

A Study on the Current Status and Development of Safety Management in Sports

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ABSTRACT

Sports are deeply involved in people's daily lives to the extent that they contribute to their leisure, health promotion, and public welfare, and the area of sports is also rapidly expanding due to the explosive increase in the sports population and various new leisure sports. Sports safety accidents are caused by a combination of various factors such as careless operation of sports facilities, poor operation of managers, and safety anxiety of users. Therefore, sports safety management requires a comprehensive approach to all matters necessary for sports facilities and sports activities. Accordingly, this study was conducted with the aim of presenting a development plan to improve the status of sports safety management after deriving problems from various angles. The results of this study are as follows. First, the legal basis for the safety management of sports facilities was insufficient or systematic. There was a blind spot for sports facilities to which the law was applied, and the competent ministries that operated the actual regulations were all at the same time, resulting in poor effectiveness and wasted administrative power. Second, there was a lack of awareness of the safety of managers and users of sports facilities. As a result of a survey of people who experienced injuries during actual sports activities, it was found that the degree of knowledge and implementation of warm-up and finishing exercises was very low, as well as wearing protective gear/safety equipment, identifying risks, preventing and coping with safety accidents. Third, sufficient safety education is not being provided. Despite the fact that safety education was the basis of safety awareness, there was no opportunity to accumulate knowledge of safety, and it resulted in reducing the effectiveness of accident prevention and accident reduction. In order to improve these problems, this researcher proposed the following specific action plans. First, legal and institutional improvements are needed to strengthen the safety of sports facilities. Second, it is necessary to train and deploy field safety management professionals in sports facilities. Third, it is necessary to provide continuous safety education on sports safety management. Fourth, it is necessary to raise the safety awareness of sports activity users. Safety cannot be overemphasized. In order to increase the function of the virtuous cycle of leisure, health promotion, and welfare realization, thorough management of sports safety and raising safety awareness will be an essential duty for all of us living in modern society.

1. Introduction

In addition to personal leisure and health promotion, sports are activities that contribute to the realization of welfare that improves the quality of life. In particular, interest in sports activities has increased as the "Work Life Balance" culture, which means work-life balance and changes in social conditions, such as the introduction of a five-day week and a 52-hour workweek, has spread, and the number of sports activities is also increasing rapidly. In addition, new sports called extreme sports have emerged in addition to traditional sports such as soccer, baseball, badminton, and mountain climbing, creating an atmosphere of enjoying sports without space restrictions. Accordingly, the use of leisure time through sports is recognized as an important means of inspiring satisfaction with modern people's lives (Kim Sang-ho et al., 2019).

While the scope of sports activities is expanding, the possibility of safety accidents is also increasing. Sports always pose a risk of safety accidents, especially because recent extreme sports such as skin scuba and rock climbing are activities that gain psychological satisfaction while overcoming extreme situations, so it is true that they are more

exposed to risks than existing sports. In addition, these events require more safety management because human and physical losses are very large compared to other events in the event of an accident.

Nevertheless, safety management in sports activities is still unsatisfactory, and various accidents occur frequently. This can be said to be the primary cause of the lack of legal regulations that can encompass a wide range of sports fields. In the National Sports Promotion Act, sports activities (sports) are classified only as "professional sports" and "living sports," and the types of sports facilities designated by the "Act on the Installation and Use of Sports Facilities" do not include various emerging sports events, so there is a blind spot for the application of laws and regulations. In addition, the legal basis for sports safety management and the competent ministries are scattered by sport, so administrative power is wasted. In addition, various accident statistics and fact-finding surveys show various problems related to sports safety management, such as the absence of safety management experts, insufficient safety education, and lack of safety awareness.

Sports have become a part of everyday life enjoyed by anyone regardless of age or class. In order to maximize the positive meaning of sports activities and create a virtuous cycle structure, safety cannot be overemphasized, and it can be said to be a factor that should be considered first. Therefore, in this paper, we would like to derive problems on the actual state of safety management in the sports field and propose a development plan for it. The results of this study could serve as a starting point for contributing to the promotion of people's leisure and health, and ultimately to the realization of welfare.

2. Theoretical background

2-1. Concept and importance of safety awareness

The dictionary meaning of "safety" is "no risk or risk of accidents." Or, it is such a state, and more comprehensively, it refers to a state in which measures are in place to prevent harm to people even if there is a cause of danger. In other words, safety aims to prevent accidents by artificially eliminating the possibility of danger, which means a condition that occurs due to differences in human behavior (Florio et al., 1979). Regarding the concept of safety, Bohn (2001) said that "safety is a condition or condition caused by changes in human behavior; reducing accidents by the creation of a physical environment that reduces the likelihood of risk," and the World Health Organization (WHO) defined "a condition in which conditions that cause danger and physical, mental or material harm are controlled for the health and welfare of individuals and local communities" as the concept of safety. In addition, Kwon Bong-an (1987) referred to safety as "a state of attempting to prevent or minimize economic damage such as human damage and property loss, such as death injuries and diseases caused by danger."

Safety is a state that is artificially created by humans and can be achieved by having various safety equipment or establishing various measures to prevent the surrounding environment from being destroyed. In the past, there was a perception that because risk was personal, individuals should control themselves to ensure safety (Sang-Jun Oh, 2019). However, due to various abnormal climates, economic development, and advances in science and technology, modern society exhibits a very complex pattern, and new risk factors that individuals cannot perceive are emerging one after another. Therefore, the subject of safety is not individuals, but everyone who has interests, and safety can be secured when they act complementarily (Hwan-Sung Lee et al., 2014). According to Maslow's fifth stage of desire, people want the most primitive physiological needs, namely, food, clothing, shelter and essential conditions necessary for survival, to be met first (Maslow, 1970). Those who are satisfied with their physiological needs seek something definite, familiar, and stable, a desire to be protected from physical, emotional, and economic risks. This need for safety is most fundamentally guaranteed for a person's survival, and if this is not met, it cannot move on to the next stage of need. From this point of view, everyone has an inherent desire for safety, and especially in modern society, where the risk of safety accidents has increased, interest in safety is bound to increase.

