BUSAN METROPOLITAN CITY'S PERFORMANCE ANALYSIS AWARDED AT NATIONAL SPORTS FESTIVAL

Moon Soo Park

Department of Physical Education/Dong-eui University, Busan 47340, Republic of Korea Corresponding Author: Moon Soo Park E-mail: sports8688@deu.ac.kr

ABSTRACT

Sports activities depend on a sufficient number of competitors to take place, as participants alone are unable to organise a sport competition. In this study, I analyzed the performance of the National Sports Festival in Korea and the performance of the National Sports Festival in Busan in 2018 and 2019. Busan ranked fourth with 122,377 points on 2019, but fifth the previous year. Compared to the previous year, it showed 7 sports events (track and field, cycling, lawnball, tennis, gateball, basketball, and badminton) for improving performance These seven stocks rose more than 1,000 points year-on-year. Compared to the previous year, it showed 7 sports events for downward. There did not participate in the relay and weakened the business team's ability in swimming, a lack of athletes and performance in archery, the lack of performance and the association's functions (Boccia), a shortage of players in table tennis, the lack of physical strength of the player (goal ball).

KEYWORDS: Busan, Korea, Sports, National Sports Festival.

INTRODUCTION

The most convincing evidence concerns health benefits, which prevent or reduce physical and mental health problems and save on health care costs (Bridges, 2006). Sports are embedded in national cultures and are seen as contributing to social development (OECD, 2023). Sports are embedded in societies and have histories that in complex ways interact with developments in the surrounding communities (Aggerholm & Breivik, 2021).

Furthermore, every sport has a governing body that sets the rules of the game, promotes the sport and collects revenues. Many countries are holding sports competitions. The Korean National Sports Festival (KNSF) is an annual sports competition held in the <u>South Korea</u>. Tosa (2015) examined the history and characteristics of sport nationalism in South Korea as a step toward a comparative study in East Asia, with special emphasis on media, postcolonial history of the policies, and the ritual dimension of sport.

The Korean government has sought triumphalism embodied by a focused strategy of close collaboration at the state and local levels, elitist training method, special rewards for athletes' distinguished results, and so on. Journalism is fond of this topic, its academic investigation is still in a nebulous stage, particularly in Asia (Bairner, 2001; Smith & Porter, 2004; Tomlinson & Young, 2006).

For a full week each October, about 20,000 athletes representing 16 cities and provinces throughout the country compete in about 40 separate sports. The site rotates among the major cities, including <u>Seoul</u>, <u>Busan</u>, <u>Daegu</u>, <u>Gwangju</u>, <u>Incheon</u> and several co-hosting cities. The 2005 festival was held in <u>Ulsan</u> and the 2009 festival in <u>Daejeon</u>. Competitions are held in <u>High School</u>, College, and Regular Divisions.

The current annual numbering originates from the 1920 All-Korea Baseball Series and the formation of the Korean Sports Festival (Joseon Sports Association). The <u>Japanese colonial government</u> held a multi-sport competition in 1925, but the Korean Sports Festival first became a national multi-sport competition in 1934, with baseball, soccer, tennis, track and field, and basketball.

In 1938, the Korean Sports Festival was forcibly dissolved by the colonial government. The festival, numbered 26th, resumed upon the 1945 liberation of Korea. With the establishment of South Korea in 1948, the event was renamed the "National Sports Festival," and individual competition was changed to competition among cities and provinces. The festival was cancelled in 1951, during the Korean War.

Busan Sports Council was established in 1963 and is an organization established under the Korean Sports Council to promote school sports and daily sports in Busan, promote civic health and physical strength, and improve leisure and welfare.

There have been several studies on the analysis of sports competitions (Pradhan et al., 2021). The main objective of this study is to analyze the Busan's performance at the 2018 and 2019 KNSP. In order to improve their performance, Busan-si government should perform such Analysis which would help them in the improvement of their policies and strategies by providing current statistics to them.

AN ANALYSIS OF ATHLETIC PERFORMANCE

I have taken two datasets which provide us with large volume and a large variety of data for Analysis. The dataset consists the information about the players and their entire details like 17 cities, total points, players, fellow players for which they play, medals won (Gold, Silver and Bronze) and many more. This data can be used to analyze the performance of the particular player and can also help in the comparative study between two or more players.

