Fun of Elderly Women Participating in Health Qigong on Resilience. *Kinesiology*, 6(1), 30-38 (2021). [Read More]

[7] Lee J & Kim T. Exploring the Effectiveness and utilization of Terahertz Waves for the Protection of Human Body. *Protection Convergence*, 6(1), 41-49 (2020). [Read More]

[8] Lee JP & Lee JM. The Effect of Semi-elderly Preparation for Retirement on Successful Aging. *National Counseling Welfare Research*, 4, 169-201 (2020).

[9] Jeon HM & Shin CB. Development of Wellness Service Concept Scenario using Smart Band for Active Senior. *Journal of the Korean Society of Design Culture*, 23(1), 527-536 (2017).

[10] Yoon IH & Changes in the Life-style Needs of Active Seniors who Pursue Healing and Beauty through Semi-permanent Makeup. *The Korean Water Society*, 9(1), 43-54 (2021).

[11] Kim ES & Park JS. Effects of Qigong Training on Body Composition, Fitness and Bone Mineral Density in the Elderly. *International Journal of Martial Arts*, 3(1), 20-27 (2018). [Read More]

[12] Lee JB & Kim YK. The Participation Value of National Level Sports for all Programs Perceived by the Living alone Elderly. *International Journal of Applied Sport Sciences*. 26(1), 42-51 (2014).

[13] Lee JB & Lee DJ. Values of Health Qigong as Elderly Exercise. *Korean Society of Growth and Development*, 23(1), 77-82 (2015).

[14] Byeon Y & Lee J. Chinese Health Qigong's Healing Principle and Kinematic Discourse. *International Journal of Martial Arts*, 5(2), 31-37 (2020). [Read More]

[16] Lee BG & Kim SH & Boo SJ. Intrinsic Capacity and Willingness toward Aging in Place among Community-dwelling Older Adults. *Nursing and Health Issues*, 29(2), 242-252 (2024).

[17] Kim SM & Lee JB & Lee CH. Exploring the Structure of Smart Active Seniors for Successful Aging, *Aisa-pacific Journal of Convergent Research Interchange*, 11(3), 675-690 (2025).

[18] Lee SH & Bae JY & Im SA & Yang HM & Kim SR & Heo JM. Selective Optimization with Compensation and Successful Aging: Narratives of Senior Fashion Models. *Journal of Sport for All*, 82, 272-286 (2020).

[19] Lee JB. The Meaning of Healthy Pleasure and Healthy Aging in Korean Society. *Aisa-pacific Journal of Convergent Research Interchange*, 11(5), 595-605 (2025).

[21] Seo JY & Kim J. A Study on the Improvement of Elder abuse Definitions and Laws through International Comparison. *Korean Journal of Safety Culture*, 38, 45-65 (2025).

[22] Jeong SK. A Study on the Life Experiences of Older Women: Sacrificial Lives for the Family and Experiences of Poverty. *Industry Promotion Research*, 10(1), 255-263 (2025).
[23] Kang MJ. Determinants of Elderly Women's Participation in Elderly Jobs. *The Journal of Women and Economics*, 21(2), 41-63 (2024).
[25] Lee JB & Byeon YS & Liang D. Application of Exercise Prescription for Health Qigong in Non-medical Health care Service: Focusing on the Elderly Health Care. *The Journal of Natural Healing Rehabilitation Welfare Convergence Study*, 5(2), 1-10 (2021).
[26] Byeon Y & Lee J & Sim SW. Q-methodological Approach on Type Analysis of Elderly Participating in Health Qigong after Covid-19. *Protection Convergence*, 7(2), 88-97 (2022). [Read More]
[27] Jung JS & Lee JB & Oh JM. The Relation between the Female Elderly' Satisfaction of Oriental Medicine Qigong Exercise Program Participation and Successful Aging Perception. *International Journal of Human Movement Science*, 12(3), 33-46 (2018).
[28] Lee JB. Application Process of Qigong Training for Elders: A Grounded Theory Approach. *International Journal of Human Movement Science*, 6(1), 217-235 (2012).
[29] Choi YS & Lee SB. The Relationship between Fun Factors and Health-related Quality of Life of Elderly Women Participating in the Oriental Medicine Qigong Movement. *The Journal of Natural Healing*, 3(1), 9-20 (2018).

6.2. Thesis degree

[30] Byeon YS. Type Analysis and Instructional Model Application of the Elderly Participating in the Health Qigong Exercise using Q-methodology. Dongbang Culture University, Doctoral Thesis (2021).

6.3. Additional references

[15] https:// www.bioin.or.kr/ (2025).
[20] https://www.kostat.go.kr/ (2025).
[24] https://www.mohw.go.kr/ (2025).

7. Appendix

7.1. Author's contribution

	Initial name	Contribution
Lead Author	TK	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑
Corresponding Author*	JL	-Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