Safety perception refers to the degree to which an individual's potential interest in safety manifests itself in specific actions and practices, and refers to the degree of value that an individual perceives about safety (Song Yu-jin et al., 2008). Safety awareness is the result of learning how to cope with various risk factors that can occur in everyday life through education and training to satisfy the previously discussed safety needs (Shin Tae-woong, 2018). The concept of safety consciousness is defined somewhat differently by researchers. Kim Hye-won (2002) said that the difference in cognitive ability to protect life and property from various risks and accidents that may occur in the

sports field, and Lee Kwan-hyung et al (2005) said that the instinctive attitude of an individual seeking comfort in a specific situation is safety consciousness, which is related to the individual's altruistic behavior or attitude. In addition, Lee Hee-taek (2010) stated that it is a safety consciousness to be familiar with the surrounding risk factors and to remove the possibility of danger or to acquire the knowledge necessary for prevention in order to maintain safety from dangers lurking in everyday life and prevent accidents. To sum up the concept of safety consciousness of various researchers, safety consciousness can be said to be the degree of value that an individual has for safety, that is, "value orientation for safety" (Song Yu-jin et al., 2008).

As shown in <Table 1>, safety consciousness can be classified into personal and social dimensions according to the location of the risk factor, and into passive and active dimensions according to the response method to the risk factor (Lee Dong-joon, 2018).

[Table 1] Distinction of safety consciousness

level	passive	active
personal	Formed through direct or indirect experiences or media in your daily life.	Willingness to eliminate possible risks in everyday life directly
social	Recognizing the risk factors of the community and society to which the individual belongs and being alert	Position to directly eliminate risk factors in the community and society to which an individual belongs or to identify new risk factors and actively cope with them

Factors affecting safety consciousness can be divided into three main categories (Hwan-Sung Lee et al., 2014). First, it's a personality. Several researchers have found that differences in individual personality indicate different behaviors and attitudes toward safety. Hansen (1991) said that extroverted, aggressive, socially maladaptive, neurotic, and impulsive people are more likely to cause risk accidents, and Forcier et al. (2001) said that personal differences in safety locus of control, risk avoidance, and stress tolerance affect safety consciousness. Second is the learning effect of experience. Through the experience of safety accidents, individuals learn how to cope with the situation, and the more experienced people, the higher their safety awareness (Kim Tae-hwan, 2003; Yoo Hyun-jung et al., 2010). Third, education on safety. The more people who have received safety education, the higher their awareness of safety (Choongsik Choi et al., 2013), and the same results were found not only for adults but also for students (Lee Myung-sun et al., 2012).

There are various risk factors in the environment in which people live. It may be material, such as dangerous objects (Scott, 1992), activity, including sports activities (Clark et al., 1986), or social, such as transportation or sanitation (Pickle et al., 1989; Hughes, 1992). In order to overcome the numerous risk factors that exist everywhere, there must always be a sense of safety.

Most safety accidents are caused by a combination of incomplete surroundings and unsafe individual behavior, and safety accidents occur only when artificial conditions precede, not areas of force beyond the control of individuals (Ji Mi-young, 2000). In other words, if the incomplete environment and unsafe individual behavior can be controlled, the frequency of safety accidents can be reduced (Ren Yadong, 2016). From this point of view, the best way to control an individual's unsafe behavior would be through education on safety consciousness (Korea Occupational Safety Corporation, 1996). Education on safety consciousness should be repeated in the long run, especially from childhood when the self begins to form. It is very important to establish a safety consciousness that can protect themselves and their surroundings, as children begin to escape parental protection little by little. (Choi Young-il, 1998).

2. Current status and safety management status by sports sector

2-1. Concept and importance of safety awareness

Article 2 (Definition) of the National Sports Promotion Act defines "athletic activities performed by

athletes" as the concept of professional sports (professional sports), which includes support activities to improve athletes' performance, such as selecting excellent players, expanding training facilities, and fostering game leaders. Professional sports can generally be divided into elite sports played by amateur athletes registered with the Korean Sports Council's sports organization and professional sports played by professional athletes registered with the Korea Sports Association (Ministry of Culture, Sports and Tourism, 2007).

Professional sports can contribute to enhancing national prestige by having excellent performances in various international competitions, and holding various competitions in Korea has a positive impact on improving players' skills and enhancing their national image. From this point of view, professional sports are continuously supported at the government level.

The government's policies for supporting professional sports can be divided into four main categories: 1) discovering and fostering excellent athletes; 2) improving the performance of national athletes and expanding training facilities; 3) operating the National Sports Festival and Boys' Sports Festival; and 4) promoting professional games. First of all, finding and fostering excellent athletes means continuing to discover and nurture young outstanding athletes to secure the international status of domestic sports and meet the expectations of the people. To this end, various policies are being implemented, including the sports specialist system, the military service special system, the operation of the Korean Armed Forces Sports Unit (Sangmu), and the operation of the Taeneung Training Center. In addition, projects to foster potential talents early and improve performance through competition with the national team are also being implemented. The national team is the best player in the country in each sport and plays a role in enhancing national prestige and enhancing the national image by participating in various international competitions. Accordingly, various programs at the government level are being provided to the national team to improve their performance. This includes not only providing training sites, but also various support projects such as overseas off-season training, invitation of foreign coaches, and overseas training for leaders, especially recently, intensive investment has been made in developing scientific and systematic training methods centered on the Korea Sports Policy Institute. Constant practical training is needed to improve the performance of professional sports players. However, it is difficult to provide all players with the opportunity to gain sufficient hands-on experience because the number of players who can participate in international competitions is limited. Accordingly, efforts are being made to discover and foster talented people with quality by continuously holding domestic sports competitions. The most representative domestic sports competitions include the National Sports Festival and the Juvenile Sports Festival. The National Sports Festival began in 1920 with the establishment of the Chosun Sports Association, and although there are some missing years depending on the circumstances of the times, each local government holds it alternately every year. The Boys' Sports Festival began in earnest in 1972 with the organization of Sports Boys, and is held annually for 5th and 6th graders of elementary school and 1st, 2nd, and 3rd graders of middle school. Professional sports were introduced to improve the level and base of professional sports in Korea, promote sound leisure use by the people, and contribute to the revitalization of sports and the development of local communities. Professional sports in Korea began in earnest with the launch of the professional baseball league in 1982. Since then, with the launch of professional soccer in 1983, professional basketball in 1997, and professional volleyball in 2005, professional sports have expanded rapidly, and professional organizations in various sports such as ssireum, golf, bowling, wrestling, go, and billiards have been organized and various competitions have been actively held. Soccer is the professional sport that has the largest number of athletes, teams and leaders as of 2020. Based on athletes, 20.6% of all professional sports players are registered in soccer sports, and leaders account for more than 25% of them. In addition, baseball, taekwondo, and archery show a high proportion of players and leaders, and swimming has a large number of leaders, but relatively few registered players. For registered teams, there were relatively few group events with more than 10 people, such as soccer and baseball, compared to registered players. In 2021, athletes, teams, and leaders all increased by about 5-10% compared to 2020, and the status of each event is similar to that of 2020. The detailed status of professional sports is shown in Table 2 below.