RESULTS AND DISCUSSION

The 2018 National Sports Festival (the 99th) was held in Iksan, Jeollabuk-do Province. A total of 47 events (46 official, 1 exhibition event) were held and 18,000 athletes participated in the event alone. Gyeonggi Province topped the list with a total score of 223,376 (Table 1). Jeollabuk-do province ranked second with a total score of 159,878. However, the total score in the overall ranking includes 20% of the points scored in the record game as an additional point for the venue (Jeonbuk-do). The third place was taken by the Seoul Metropolitan Government. Busan-si ranked fifth with 118,700 points.

Table 1. 2018 Korean National Sports Festival Overall ranking by city and province

Rank	Group (*)	Total score (**)	Gold	Siver	Bronze	Total
1	Gyeonggi	223,376	136	122	141	399
2	Chungbuk	159,878	112	84	79	275
3	Seoul	156,079	86	104	108	298
4	Jeonbuk	142,983	44	51	47	142
5	Busan	118,700	69	68	69	206
6	Daegu	118,043	48	61	72	181
7	Daejeon	116,719	69	59	61	189
8	Chungnam	95,716	37	49	48	134

9	Jeonnam	95,234	35	46	53	134
10	Gyangju	91,632	47	39	62	148
11	Gyeongbuk	88,221	52	51	63	166
12	Ulsan	84,882	79	51	39	168
13	Incheon	79,588	43	47	59	149
14	Gyeongnam	74,492	33	32	45	110
15	Gangwon	68,090	20	39	35	94
16	Jeju	64,860	34	36	31	101
17	Sejong	11,490	8	1	5	13

^{*} Gyeonggi: Gyeonggi-do, Chungbuk: Chungcheongbuk-do, Seoul: Seoul-si, Jeonbuk: Jeollabuk-do, Busan: Busan-si, Daegu: Daejeon: Daejeon-si, Chungnam: Chungcheongnam-do, Jeonnam: Jeollanam-do, Gyangju: Gyangjusi, Gyeongbuk: Gyeongsangbuk-do, Ulsan-si, Incheon: Incheon-si, Gyeongsangnam-do, Gangwon: Gangwondo, Jeju: Jeju-si, Sejong: Sejong-si.

The 100th National Sports Festival in 2019 was held in Seoul. In the Seoul event, 47 sports were held, including 45 regular and two exhibition events. Seoul-si topped the list with a total score of 236,954 (Table 1). Gyeonggi-do province ranked second with a total score of 229,729. Jeollabuk-do Province ranked third with 139,522 points. Busan ranked fourth with 122,377 points, but fifth the previous year.

It is true that as sports diversified and the number of participating athletes surpassed 25,000 and 30,000, the national sports competition was criticized for over-expanding and aggravating the finances of sports facilities built for hosting the games. However, as time passed, sports facilities have become the infrastructure for sports-for-all, and the increase in new sports should not be overlooked as contributing to the creation of new jobs and healthy lives of the people across the country (Korea Sports & Olypic Committee, 2019).

Table 2. 2019 Korean National Sports Festival Overall ranking by city and province

Rank	Group	Total score	Gold	Siver	Bronze	Total
1	Seoul	236,954	116	123	167	406
2	Gyeonggi	229,728	157	115	154	426
3	Chungbuk	139,552	94	91	62	247
4	Busan	122,377	86	61	79	226
5	Daejeon	108,182	62	61	53	176
6	Daegu	105,792	33	59	58	150
7	Chungnam	102,814	38	54	59	151
8	Gyangju	97,233	56	45	66	167
9	Gyeongbuk	96,300	46	61	72	179
10	Incheon	90,925	46	43	64	153
11	Jeonbuk	89,782	31	48	58	137
12	Gyeongnam	82,077	40	39	48	127
13	Ulsan	77,411	72	34	49	155
14	Jeonnam	76,424	25	47	44	116

^{**} Total score = Participation score (number of players with disabilities/non-disabled) + Score for each event.

15	Gangwon	70,296	31	41	30	102
16	Jeju	58,100	28	47	28	103
17	Sejong	15,988	10	1	8	19

Table 3 shows the results of the 2018 National Sports Festival, in which professional players other than hobbyists participated. Gyeonggi Province topped the list with a total score of 198,165.64. In the overall score, Chungcheongbuk-do came in second and Seoul City came in third. Busan ranked fourth with 99,604.6 points.

