Environment of "watching sports" for the older adults in Japan

国際社会系(渡邊ゼミ)

S116094

林寬

Kan Hayashi

#### **Abstract**

### Environment of "watching sports" for the older adults in Japan

Aim: The purpose of this paper is to investigate whether there is an environment in which the older adults can actively watch sports. Methods: A questionnaire (14 questions in total) was conducted on 85 older adults aged 60 and over living in Nagoya, Japan. Results: In the question of the frequency of "watching sports" on TV and through media, 25 respondents (31.6%) answered "once a month". In the question of the frequency of "watching sports" at stadiums and gymnasiums, 38 respondents (47.5%) answered "never". In the degree of satisfaction of "watching sports" on TV and through media, "satisfied" and "slightly satisfied" were the most popular answer (32.1%). In the degree of satisfaction of "watching sports" at stadiums and gymnasiums, "be more of satisfied" was the most popular answer (27.9%). Conclusion: The survey found that if there was an environment where older adults could watch sports, they would watch sports. Moreover, many older adults were satisfied with "watching sports", thus, measures are needed to reduce the risk of going out for the older adults.

## 日本の高齢者にとっての「観るスポーツ」の環境

目的:本研究の目的は、高齢者が能動的にスポーツを観ることが出来る環境が整備されているかを調査することである。 方法:日本の名古屋に住む 60 歳以上の 85 人の高齢者にアンケート調査 (全 14 問)を実施した。 結果:テレビやメディアでのスポーツ観戦の頻度の質問では、最多の 25 人 (31.6%)の回答者が「月に一回」と回答した。 一方で、スタジアムや体育館でのスポーツ観戦の頻度の質問では最多の 38 人 (47.5%)の回答者が「全く観ない」と回答した。 テレビやメディアでのスポーツ観戦の満足度は「満足」と「やや満足」が並んで最多であった (32.1%)。 スタジアムや体育館でのスポーツ観戦の満足度は「どちらかと言えば満足」が最多であった (27.9%)。 考察:高齢者にとってスポーツを観ることができる環境があれば、彼らはスポーツを観るということがこの調査から分かった。 また、多くの高齢者はスポーツを観ることに満足していたので、高齢者にとっての外出のリスクを軽減するための対策が必要だ。

# Entorno de "ver deportes" para adultos mayores en Japón

Objetivo: El propósito de este documento es investigar si existe un entorno en el que los adultos mayores puedan ver deportes activamente en la actualidad. Métodos: Se realizó un cuestionario (14 preguntas en total) a 85 adultos mayores de 60 años o más que viven en Nagoya, Japón. Resultados: En la cuestión de la frecuencia de "ver deportes" en la TV y en los medios de comunicación, 25 encuestados (31.6%) respondieron "una vez al mes". En la pregunta de la frecuencia de "ver deportes" en estadios y gimnasios, 38 encuestados (47.5%) respondieron "nunca". En el grado de satisfacción de "ver deportes" en la TV y en los medios de comunicación, "satisfechos" y "ligeramente satisfechos" fueron la respuesta más popular (32.1%). En el grado de satisfacción de "ver deportes" en estadios y gimnasios, "estar más satisfecho" fue la respuesta más popular (27.9%). Conclusión: La encuesta encontró que si hubiera un ambiente donde los adultos mayores pudieran ver deportes, ellos verían deportes. Además, muchos adultos mayores estaban satisfechos con "ver deportes", por lo tanto, se necesitan medidas para reducir el riesgo de salir para los adultos mayores.

#### Introduction

In recent years, the older population has been increasing around the world. In particular, comparing the proportion of the older adults in the total population in 2018, Japan (28.1%) is the highest in the world (Ministry of Internal Affairs and Communications Statistics Bureau, 2018). On the authority of the data of the Statistics Bureau, the Ministry of Internal Affairs and Communications, the population aged 65 and over (the old age population) is 35.75 million (28.3% of the total population) by the definite value of April 1, 2019 (Ministry of Internal Affairs and Communications Statistics Bureau, 2019). Furthermore, the number of older people aged 65 and over is expected to reach 36.57 million in 2025 and its peak in 2042 (38.87 million) (Ministry of Health, Labor and Welfare, 2018) in Japan.