[Table 1] Distinction of safety consciousness

Years	Category	Players			Teams				Leaders		
		Men	Women	Sum	Men	Women	Mixed	Sum	Men	Women	Sum
2020	Football	24,019	1,407	25,426	863	62	0	925	6,502	273	6,775
	Baseball	13,127	18	13,145	394	0	156	550	1,126	0	1,126
	Basketball	1,634	786	2,420	127	81	1	209	377	103	480
	Volleyball	1,657	947	2,604	128	81	0	209	424	83	507
	Korea Archery	8,045	1,261	9,306	3	0	382	385	86	7	93
	Archery	945	811	1,756	223	194	0	417	397	394	791
	Athletics	2,880	1,820	4,700	142	79	534	755	1,206	377	1,583
	Swimming	1,969	1,279	3,248	32	55	942	1,029	1,171	403	1,574
	Tennis	913	613	1,526	68	51	203	322	422	115	537
	Taekwondo	7,474	3,300	10,774	0	0	2,105	2,105	1,238	176	1,414
	Shooting	2,170	1,151	3,321	47	44	275	366	321	148	469
	Badminton	1,475	892	2,367	177	130	0	307	678	319	997
	Etc	29,386	11,305	42,691	1,946	1,299	6,600	9,845	8,365	1,988	10,253
	Sum	95,694	27,590	123,284	4,150	2,076	11,198	17,424	22,213	4,386	26,599
2021	Football	25,633	1,460	27,093	907	63	0	970	6,855	282	7,137
	Baseball	13,381	11	13,392	379	0	188	567	1,125	1	1,126
	Basketball	1,817	827	2,644	139	80	1	220	423	141	564
	Volleyball	1,703	1,064	2,767	124	84	0	208	459	93	552
	Korea Archery	7,379	1,137	8,516	3	0	376	379	45	2	47
	Archery	1,113	911	2,024	245	217	1	463	433	422	855
	Athletics	3,257	2,212	5,469	154	74	632	860	1,383	434	1,817
	Swimming	2,047	1,303	3,350	25	46	966	1,037	1,334	450	1,784
	Tennis	991	663	1,654	62	47	224	333	344	91	435
	Taekwondo	7,526	3,604	11,130	0	0	2,356	2,356	1,458	217	1,675
	Shooting	2,307	1,258	3,565	4	48	337	434	360	145	505
	Badminton	1,467	937	2,404	185	137	0	322	522	223	745
	Etc	32,417	14,805	47,222	2,103	1,367	7,417	10,887	9,442	2,092	11,534
	Sum	101,038	30,192	131,230	4,375	2,163	12,498	19,036	24,183	4,593	28,776

2-2. Concept and importance of safety awareness

Humans feel joy, anger, sorrow, and pleasure through sports. This is an emotion that can be felt not only when you directly participate in sports activities, but also when you watch sports. In other words, sports have a great influence on human lifestyles, and the effect of health promotion can also be obtained through sports activities. Especially in modern society, which has been complicated by radical industrialization, humans face numerous environmental risks, and the importance of sports that enable the promotion of health and the maintenance of a sound mental state is increasing. Unlike professional sports aimed at fostering athletes who can display their best skills, daily sports aim to provide leisure or recreational opportunities for everyone to easily access and participate in their daily lives. In particular, life sports are recognized as an important means of supporting desirable social adaptation by positively affecting the physical development and healthy mental content of children or adolescents (Jang Pyeong-seok, 2003). In addition, participation itself is the most important feature of daily sports, not the purpose of obtaining high rankings or grades, but the act of having no winners or losers itself. From this point of view, life sports are an integrated sports area in which all ages and classes, including children, adolescents, adults, the elderly, men, women, the disabled, and the non-disabled, can participate, and will affect the realization of welfare and social ideology along with the sound development of individuals. Living sports is a term conceptualized in the process of promoting the national sports promotion policy in 1985 (Lim Bunjang, 1995). The Korea Legal Research Institute (1989) called "voluntary and everyday sports activities to promote health and physical strength" a daily sport, and Han Sang-deok (1995) called "a social phenomenon that occurs in the interrelationship between social consideration and various sports activities developed by voluntary participants to support and promote the health and happiness of members from non-profit motives." (Kim Young-sun, 2009). In addition, Lim Bun-jang (1991) called "lifelong educational sports activities in which all classes of the people voluntarily participate for the purpose of promoting health welfare and leisure as non-profit sports activities in the workplace and local communities," and Kwak Sung-young (2020) called "organized sports activities that anyone can freely participate in through leisure time." In addition, Kim Seong-bae (1991) defined the concept by dividing living sports into 1) political functions that mean the construction of personal welfare and welfare society to achieve the goal as a whole, 2) economic functions that mean securing material resources or energy necessary for social maintenance, and 3) educational functions that relieve anxiety within society and motivate members correctly. As such, many researchers have suggested the concept of life sports somewhat differently, but in sum, life sports can be said to be "physical activities in daily life in which individuals and organizations voluntarily participate to lead a better life." In modern society, life sports also play a role in entertainment and social functions beyond the meaning of simple physical fitness. In other words, one of the main ways to prevent various diseases, improve health, and furthermore, to make sound use of an individual's leisure time through regular physical activities in daily life is through life sports. In addition, it is possible to cultivate the spirit of compliance through rule-based sports activities, and in the case of group sports, unity and cooperation can also be cultivated. As such, life sports can provide various positive effects in various aspects, so a shift to a national participation movement that can improve the quality of life of individuals is required (Kim Bo-hye, 2014). More specifically, the necessity of daily sports is shown in Table 3 (Moon Yong et al., 1997; Kim Bo-hye, 2014).