Table 3. Ranking of professional athletes by city and province at the 2018 Korean National Sports Festival

Rank	Group	Total score	Gold	Siver	Bronze	Total
1	Gyeonggi	198,165.64	111	93	110	314
2	Chungbuk	140,103.88	80	67	59	206
3	Seoul	134,663.50	71	70	83	224
4	Jeonbuk	128,788.52	43	46	41	130
5	Daegu	106,447.40	43	55	63	161
6	Busan	99,604.60	49	47	46	142
7	Daejeon	98,768.40	51	44	52	147
8	Chungnam	82,115.00	27	30	30	87
9	Gyeongbuk	80,523.80	47	48	56	151
10	Gyangju	80,300.68	40	31	53	124
11	Jeonnam	79,010.20	23	34	38	95
12	Gyeongnam	68,339.60	27	29	40	96
13	Ulsan	67,710.80	52	36	24	112
14	Incheon	67,212.40	19	31	43	93
15	Gangwon	57,937.40	17	31	30	78
16	Jeju	55,383.60	26	31	25	82
17	Sejong	11,459.40	8	1	5	14

Table 4 shows the results of the National Sports Festival hobbyist competition. Gyeonggi Province topped the list with a total score of 25,281. The Seoul Metropolitan Government came in second with 21,145.7 points. Chungcheongbuk-do ranked third with 19,774.6 points. Busan ranked fourth with 19,095.6 points.

Table 4. Ranking of hobbyists by city and province at the 2018 Korean National Sports Festival

Rank	Group	Total score	Gold	Siver	Bronze	Total
1	Gyeonggi	25,281.00	25	29	31	85
2	Seoul	21,415.70	15	34	25	74
3	Chungbuk	19,774.60	32	17	20	69
4	Busan	19,095.60	20	21	23	64
5	Daejeon	17,951.00	18	15	9	42
6	Ulsan	17,171.30	27	15	15	57
7	Jeonnam	16,056.40	10	12	15	37
8	Chungbuk	14,195.40	1	5	6	12
9	Chungnam	13,601.50	10	19	18	47
10	Incheon	12,375.60	24	16	16	56
11	Daegu	11,596.50	5	6	9	20
12	Gyangju	11,332.10	7	8	9	24
13	Gangwon	10,153.20	3	8	5	16
14	Jeju	9,476.40	8	5	6	19
15	Gyeongbuk	7,697.50	5	3	7	15
16	Gyeongnam	6,153.20	6	3	5	14
17	Sejong	31.00	0	0	0	0

Table 5. Comparison of scoring status by sport at the 2018 National Sports Festival

Athletic sports	Gyeonggi	Chungbuk	Seoul	Jeonbuk	Busan	Daegu	Daejeon	Chungnam	Jeonnam	Gyangju
Field	11,895	13,034	10,486	13,817	6,938	10,269	10,170	6,886	7,419	3,654
Archery	6,602	3,448	1,903	947	2,910	2,993	4,073	0	1,437	5,092
Track	15,989	14,668	17,692	5,434	12,077	9,708	9,717	7,838	6,803	10,982
Badminton	8,473	2,091	4,229	4,875	2,507	4,658	4,979	2,284	2,900	594
Billiards	7,017	2,988	2,260	2,891	1,397	1,000	1,700	2,266	3,804	1,284
Boccia	4,623	1,506	2,936	2,842	94	1,053	950	2,551	3,093	3,256
Cycle	5,359	7,784	4,429	9,023	928	0	7,235	2,172	5,414	636
Soccer	12,424	8,848	12,029	13,606	7,691	8,482	4,329	6,725	6,728	3,462
Goalball	1,578	0	5,541	4,973	4,669	0	3,333	4,071	4,803	2,230
Gateball	1,930	1,470	1,960	3,164	970	2,084	0	1,000	3,408	0
Judo	6,569	3,881	4,408	3,598	2,966	907	1,185	761	294	0
Lawn Ball	11,135	2,558	6,917	12,732	8,125	8,558	6,894	4,098	10,573	5,894
Park Golf	3,055	46	1,502	1,029	1,666	3,237	380	1,777	2,182	2,370
Weightlifting	20,232	27,069	9,168	7,210	24,122	2,629	9,659	6,832	13,759	3,761
Rowing	4,206	1,438	5,423	0	324	2,705	767	510	1,151	1,351
Yacht	492	0	0	0	390	0	0	338	0	0
Shooting	11,680	10,094	139	1,990	464	2,635	1,258	1,968	396	7,074
Swimming	19,153	21,976	9,532	4,256	17,916	10,447	15,797	799	791	8,804
Bowing	16,812	4,552	8,719	6,619	3,522	15,360	11,683	6,370	4,919	3,426
Taekwondo	3,213	120	4,602	2,541	224	0	0	2,324	925	2,198
Table Tennis	20,604	18,970	21,960	20,885	16,581	20,463	13,949	11,040	3,963	14,142
Volleyball	5,612	2,979	2,250	6,584	0	0	0	6,862	5,422	6,553
Basketball	5,292	912	6,012	1,824	0	4,038	3,456	4,684	0	0
Dance Sports	5,218	0	4,336	1,125	120	2,569	0	837	1,680	797
Fencing	3,878	3,725	1,611	6,096	768	602	0	7,709	1,655	2,411
Wheelchair Rugby	4,192	2,493	2,736	2,840	770	0	3,515	2,693	936	0
Tennis	5,648	2,800	2,741	1,717	190	3,253	1,396	0	277	1,342
Total	222,881	159,450	155,521	142,618	118,329	117,650	116,425	95,395	94,732	91,313