Moreover, fifty-six years after having organized the Olympic Games, the Japanese capital will be hosting a Summer edition for the second time, from 24 July to 9 August 2020 (International Olympic Committee, 2019). Therefore, the hosting of the Olympic has various effects and influences on the host city and nation. There are tangible effects and impacts along with Olympics such as economic effects, tourism and infrastructure development. In addition, there are intangible effects and influences brought by sports promotion, sports policy and education, and the event experience of the Olympic (Masumoto, Honma, 2014). The economic ripple effect of the 2020 Tokyo Olympics is expected to be 13,820.0 billion yen (Ministry of Economy, Trade and Industry, 2016). Therefore, creating relationships between the 2020 Tokyo Olympics and many people is very meaningful in order to further increase the economic ripple effect of the Tokyo Olympics and achieve the Olympic legacy.

In addition, the emphasis on people (people who do, people who watch, and people who support) is the

basic concept of the sports nation strategy (Ministry of Education, Culture, Sports, Science and Technology, 2011).

Being happy and enriched through sports is one of the rights which is ensured for everyone (Ministry of Education, Culture, Sports, Science and Technology, 2011). This paper focuses on "watching sports", but it also investigates "doing sports" and "supporting sports".

Regarding the Japanese sports market, the size of the Japanese sports market in 2002 (approximately 7 trillion yen) was retail (approximately 1.9 trillion yen), sports facilities (approximately 3.3 trillion yen), entertainment and broadcasting (approximately 1.8 trillion yen). In 2012, the size of the market (approximately 5.5 trillion yen) was retail (approximately 1.7 trillion yen), sports facilities (approximately 2.1 trillion yen), entertainment and broadcasting (approximately 1.7 trillion yen). From 2002 to 2012, retail sales (-0.2 trillion yen) and sports facilities industry (-1.2 trillion yen) decreased, and entertainment / broadcasting are almost flat (Japan Sports Agency and Ministry of Economy, Trade and Industry, 2016). In 2018, the US sports market is approximately US \$ 130 billion (approximately 14.4 trillion yen), the largest in the world (Japan External Trade Organization, 2019). Hence, Japan's sports industry is smaller than other developing countries. In Japan, further development of the sports industry is indispensable, and participation of the older adults, whose population is increasing, must help the Japan's sports industry. Therefore, this paper investigates the interest of older adults in sports.

Moreover, Oda (2001) reported that only a few respondents answered "within 1 hour" including "never watch" for the question about watching time of TV. Over 90% of the older adults watched TV for more than 2 hours a day, and approximately 20% of respondents exceeded 6 hours. Some respondents watched it for more than 8 hours. The most common was "within 3 hours", accounting for approximately 20% of the total. Next, "within

4 hours" and "within 5 hours" were each about 17%. Approximately half of the older adults watched over 4 hours. Furthermore, there is a paper that analyzed the program organization of terrestrial broadcasting stations (11 channels) and BS digital broadcasting stations (8 channels) by genre, using the program table data for 8 weeks in 2010. The total broadcast time ratio of sports was 7.399% out of 20 genres (The sixth of 20 genres) (Asai, 2011). Therefore, TV can be a medium for "watching sports" for the older adults.

The data from the Ministry of Land, Infrastructure, Transport and Tourism (2017) showed the outing characteristics of the older adults. In households including the older adults, the composition of "single households" and "households with a couple" has been increasing in recent years. The number of cases in which older adults have to move on their own for activities necessary for daily life has been increasing, and it is necessary to secure the means of transportation for older adults. In addition, the number of driver license holders over the age of 65 is on the rise, and the number of self-returned licenses has been increasing rapidly in recent years. The annual income of older adults is about 2.5 million yen lower than the average of all households, and many older adults receive pensions and other benefits. The going-out rate of the older adults is low compared to non-older adults. In addition, the older adults without a driver license is much lower than the other ages. Thus, the older adults are getting harder to go out by themselves.

From these social backgrounds, the question arises: how much do older adults really participate in watching sports via TV and other ways? Therefore, the purpose of this paper is to investigate whether there is an environment in which the older adults can actively watch sports at present. To investigate it, this paper asked the older adults about the frequency and satisfaction of "watching sports", and the kinds of sports that they watch on TV/ through

media such as live streaming service and movies on internet and at stadiums/ gymnasiums. In addition, one of the purposes of this paper is to investigate the relationship between "watching sports" and "doing/ supporting sports".

The hypothesis of this paper was that the frequency of watching sports on TV and through media is expected to be high, based on the length of TV viewing time of older adults and the data of the broadcast time ratio of sports programs. On the other hand, the frequency of watching sports at stadiums and gymnasiums is expected to be lower due to the current situation of older adults going out.