[Table 3] the necessity of life sports

Sortation	main content
Cultural-anthropological aspects	<ul style="list-style-type: none"> ▪ Constructive and Educational Use of Leisure Time ▪ Contributing to the creation of a sound social climate
physiological aspect	<ul style="list-style-type: none"> ▪ the effect of maintaining health ▪ Provide opportunities for the appropriate amount of physical activity necessary for human survival to help maintain health and foster strong physical strength

psychological aspect	<ul style="list-style-type: none"> ▪ Relieves anxiety and anxiety, suppresses aggression, reduces guilt, and relieves inferiority complex ▪ The role of restoring normal physiological balance in the event of destruction
sociological aspect	<ul style="list-style-type: none"> ▪ Learn various living principles such as teamwork, obedience, discipline, thrift, and saving through sports activities to lead a smooth social life

As such, life sports have positive needs or functions in various aspects, but there are also several dysfunctions in return. First of all, it's imitation. Unlike the family-centered lifestyle of Western society, life sports are mainly centered on friends and workplaces in Korea. As a result, there are frequent cases of purchasing expensive sports equipment used by colleagues by increasing a sense of belonging or being conscious of the gaze of others (Lee Je-hong et al., 2002). If this trend or imitation psychology spreads, negative perceptions of daily sports will increase. The second is commercialization. Due to the introduction of the 52-hour workweek system and five-day work, daily sports are in full swing. The increase in the participation rate in daily sports can help improve individual health and welfare, but concerns have been raised that it can be used for profit-seeking purposes in related industries (Lee Je-hong et al., 2002). Finally, it is the pleasure of daily sports. The introduction of various life sports can bring joy and joy to many people, but if it is excessively transformed into a pleasure or pleasure direction, such as drinking or gambling, it will cause great harm to individuals and society (Kim Myung-mi, 2005). The following <Table 4> summarizes the top nine events with high participation rates and participation rates in daily sports of the general public. The rate of participation in sports activities three times a week was the highest in both 2020 and 2021, followed by twice a week and once a week. About 3% participated in sports activities every day, and 30% did not exercise at all. The highest participation rate was about 50% of walking, which did not require special equipment or places, and hiking, bodybuilding, and gymnastics were preferred sports by the general public.

[Table 4] Life sports participation rate and top 9 sports (2020-2021)

Years	Never	3 times per month or less	Once a week	twice a week	three times a week	four times a week	five times a week	six times a week	every day
2020	29.5	10.4	13.1	14.3	16.4	5.6	6.3	1.7	2.8
2021	28.7	10.6	11.0	15.1	18.6	5.6	4.8	1.9	3.9
increase/decrease rate	-0.8	0.2	-2.1	0.8	2.2	-	-1.5	0.2	1.1
Years	Walking	hiking	bodybuilding	Gymnastics	bicycle Cycling	Soccer futsal	Yoga Pilates	Billiards pocket ball	Bowling
2020	49.0	22.8	10.8	11.4	8.1	8.1	5.8	7.8	8.6
2021	48.5	21.0	11.2	10.6	8.6	7.0	6.7	6.6	6.3
increase/decrease rate	-0.5	-1.8	0.4	-0.8	0.5	-1.1	0.9	0.8	-2.3

The percentage of using public or private sports facilities in daily sports activities was 20% each, higher than that of other schools, workplaces, and self-sports facilities. What is unique is that more than 25% of them did not use sports facilities at all, which is expected to be due to the recent trend of home training. When it comes to purchasing sports goods, the rate of purchasing clothes and shoes was overwhelmingly high, and other ball games and rackets were less than 10%. The amount of purchase and payment for sports goods was about 300,000 won per year in all of 2020 and 2021.

[table 5] Status of use of sports facilities and purchase of sports equipment for one year (2020-2021)

Years	the public sports facilities	the private sector sports facilities	Etc sports facilities	School sports facilities	Job sports facilities	self-facilities	Never
2020	19.0	23.0	20.6	7.6	0.3	3.8	25.7
2021	22.1	20.6	14.9	8.5	0.6	4.3	29.1
increase/decrease rate	3.1	-2.4	-5.7	0.9	0.3	0.4	3.4

Years	Purchase experience	Type of purchase					Average Purchase cost
		Clothing	footwear	balls	rackets	Etc	
2020	34.2	83.1	71.6	5.5	4.9	2.7	29.2
2021	32.2	68.1	63.6	8.2	6.2	5.0	28.8
increase/decrease rate	-2.0	-15.0	-8.0	2.7	1.3	2.3	-0.4

Table 6 shows the current status of public sports facilities nationwide. Public sports facilities are specialized sports facilities and living sports facilities established, managed, and operated by the state or local governments or public organizations (public corporations such as the Korea Sports Association, the Korea Sports Promotion Foundation, and the Korea Racing Authority) for the people's sports activities, including village sports facilities, provincial education offices, county education offices student gymnasiums, and student swimming pools. As of the end of 2020, there were 31,554 public sports facilities nationwide. This is an increase of 4.5% (1,369 locations) from 30,185 in 2019, which comprehensively reflects the expansion of national leisure time, increased interest in health, and active policies of the government and local governments to expand public sports facilities. By facility, there were 23,834 simple playgrounds, accounting for 75.6% of the total, and more than 1,000 gateball courts, gyms, and soccer fields were distributed. The largest concentration of facilities was 6,374 (20.2%) in Gyeonggi/Incheon, and 633 (2.0%) in Jeju Island were the least distributed. In addition, four snow stadiums were distributed in Gangwon-do, and less than 20 rowing, canoe, hockey, and cycle stadiums were distributed nationwide, which can be expected to be affected by local or public popularity.

[Table 6] Status of public sports facilities nationwide (2020)

facility	Sum	Seoul	Gyeonggi/Incheon	Busan/Gyeongnam	Daegu/Gyeongbuk	Daejeon/Sejong/Chungcheong	Gwangju/Jeolla	Gangwon	Jeju
athletic field	252	3	47	34	37	35	44	33	14

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football field	1,064	73	281	199	106	65	204	70	21
hockey field	16	1	5	2	1	3	2	2	-
Baseball field	332	19	85	47	46	41	56	27	7
Cycle field	11	1	2	2	1	2	2	1	-
Tennis field	832	65	238	138	88	84	123	72	7
Ssireum field	73	-	18	10	12	6	19	4	1
a portable playground (Village Sports Facility)	23,834	2,475	4,251	3,239	3,645	3,567	4,211	1,764	487
Gym	1,194	156	341	137	105	151	175	84	28
All Weather Gate Ball Stadium	1,829	23	477	200	66	373	400	232	38
pool	474	97	135	57	43	53	56	19	2
roller skating rink	179	15	57	30	19	26	18	10	2
shooting arena	25	-	2	5	5	5	2	5	-
Korean archery field	281	8	62	51	21	42	55	33	5
archery field	25	-	7	2	3	4	5	3	-
riding ground	20	-	1	3	6	2	5	3	-
Golf field	89	33	13	15	5	3	9	9	2
Rowing And Canoe Race	10	-	2	2	-	3	2	1	-