Table 6. Comparison of scoring status by sport at the 2019 National Sports Festival

Athletic sports	Seoul	Gyeonggi	Chungbuk	Busan	Daejeon	Daegu	Chungnam	Gyangju	Gyeongbuk	Incheon
Field	14,630	11,086	9,908	12,346	10,394	8,565	9,983	5,147	11,053	4,323
Archery	4,974	2,400	4,036	798	3,190	3,280	0	4,347	1,920	730
Track	18,208	15,771	6,632	11,469	6,975	5,343	5,642	10,244	11,250	5,823
Badminton	10,805	8,269	1,816	3,470	3,524	4,005	1,567	369	6,364	3,894
Billiards	3,418	9,680	1,936	1,430	1,050	4,940	2,022	1,340	4,630	2,470
Boccia	6,114	4,224	1,126	0	868	455	4,990	4,556	0	1,008
Canoe	2	1	2	1	0	0	0	0	1	1
Cycle	9,123	7,406	5,540	3,365	5,360	0	3,306	788	8,771	7,277
Soccer	17,846	14,478	8,090	8,143	3,255	8,478	7,348	4,329	3,192	4,456
Golf	4	0	0	0	0	0	0	3	3	0
Goalball	5,805	2,733	1,894	3,597	3,165	0	4,282	1,438	0	4,704
Gateball	2,880	3,140	3,140	2,240	500	1,680	1,000	500	2,000	500
Judo	5,671	1,768	3,180	3,659	1,268	1,329	72	0	2,432	0
Lawn Ball	11,491	10,045	5,377	9,922	9,212	4,413	4,159	6,928	939	6,646
Park Golf	4,027	5,093	140	1,417	928	3,656	3,767	4,154	692	2,463
Weightlifting	9,708	20,918	29,585	23,276	10,476	1,608	10,997	10,457	8,260	10,227
Rowing	7,143	4,705	1,204	831	964	3,146	779	1,911	552	963
Yacht	170	664	0	376	0	0	280	0	0	0
Showdown	1	0	4	0	0	5	0	0	5	5
Shooting	7,907	6,006	9,323	1,214	0	2,884	1,389	1,926	239	2,924
Sjoelen	2	0	0	0	0	0	0	0	2	0
Swimming	17,208	19,183	13,934	12,538	16,577	7,052	1,855	10,499	3,211	2,185
Triathlon	1	1	0	0	0	0	0	0	1	1
Bowing	11,639	22,050	9,956	2,834	14,569	17,278	7,120	5,437	6,040	7,891
Taekwondo	5,586	3,149	380	203	0	506	4,071	1,577	1,157	130
Table Tennis	28,206	23,632	14,081	14,771	9,895	19,100	8,170	11,763	18,340	7,767
Volleyball	6,582	5,298	0	0	0	2,250	6,377	2,288	0	3,344
Basketball	7,606	6,370	0	1,140	2,520	3,378	1,520	1,140	1,680	1,960
Dance Sports	6,166	4,051	0	602	0	0	460	0	395	1,554
Fencing	5,508	8,435	2,694	672	0	0	7,390	2,722	0	0
Wheelchair Rugby	4,110	3,357	3,029	0	2,786	0	3,914	0	2,778	3,616
Tennis	3,763	5,228	2,121	1,686	420	2,067	0	3,079	0	3,714
Total	236304	229,141	139,128	122,000	107,896	105,418	102,460	96,942	95,907	90,576

Compared to the previous year, it showed 7 sports events for improving performance and 7 sports events for downward (Table 7). In seven events with improved performance, there was an improvement in performance by securing excellent athletes in track and field. There was an excellent visual performance in the disabled part in the cycling. There was an improvement in women's and team performance in lawnball. There was a performance improvement in tennis and badminton. It advanced in the team tournament in the gateball. These seven stocks rose more than 1,000 points year-on-year.