Furthermore, according to the research of Mochizuki et al. (2013), "having experience of sports and exercise" affects the contact with sports information. Therefore, it can be expected that the frequency of "doing sports" increases as the frequency of "watching sports" increases.

### **Materials and Methods**

The subjects of this study were 85 older adults (males and females) living around Nagoya, Japan. The research period was from October 2018 to April 2019, and a questionnaire survey was used in this study. The questionnaire was sent to 85 older adults on January 29, 2018.

The contents of this questionnaire were consisted 14 questions in total (Figs. 1-4). As details of the contents of this survey, first of all, this questionnaire asked respondents about the frequency, the degree of satisfaction of "watching sports" and the kinds of sports that respondents watch at stadiums and gymnasiums. Then, this questionnaire asked respondents about the frequency of "doing sports" and whether respondents participated in "supporting sports" or not. In the question of frequency of "watching sports" (Question no.1 and 6), this paper

2019年1月29日

### 「観る」スポーツに関するアンケート

## お手数をお掛けしますがこちらのアンケートにご協力ください。 ※研究以外でこのアンケートは利用しません。

返信用封筒に回答したアンケートを封入し、返送ください。 その際に「八事いきいきアカデミー」に参加される方は 参加登録票と一緒に同封していただいて構いません。

中京大学 国際教養学部 渡邊航平ゼミ 3年

林 寛

**Figure 1.** The questionnaire for survey (English annotation)
January 29th, 2018

A questionnaire about "watching Sports"

Please cooperate with this questionnaire.

\*We will not use this questionnaire only for research purposes.

Please send it back using the enclosed envelope for returning

Kan Hayashi

Junior, School of International Liberal Studies, Chukyo University

```
① テレビなどのメディアでの「観る」スポーツ
*こちらの「観る」スポーツとはテレビや動画、ラジオなどにおける「観る」となりま
す。競技をテレビで観たときのことについてのアンケートになります。バラエティ番組の
スポーツやニュース番組のスポーツハイライトは含みません。
例:プロ野球・甲子園・相撲・駅伝・ゴルフ・格闘技など
 1 「観る」スポーツの頻度で、最も近いところに○をしてください
  毎日・一週間に一回・月に一回・半年に一回・年に一回・全く観ない
 2 「観る」スポーツの満足度で、最も近いところに○をしてください
  満足・やや満足・どちらかと言えば満足・どちらかと言えば不満・やや不満・不満
 3 満足・やや満足・どちらかと言えば満足、と回答された方は、
 下のカッコにその理由を回答ください
 4 不満・やや不満・どちらかと言えば不満、と回答された方は、
 下のカッコにその理由を回答ください
 5 よく「観る」スポーツの競技を1つ、下のカッコ内に回答ください
```

Figure 2. The questionnaire for survey

(English annotation)

1) The questionnaire is about "watching sports" on TV and through media. Variety shows on sports, sports news and game highlights are not included.

Example: baseball, sumo, ekiden, golf,

1, Circle the nearest place with your frequency of "watching sport".

Daily · Once a week · Once a month · Once a half year · Once a year · Never

2, Circle the nearest place with your degree of satisfaction of "watching sports"

Satisfied · Slightly satisfied · Be more of satisfied · Be more of dissatisfied · Slightly dissatisfied · Dissatisfied 3, If you answered "Satisfied", "Slightly satisfied" and "Be more of satisfied", please write the reason below.

4, If you answered "Dissatisfied", "Slightly dissatisfied" and "Be more of dissatisfied", please write the reason below.

) 5, Please answer one sport you often watch in the brackets below. )

8

② スタジアムや競技場などで「観る」スポーツ
* こちらの「観る」スポーツは、スタジアムや競技場などの現地でのスポーツ観戦のこと
です。
例:ナゴヤドームでの観戦、体育館での子供たちのスポーツ応援など
6 「観る」スポーツの頻度で、最も近いところに○をしてください
毎日・一週間に一回・月に一回・半年に一回・年に一回・全く観ない
7 「観る」スポーツの満足度で、最も近いところに○をしてください
満足・やや満足・どちらかと言えば満足・どちらかと言えば不満・やや不満・不満
8 満足・やや満足・どちらかと言えば満足、と回答された方は
下のカッコ内にその理由を回答ください
(
9 不満・やや不満・どちらかと言えば不満、と回答された方は
下のカッコ内にその理由を回答ください
(
10 よく「観る」スポーツの競技を1つ、下のカッコ内に回答ください
(

Figure 3. The questionnaire for survey

(English annotation)

- ② The questionnaire is about "watching sports" at stadiums and gymnasiums.