Course									
yacht rink	17	-	1	8	1	2	3	2	-
ice rink	32	3	10	5	2	3	2	7	-
snow stadium	4	-	-	-	-	-	-	4	-
Etc	961	40	339	191	93	73	97	92	19
Sum	31,5 54	3,0 12	6,374	4,377	4,305	4,565	5,490	2,477	63 3

2-3. Leisure Sports Status

The term leisure sports is not clearly defined legally and academically as a combination of English Leisure and Sports, but it is commonly used socially, such as "sports that combine leisure with entertainment" or "voluntary physical activities performed in leisure time to improve the quality of life." The National Sports Promotion Act categorizes physical education into professional sports and daily sports, while professional sports are defined as "athletic sports activities performed by athletes" and daily sports are "voluntary and daily sports activities performed to improve health and physical strength" (National Sports Promotion Act, 2022), while it does not define a clear concept of leisure sports. Although the concept is not clearly defined legally, clubs and associations of various sports such as rock climbing, water skiing, and paragliding are joined and operated by the National Sports Council. From this point of view, leisure sports can be viewed as a concept that includes some sports belonging to daily sports (Han Sun-kyo, 2014; Lee et al 2020). The definition of the concept of leisure sports began to be presented in the mid-1980s, and literature explaining the concept has been reported in earnest since the mid-1990s, when rapid social changes such as nuclear familyization and reduction of working hours began. Looking at this, there are "play performed as a social means of finding rewards in human life" (Jeong Cheong-ja et al., 1985), "actions made to promote body, mind, and spirit" (Yoon Jae-baek, 1999), and "actions that satisfy physical activity, competitiveness, and technical learning as leisure activities" (Sung Moon-jeong et al., 2006). Various opinions are presented depending on the researchers regarding the classification of leisure sports. Farrell et al. (1991) categorizes leisure sports into four types: team sports and field sports, individual sports and interpersonal sports, recreational sports, and physical fitness-enhancing sports, and the National Sports Council classifies them into four types: health and physical promotion leisure sports, competitive leisure sports, nightlife leisure sports, and folk game leisure sports. In addition, the criteria for classifying types that the general public can recognize most easily are based on the natural environment in which actions take place and can be classified into three types: land type, water type, and aviation type (Yoon Tae-hoon, 2012). The track and field type is performed on the ground, and sports climbing, rock climbing, and survival games are representative events, and the award-winning type is a sport that takes place in or on the water, and representative events include skin scuba, water skiing, and rafting. And the aviation type is related to the sky, and paragliding, hang gliding, and skydiving are well known. The following <Table 7> summarizes the events of leisure sports according to the natural environment and related legal grounds.

[Table 7] Classification of leisure sports

Sortation	Category	legal basis
land type (32)	Sports climbing, rock climbing (with ice walls), survival game, clay shooting, auto racing, bungee jumping, zip line, motorcycle racing, cycling, bicycle, climbing, inline skating, orienteering, hunting, card, bungee jumping, treetring, ATV, streetboarding, crossbow, wheelman,	National Sports Promotion Act Tourism Promotion Act

	motorboarding, skateboarding, boomerang, snowbike, mountainboard, park golf, sportskite, snowcooter	building law Urban Planning Act the Park Act the Forest Law
Water type (16)	Water Skiing, Wakeboarding, Water Motorcycle, Banana Boat, Windsurfing, Skinsurfing, Fishing, Rafting, Canoeing, Kayaking, Waterslide, Surfing, Cliff Diving, Rafting, Underwater Scooter, Powerboat, Sea Rafting	Water Leisure Safety Act
Air type (10)	Paragliding, Model Aviation, Hang Gliding, Skydiving, Microlight, Motor Paragliding, Hot Air Ballooning, Gliding, Homemade Aircraft, Kitesurfing, Soaring	the Aviation Act Aviation Law Enforcement Regulations

As of 2017, the number of leisure sports-related facility companies was 2,203, an increase of 296 (15.5%) compared to 2016. Among them, 1,284 water types accounted for 58.3% of the total, 784 land types (35.6%) and 135 aviation types (6.1%). By region, Gangwon-do had the largest number of 673 locations, which is expected to be due to the fact that Gangwon-do includes both mountains and seas, making it suitable for the location conditions of leisure sports that are heavily influenced by topography. In addition, the Gyeonggi/Incheon area and the Busan/Gyeongnam area also showed a leisure sports facility ratio of more than 10%.

[Table 8] Current status of leisure sports facility companies (2017)

Sortation		S u m	Se ou l	Gyeonggi /Incheon	Busan/G yeongna m	Daegu/G yeongbu k	Daejeon/Sejon g/Chungcheon g	Gw ang ju / Jeol la	Gan gw on	Je ju
La nd ty pe	Survival	237	3	30	49	8	19	11	117	-
	Bungee jumping	8	-	4	-	-	1	-	3	-
	cart	46	2	7	2	3	5	2	12	13
	Dropping Facility (Zipline)	35	-	4	5	3	4	3	15	1
	ATV	223	2	40	27	7	21	8	108	10
	Sports Climbing	195	47	44	32	35	18	11	6	2
	clay shooting	8	-	1	-	2	3	-	1	1
	Park Golf	32	5	8	4	3	1	-	10	1
Small sum		784	59	138	119	61	72	35	272	28

W a t e r t y p e	rafting	28 9	7	9	51	23	6	21	172	-
	Wakeboard/water skiing	23 5	15	139	11	7	12	8	43	-
	Water slide	43	-	20	1	2	1	2	17	-
	water motorcycle	23	3	2	9	1	-	2	4	2
	Windsurfing/surfing	14 2	14	2	33	4	3	3	60	23
	Skin scuba	23 1	40	32	54	20	8	9	33	35
	Canoe/Kayak	94	4	7	21	4	8	5	32	13
	motorboat/powerboat	17 8	2	108	14	6	9	7	24	8
	Yachts	49	2	7	18	2	3	7	3	7
	Small sum	1,2 84	87	326	212	69	50	64	388	88
A i r t y p e	paragliding	99	6	19	11	9	32	7	13	2
	Hang gliding	4	2	2	-	-	--	-	-	-
	ultra-light aircraft	20	2	9	1	3	4	1	-	-
	Hot air balloon	6	-	1	-	1	2	-	-	2
	skydiving	6	2	3	1	-	-	-	-	-
	Small sum	13 5	12	34	13	13	38	8	13	4
Sum		2,2 03	158	498	344	143	160	107	673	120

2-3. Current Status of Sports Safety Management

In order to prevent accidents in the course of sports activities, appropriate management measures must be established and systematically operated. Through this, it will be possible to promote the safety of everyone and ultimately improve the quality and happiness of individual life. In other words, a manual that can cope with all possible situations for safe sports activities as a whole is needed, and compulsory legal devices and continuous and repetitive efforts must be put into place to increase effectiveness. Therefore, in order to discuss the safety management of various sports events, it is necessary to comprehensively look at the facilities where sports activities take place and matters related to safety in the process of sports activities.