On the other hand, there were many sports where the grades were lowered. There did not participate in the relay and weakened the business team's ability in swimming. There was a lack of athletes and performance in archery. In Boccia, the lack of performance and the association's functions were poor. There was a shortage of players in table tennis. In the goal ball, the lack of physical strength of the player was remarkable. No outstanding athletes were able to compete in weightlifting. In bowling, there was a lack of players and performance.

Sports are interconnected with national culture and are a powerful instrument to improve social development and cohesion. Financial support is needed from high school and university sports departments to improve grades, but it is difficult to expect sufficient support from Busan City. Individual sports are more commonly organised as tours, run in different sites throughout the year and often with different organisers, although competitions are usually interconnected through a common ranking system (OECD, 2010). student athletes were classified as amateur, despite the fact that the concerning colleges and universities were engaging in very profitable sports activities (Bailey, et al., 2009). Unlike in Europe, clubs do not have incentives to invest in the development of young players, which is outsourced to high school and college sports programmes (Hoey et al., 2021; KEA; CDES, 2013).

Table 7. Top seven upward events and 7 downward events compared evious year

Top seven upwa	rd events				7 downward eve				
Athletic sports	Score		Ranking		Athletic sports	Score	Score		
	2018	2019	2018	2019		2018	2019	2018	2019
Track & field	19,015	23,815	8	3	Swimming	17,916	12,538	3	5
Cycle	928	3,365	13	9	Archery	2,910	798	6	12
Lawn Ball	8,125	9,922	5	3	Boccia	94	0	15	15
Tennis	190	1,686	12	8	Table Tennis	16,581	14,771	6	5
Gateball	971	2,240	10	4	Goalball	4,669	3,597	5	5
Backetball	-	1,140	13	12	Weightlifting	24,122	23,276	2	2
Badminton	2,507	3,470	10	9	Bowing	3,522	2,834	16	14

REFERENCES

- 1. Pradhan R, Agrawal K, and Nag A. Analyzing evolution of the Olympics by exploratory data analysis using R. IOP Publishing. 1099 (2021) 012058, doi:10.1088/1757-899X/1099/1/012058.
- 2. Si X. 2018. Olympic games medal count analysis summer and winter olympic games. Degree Master, California State Polytechnic University, Pomona.
- 3. Cutait, M. Management performance of the Rio 2016 Summer Olympic Games. Research Paper submitted and approved to obtain the Master's degree in Sports Administration at AISTS in Lausanne, Switzerland.

- 4. Yamunathangam D, Kirthicka G and Shahanas P 2018 Performance Analysis in Olympic Games using Exploratory Data Analysis Techniques International Journal of Recent Technology and Engineering (IJRTE) 7: 251–3.
- 5. Korea Sports & Olypic Committee. 2019. Sport1. October 2019, 40: 4-9.
- 6. OECD. 2023. Competition and Professional Sports, OECD Competition Policy Roundtable Background Note, www.oecd.org/daf/competition/competition-and-professional-sports-2023.
- 7. OECD (2010), Competition and Sports, OECD Competition Policy Roundtable Background Note, https://www.oecd.org/daf/competition/competition-and-sports-2010.
- 8. Hoey S, Peeters T, Principe F. 2021. The transfer system in European football: A pro□competitive no-poaching agreement? International Journal of Industrial Organization, 75(2): 102695.
- 9. KEA-CDES (2013), The Economic and Legal Aspects of Transfers of Players, https://ec.europa.eu/assets/eac/sport/library/documents/cons-study-transfers-final-rpt. pp. 81
- 10. Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I. and Sandford, R. (2009). The educational benefits claimed for physical education and school sport: an academic review. Research Papers in Education, 24(1): 1-27.
- 11. Bridges, B. (2006). Fun, fervor or fitness?: Sporting cultures and happiness, in Ng, Y.K. and Ho, P.L.S. Happiness and public policy: theory, case studies, and implications. Palgrave Macmillan. Pages 221-234.
- 12. Aggerholm K, Breivik G. 2021. Being, having and belonging: values and ways of engaging in sport. Sports & Society, 24(7): 1142–1156.
- 13. Tosa, M. 2015. Sport Nationalism in South Korea: An Ethnographic Study. SAGE Open October-December 2015: 1–13.
- 14. Bairner, A. (2001). Sport, nationalism, and globalization: European and North American perspectives. New York: State University of New York Press.
- 15. Smith, A., & Porter, D. (2004). Sport and national identity in the post-war world. Abingdon, UK: Routledge.
- 16. Tomlinson, A., & Young, C. (2006). National identity and global sports events: Culture, politics, and spectacle in the Olympics and the Football World Cup. New York: State University of New York.