  Example: watching games at the Nagoya Dome, children's games at the gymnasium.
- 6, Circle the nearest place with your frequency of "watching sport".

Daily · Once a week · Once a month · Once a half year · Once a year · Never

7, Circle the nearest place with your degree of satisfaction of "watching sports"

Satisfied • Slightly satisfied • Be more of satisfied • Be more of dissatisfied • Slightly dissatisfied • Dissatisfied 8, If you answered "satisfied", "Slightly satisfied" and "Be more of satisfied", please write the reason below.

(

9, If you answered "Dissatisfied", "Slightly dissatisfied" and "Be more of dissatisfied", please write the reason below.

( )
10, Please answer one sport you often watch in the brackets below.
( )

③ 「する」「支える」スポーツ
*「観る」人以外にも「する」人や「支える」人としてのスポーツがあります。
(文部科学省がスポーツ立国戦略として設定した三要素)
「する」人→その名の通りスポーツをする人のこと
「支える」人→スポーツのポランティア活動や指導者、子供たちの保護者としてなどでス
ポーツを支える人のこと
11 「する」スポーツの頻度で、最も近いところに○をしてください
毎日・一週間に一回・月に一回・半年に一回・年に一回・全くしない
12 よく「する」スポーツを1つ、下のカッコ内に回答ください
(
13 「支える」スポーツをしたことがありますか
□ はい
□ いいえ
14 その時の支えるスポーツの活動内容を下のカッコ内に回答ください
(
☆アンケートのご協力ありがとうございました。

# Figure 4. The questionnaire for survey

(English annotation)

The questionnaire is about "doing sports" and "supporting sports".

In addition to "watching" people, "doing" and "supporting" people are the three elements of the sports nation strategy set by the Ministry of Education, Culture, Sports, Science and Technology.

)

)

"Doing sport"  $\rightarrow$  This means people who do sports.

"Supporting sports" → This means people who support as a volunteer, coach and parents.

11, Circle the nearest place with your frequency of "doing sport".

Daily · Once a week · Once a month · Once a half year · Once a year · Never

12, Please answer one sport you often do in the brackets below.

13, Have you ever participated in "supporting sports"?

☐ Yes

☐ No

14, Please answer the activity details of "Supporting Sports" in the brackets below.

☆Thank you for your cooperation in the questionnaire.

separated the choices into "every day once a week once a month once a half year once a year never". The reason for this division is that major sports events in Japan are held throughout the year (NPB, 2019). In addition to that, it was separated in order from "Once a year" to make it easier for older adults to answer. In the question of the degree of satisfaction of "watching sports" (Question no.2 and 7), this paper equally separated the options from "satisfied" to "dissatisfied" into 6 parts. The reason why question numbers 3, 4, 8 and 9 were added to the questionnaire was because the reason for the degree of satisfaction of "watching sports" for the older adults was necessary. Question number 5, 10 and 12 were added to the questionnaire to investigate the sports of interest to the older adults. Question number 11 was assigned to six options to match question number 1 and 6. Question numbers 13 and 14 were added to the questionnaire to investigate the "supporting sports" experience and activities of the older adults. Furthermore, this paper analyzed the relationship between the frequency of "watching sports" and the frequency of "doing sports", and the relationship between the frequency of "watching sports" and the experience of "supporting sports".

To quantify the results of questionnaire, percentages for number of each answer for each question were calculated in this study. In this paper, the second decimal place is rounded off.

### Results

The total number of respondents of the questionnaire was 85 including 20 male, 50 female and 15 unidentified. To summarize the questionnaire results, in the question of the frequency of "watching sports" on TV and through media, 25 respondents (31.6%) answered "once a month", which was the most popular answer. Then,

24 people (30.4%) answered, "every day" (Table. 1).

Regarding the question of the degree of satisfaction of "watching sports" on TV and through media, "satisfied" and "slightly satisfied" were the most popular answer (32.1%). Then, 25 respondents (30.9%) answered "be more of satisfied" (Table. 2).

The following opinions are the reasons why respondents answered "satisfied", "slightly satisfied" and "be more of satisfied" of "watching sports" on TV and through media.