The Sports Safety Manual and Underwater Sports (2015) presented by the Sports Safety Foundation introduces cases of accidents by major sports facilities, pointing out that most accidents are caused by lack of guidelines for safety management facility manuals and safety rules (Kim Business, 2015). As shown in <Table 9>, many of the accidents in sports facilities are insufficient facility management, and in addition, the lack of safety management personnel is also indicated as an important accident factor.

[Table 9] Types of accidents by major sports facilities

Sortation	Accident case	Type of accident
indoor swimming pool	<ul style="list-style-type: none"> ▪ Personal injury due to boiler explosion ▪ Hitting head on water level control panel ▪ Slipping and falling in the shower 	lack of bewareing of water and safety measures
Indoor gymnasium	<ul style="list-style-type: none"> ▪ The stand falls from the ceiling ▪ a fall caused by poor cleaning ▪ a fall caused by poor wire arrangement ▪ Running machine user fall due to power outage 	negligence in the management of facilities
ice rink	<ul style="list-style-type: none"> ▪ Falling on icy areas such as skating ▪ Accident due to negligence in safety management of safety personnel ▪ an accident caused by poor management of the safety fence 	Negligence of ice management and safety personnel
sports complex	<ul style="list-style-type: none"> ▪ Wheelchair Collision with Lawn Tidying Machine ▪ a fracture in a chair while watching a game ▪ an accident caused by the fall of a frozen ball of snow on the roof ▪ Accident due to track loss due to ground subsidence 	Damage to facilities due to natural disasters
riding ground	<ul style="list-style-type: none"> ▪ A user crash during horseback riding lessons ▪ a horse-shocked accident 	Non-compliance with safety personnel and safety guidelines

The legal basis for the safety management of sports facilities stipulates the establishment of basic plans, delegation and entrustment of safety inspections, safety inspections, etc., implementation of safety inspection results, operation of a comprehensive system for information management of sports facilities, and rewards for safety management in Articles 4-2 through 4-7 of the Act on the Installation and Use of Sports Facilities.

[Table 10] Laws and regulations concerning safety management of sports facilities

Sortation	Contents	legal basis
Safety management of sports facilities	<ul style="list-style-type: none"> ▪ Matters concerning mid- and long-term safety management policies for sports facilities 	Article 4-2
Establishment of a Basic Plan	<ul style="list-style-type: none"> ▪ Matters concerning the improvement of the safety management system and duties of sports facilities 	

	<ul style="list-style-type: none"> ▪ Matters concerning education, public relations, and safety inspections to prevent accidents related to sports facilities ▪ Construction and management of computer systems related to safety management of sports facilities ▪ Matters concerning the management of hygiene and quarantine against infectious diseases, etc. in sports facilities 	
Safety inspection of sports facilities	<ul style="list-style-type: none"> ▪ The Minister of Culture and Sports shall regularly conduct safety inspections related to the safety management of sports facilities 	Article 4-3
Delegation and entrustment of safety inspection of sports facilities	<ul style="list-style-type: none"> ▪ The following duties may be delegated and entrusted to an agency responsible for disaster management under the Framework Act on the Management of Disasters and Safety - Educational and public relations activities to prevent accidents related to sports facilities - Safety inspection related to safety management of sports facilities - Construction and management of computer systems related to safety management of sports facilities 	Article 4-4
Implementation of safety inspection results	<ul style="list-style-type: none"> ▪ Disclosure of safety inspection results of sports facilities and notification to owners of sports facilities ▪ Repair and reinforcement of facilities when there is a serious defect 	Article 4-5
Operation of Comprehensive Information Management System for Sports Facilities	<ul style="list-style-type: none"> ▪ Basic Plan and Management Plan for Safety Management of Sports Facilities ▪ Safety Inspection Results of Sports Facilities ▪ Notification and implementation of the results of safety inspection of sports facilities and the results thereof 	Article 4-6
Rewards for Safety Management of Sports Facilities	<ul style="list-style-type: none"> ▪ Rewards to the owners and facility operators of facilities with excellent safety management 	Article 4-7

As such, an appropriate safety management manual is presented under the Act on the Installation and Use of Sports Facilities, and the types of sports facilities are designated by the Presidential Decree under Article 3 of the same Act. Nevertheless, when sports facilities are subdivided, there is a blind spot for the application of laws and regulations. Since the National Sports Promotion Act only divides sports activities (sports) into "professional sports" and "living sports," there may be controversy over whether the safety management standards based on the "Act on the Installation and Use of Sports Facilities" also apply to leisure sports. Considering that Article 2 of the Act on the Installation and Use of Sports Facilities defines "facilities continuously used for sports activities (facilities that experience actual sports games in a virtual sports environment using information processing technology or mechanical devices)" as sports facilities, leisure sports facilities can also be regarded as a part of sports facilities, but the Enforcement Decree of the Act on the Installation and Use of Sports Facilities stipulates specific types of sports facilities, so various opinions can be presented as to whether leisure sports fall under this category. In addition, the enforcement decree restricts the form of facilities to playgrounds, gymnasiums, general sports facilities, and virtual experience sports facilities, which can also be controversial whether leisure sports that mainly use natural environments such as bungee jumping, artificial rock wall climbing, and extreme sports are included. As such, the National Sports Promotion Act and the Act on the Installation and Use of Sports Facilities, which are legal grounds for the safety management of current sports facilities, stipulate

only professional and daily sports as the subject of management, and it is also frequently pointed out that the legal basis for leisure sports is insufficient.

Various legal provisions were newly established to overcome legal blind spots in the safety management of these sports facilities, including the Aviation Act, the Fishing Boat Act, the Gyeongryun Correction Act, the Bicycle Use Promotion Act, and the Natural Park Act. These legal grounds are operated by the Ministry of Culture, Sports and Tourism, the Ministry of Land, Infrastructure and Transport, the Ministry of Public Administration and Security, the Ministry of Agriculture, Food and Rural Affairs, and the Ministry of Environment because the variety of sports has expanded the time and space in which sports activities take place. As a result, the responsibility and management area for safety management have become legally ambiguous, and related ministries are excessively established depending on sports events, causing waste of administrative power. Safety accidents at the site where sports are played are also caused by insufficient facilities, but in many cases, the carelessness of sports actors and the inexperience of management of operators are considered the main reasons. Therefore, despite the fact that the thorough safety awareness of users and managers is a very important factor, awareness of safety in the field of sports activities is very insufficient. This is evident from the results of a safety accident survey conducted by the Sports Safety Foundation. <Table 11> shows the results of a survey of 11,745 people (7,725 for all sports and 4,020 for professional sports) who experienced injuries through sports activities in 2019.

[Table 11] Investigation on Safety Accidents (N= 11,745)

sortaion	professional sportsman	life sportsman
Number of injury experiences per year	▪ Five times	2.7 times
the reason for the injury	<ul style="list-style-type: none"> ▪ Unreasonable action: 48.0% ▪ Collisions with people: 24.5% ▪ Slip and fall: 13.3% ▪ Wrong landing: 11.5% ▪ Others: 7.9% 	<ul style="list-style-type: none"> ▪ Unreasonable action: 47.1% ▪ Collisions with people: 24.5% ▪ Slip and fall: 12.4% ▪ Wrong landing: 10.8% ▪ Others: 7.8%
the aftereffects of an injury	▪ 21.8%	▪ 21.2%
Protective Equipment and Safety Supplies Wear status	<ul style="list-style-type: none"> ▪ Wearing: 24.4% ▪ Unworn: 75.6% 	<ul style="list-style-type: none"> ▪ Wearing: 31.2% ▪ Unworn: 68.8%
environmental hazards Pre-checking	<ul style="list-style-type: none"> ▪ Confirmation: 43.7% ▪ Unconfirmation: 56.3% 	<ul style="list-style-type: none"> ▪ Confirmation: 36.9% ▪ Unconfirmation: 63.1%
Safety accident prevention method Degree of familiarity	<ul style="list-style-type: none"> ▪ Knowing: 68.0% *Knows very well: 16.1% *Almost know: 51.9% 	<ul style="list-style-type: none"> ▪ Knowing: 40.7% *Knows very well: 2.8% *Almost know: 37.9%
How to deal with safety accidents Degree of familiarity	<ul style="list-style-type: none"> ▪ Knowing: 64.0% *Knows very well: 14.8% *Almost know: 49.2% 	<ul style="list-style-type: none"> ▪ Knowing: 35.9% *Knows very well: 2.8% *Almost know: 33.2%
Experience in completing safety training	<ul style="list-style-type: none"> ▪ Completion: 64.1% ▪ Failed to complete: 35.9% 	<ul style="list-style-type: none"> ▪ Completion: 41.5% ▪ Failed to complete: 58.5%

Sports Activity Habits		warm-up exercise	
	93.2%	Wear appropriate clothing/safety equipment	59.3%
	80.5%	Inform the leader of pain and injury	50.3%
	79.9%		50.6%
	59.2%	Identify external environmental factors before exercising	54.2%
	67.2%	Recognition of first aid methods such as CPR	51.1%
	85.5%	Performing a finishing exercise	38.4%

According to a survey on injury experiences over the past year, professional sportsmen were 1.8 times more frequent than 2.7 sportsmen, which is expected to be due to the relatively high intensity and duration of exercise. The reason for the injury was that "excessive movement" accounted for about half of both professional and daily sportsmen, followed by "collision with people," "slip and fall," and "misplacement." The total number of aftereffects from injuries was about 20%, indicating that 1 in 5 people were experiencing aftereffects. In sports activities, 24.4% of professional sportsmen and 31.2% of all sportsmen wore protective equipment and safety goods, and more than half did not check environmental risk factors, confirming that most people lacked awareness of safety. It was found that more than 60% of people were aware of how to prevent and deal with safety accidents. In addition, professional sportsmen were significantly higher than those of daily sportsmen in sports activities such as warming up, dressing up, first aid, and finishing exercises. Finally, the experience rate of safety education was 64.1% for professional sportsmen and 41.5% for daily sportsmen, confirming that they lacked experience in completing safety education in preparation for accidents and injuries during sports activities.

Considering the results of the safety accident survey examined so far, the biggest problem is that safety education has not been sufficiently conducted. In addition to wearing protective equipment/safety equipment, identifying risk factors, preventing/counteracting safety accidents, and implementing warm-up and finishing exercises during exercise can be sufficiently improved through repeated safety training. However, it can be inferred from the above statistical data that there was no opportunity to accumulate knowledge about safety because the experience rate of safety education was only half. The point to be pointed out here is the verification of the institutional mechanism for the implementation of safety education. Although various safety guidelines are specified in most sports sites, it is true that the case of properly notifying users in advance is very limited. Since this insensitivity to safety is a major factor in increasing the incidence of safety accidents as a result, institutional discussions that can be legally enforced will be needed.

3. Development of Safety Management in Sports

3-1. Legal and institutional improvement to strengthen the safety of sports facilities

A total of 46 sports items are specified as sports facilities in attached Table 1 of Article 2 of the Enforcement Decree of the Act on the Installation and Use of Sports Facilities. Although new sports such as bungee jumping and extreme sports continue to emerge recently, there is no legal basis for safety management of these sports' facilities. However, other laws such as the Building Act, the Facility Management Act, and the Water Leisure Safety Act are used as legal grounds for safety management for new sports events, but they are still not applied to all sports events. As described above, the main department of safety management is assigned according to the time and space in which sports activities take place, so it is often ambiguous not only in the waste of administrative power but also in the application of actual laws and regulations. Therefore, it is necessary to amend the "Act on the Installation and Use of Sports Facilities", which is the most basic legal basis for the safety management of sports facilities. The scope of the relevant sports events should be expanded and the standards for the installation and safety management of sports facilities should be clarified. In particular, the legal vacuum should be reduced by comprehensively including the rapidly

increasing number of new leisure sports. In addition, policies to include various regulations related to sports safety management within a single legal framework should also be promoted. As previously discussed, various side effects are occurring as legal grounds applied to each item are managed by various laws, and it is necessary to establish new revised laws and enforcement ordinances by integrating various laws into one. The competent authorities of these laws need to be unified into the Ministry of Culture, Sports and Tourism to respond quickly to all safety-related matters.

3-2. Training and placement of on-site safety management specialists in sports facilities

Sports facilities are particularly likely to cause safety accidents and can cause bodily injury due to momentary carelessness. In addition, safety accidents in the sports field reduce sports leisure life and cause anxiety rather than pleasure to managers and users. Therefore, the safety management of sports facilities must be carried out, and since sports sites are used by various age groups, comprehensive safety management is needed to cover all classes. 'Management' means controlling, directing, and supervising people, which requires a person with authority. In companies, the top management is the subject of management by the field supervisor or manager at the industrial site. Therefore, the main body of safety management of sports facilities will be field safety management personnel. Legal regulations have a great impact on securing the safety of sports facilities, but to secure the safety of the field, it is necessary to utilize professional safety management experts, which will enable objective and practical safety. However, among the various safety management policies specified in Article 4-2 of the Act on the Installation and Use of Sports Facilities (Establishment of Basic Plans for Safety Management of Sports Facilities), regulations on the training and placement of safety management experts are not specified. In addition, Article 23 of the Act on the Installation and Use of Sports Facilities specifies the placement of sports leaders in sports facilities of a certain size or larger, but this is limited to the qualification verification of sports leaders. As such, the missing legal regulations for the deployment of safety management professionals are a factor that significantly affects the occurrence of safety accidents in sports facilities. In fact, according to Kim Business (2015)'s analysis of the types of accidents in sports facilities, the failure of safety management personnel along with facility management was identified as a major factor in the accident. In this respect, the 「Sports Facility Safety Management Certification (KSP045001)」¹⁾ pilot project implemented by the National Sports Promotion Agency will have a very positive impact on strengthening autonomous safety management capabilities. In the future, government-wide safety management professional training programs should be expanded, and institutional regulations on the deployment of safety management personnel should be established to prevent and cope with safety accidents in sports facilities.

3-3. Training and placement of on-site safety management specialists in sports facilities

Most safety accidents in all sports are caused by a lack of awareness of the safety of managers and users. Therefore, continuous and thorough safety education for all stakeholders can be said to be the first step in preventing accidents. Nevertheless, matters related to safety management, including safety education in the current sports field, are not designated as the responsible duties of the Ministry of Culture, Sports and Tourism, and are specified to be entrusted to the disaster management agency. In addition, Article 24 of the Installation and Use of Sports Facilities Act specifies standards for the safety and hygiene of sports facilities, but does not include obligations for safety education. Due to the lack of safety education regulations, both managers and users of sports facilities lack safety awareness, and education in the sports field is conducted ineffective. In order to increase the efficiency of safety education, it is necessary to sufficiently train experts in the field, develop and distribute systematic education programs. In addition, it is necessary to establish an online education system and develop program contents suitable for each event to increase accessibility to safety education. In order for these to be active, efforts at the government or local government level, not managers or users of each facility, will be required, and if necessary, it should be legislated and set as a compulsory mandatory provision.

3-4. Raising safety awareness among participants in sports activities

One of the most basic and important ways to prevent safety accidents in sports activities is to establish safety awareness among users who enjoy sports. Even if the aforementioned laws and regulations are improved, safety management experts are nurtured, and safety education is

expanded, the effectiveness will inevitably decrease if the subject using the sports facility lacks safety awareness. In fact, if you look at safety education at most leisure sports sites, you will find many cases of small talk or mischief. If these situations continue to accumulate, the occurrence of safety accidents will increase, and the scale of damage in actual accident situations will also increase. In addition, promoting safety can also be a way to raise safety awareness. The importance of safety should be promoted by utilizing various promotional means such as TV, newspapers, and online, and promotional means such as videos and pamphlets should be actively used. Through this, many people's perception of safety will be changed, and ultimately, the occurrence of safety accidents can be gradually reduced.

3. Conclusion and Suggestion

Sports are deeply involved in people's daily lives to the extent that they contribute to their leisure, health promotion, and improvement of national welfare, and the field of sports is also rapidly expanding due to the explosive increase in the sports population and various new leisure sports. However, it is true that the possibility of accidents caused by sports activities is also increasing in return. Sports safety accidents are caused by a combination of various factors such as careless operation of sports facilities, poor operation of managers, and lack of safety awareness of users. Therefore, sports safety management requires a comprehensive approach to sports facilities and all matters necessary for sports activities. Accordingly, this study was conducted with the aim of presenting development measures to improve sports safety management after examining problems from various angles. First, the problems of sports safety management derived from various prior studies and statistical data are as follows.

First, the legal basis for the safety management of sports facilities was insufficient or systematic. There were blind spots in sports facilities where the laws and regulations were applied, and the actual department in charge of operating the regulations was subdivided into a district heating system, so it was found to be ineffective and wasted administrative power. Second, there was a lack of awareness of the safety of managers and users of sports facilities. According to a survey of people who experienced injuries during actual sports activities, the level of familiarity and implementation of warm-up and finishing exercises during exercise was very low, as well as wearing protective equipment/safety equipment, identifying risk factors, and preventing/counteracting safety accidents. Third, there is not enough safety education. Despite the fact that safety education is the basis for awareness of safety, neglecting it has resulted in no opportunity to accumulate knowledge of safety, and in reducing the effectiveness of accident prevention and accident reduction. In order to improve these problems, this researcher suggested the following specific implementation measures. First, legal and institutional improvements are needed to strengthen the safety of sports facilities. It is necessary to clarify the legal scope and standards of sports safety management limited to some sports, and to increase the effectiveness by including various regulations currently scattered in various laws and regulations within a single legal framework. Second, it is necessary to cultivate and deploy on-site safety management specialists in sports facilities. Along with legal regulations, training and deployment of safety management experts is an essential prerequisite for practical safety management of sports facilities, and synergy can occur when accompanied by legal regulations. Third, it is necessary to conduct continuous safety education on sports safety management. According to statistics, sports safety accidents are often caused by carelessness of managers and users, and continuous safety education must be provided to solve them. Therefore, it is necessary to sufficiently train experts in safety education and develop and distribute systematic education programs. Fourth, it is necessary to raise the safety awareness of sports activity users. In order to maximize the positive effects of improving laws, training safety management experts, and expanding safety education, the safety consciousness of the subjects using sports facilities should be the basis. Therefore, it is necessary to raise safety awareness of participants in sports activities through active promotion of safety as well as safety education. Safety cannot be overemphasized. In order to increase the function of the virtuous cycle of leisure, health promotion, and welfare realization, thorough management of sports safety and raising safety awareness will be essential duties for all of us living in modern society.

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