- It was fun even if I can't play sports "Watching sports" gives me the spirit of fighting
- The whole body fighting, powerful, great teamwork I get satisfaction
- Team strength, tactic I understand the game I can watch the game all the time on NHK BS1
- Easy to understand with commentaries and replays I can watch the points on the big screen
- I am impressed by the greatness of stamina and desperate effort I can watch the topic sports
- I am impressed by the seriousness of sports and great performance
- The players are committed to fair play Beautiful posture, glide with great form
- · A female tennis player won and I was looking forward to watching her playing on TV
- The effort is great I can watch techniques that I can't do
- I can watch the points in a short time Video and commentary
- · Slow playback · Just watching is fun · I want to do the sport that I watched on TV
- Pounding feeling, feeling sensation, wonderful movement, body Player's hard work
- I am impressed by the hard support My favorite player is in the game

 Table 1. Frequency of "watching sports" (TV, through media)

	Respondents	%
Daily	12	15.2
Once a week	24	30.4
Once a month	25	31.6
Once a half year	13	16.5
Once a year	3	3.8
Never	2	2.5

Table 2. Degree of the satisfaction of "watching sports" (TV, through media)

	Respondents	%
Satisfied	26	32.1
Slightly satisfied	26	32.1
Be more of satisfied	25	30.9
Be more of dissatisfied	3	3.7
Slightly dissatisfied	0	0
Dissatisfied	1	1.2

- My favorite team wins the games The games are broadcast from start to finish
- I can kill my time by "watching sports" The games are broadcast to the end on a pay program
- I like watching I can watch the results of the practice
- Player's hard work TV broadcast is easy to understand
- Be thrilled I can watch easily Player's willingness
- I can watch calmly and hear commentary Professional performance Heat the games
- · I like sports · I can learn · It's fun · I can watch many things
- I can be thrilled by the whereabouts of the game I can expect There are players I support
- I can watch the games that held in a distant place Agility, ugliness
- · I can watch sports at my convenient time · I like · I can watch on time
- I can watch without being affected by the weather I can support players hard
- I can watch my favorite sport Time zone Unexpected things happen
- · I can watch in my house · Player's performance · Interesting
- · I can watch as long as I have time · Length of broadcast time · I can see the result
- Performance Easy to understand with commentary
- I am impressed by the performance of Naomi Osaka I can watch at a good angle

The following opinions are the reasons why respondents answered "dissatisfied", "slightly dissatisfied" and "be more of dissatisfied" of "watching sports" on TV and through media.

• Insufficient study by commentators • There are not many rugby broadcasts

· Only major sports appear in the media

Moreover, 17 respondents (21.5%) answered that they watch "baseball", then, 12 respondents (15.2%) answered they watch "sumo" (Fig. 5) on TV and through media. Additionally, there are documents on the frequency and the degree of satisfaction of "watching sports" for each sport (Fig. 6, 7).

Furthermore, in the question of the frequency of "watching sports" at stadiums and gymnasiums, 38 respondents (47.5%) answered "never", which was the most popular answer. Then, 19 people (23.8%) answered "once a year" (Table. 3).

Regarding the question of the degree of satisfaction of "watching sports" at stadiums and gymnasiums, "be more of satisfied" was the most popular answer (27.9%). Then, each 11 respondents (25.6%) answered "satisfied" and "slightly satisfied" (Table. 4).

The following opinions are the reasons why respondents answered "satisfied", "slightly satisfied" and "be more of satisfied" of "watching sports" at stadiums and gymnasiums.

- I can hear the cheering and feel presence Impressive to be on site I can get tickets easily
- I can watch as if I was playing I am impressed by the players performance
- I can watch happily with my friends On site is great Presence
- I can watch as if I was playing There is presence different from watching on TV
- I am impressed by the players hard work Players or team wins
- Everyone plays hard It was fun to watch There are many audiences
- The player I know is in the game Powerful I can actually watch the players

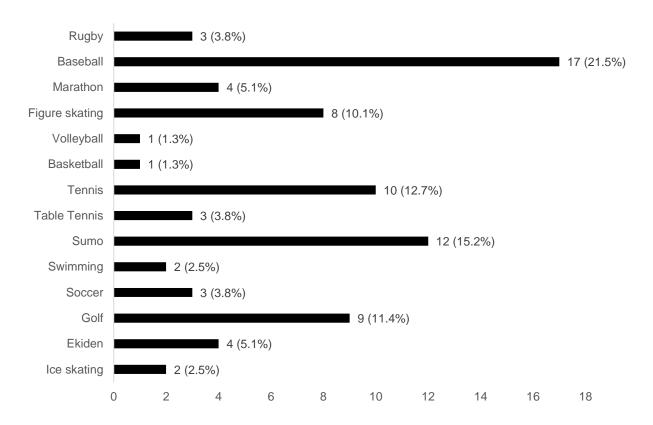
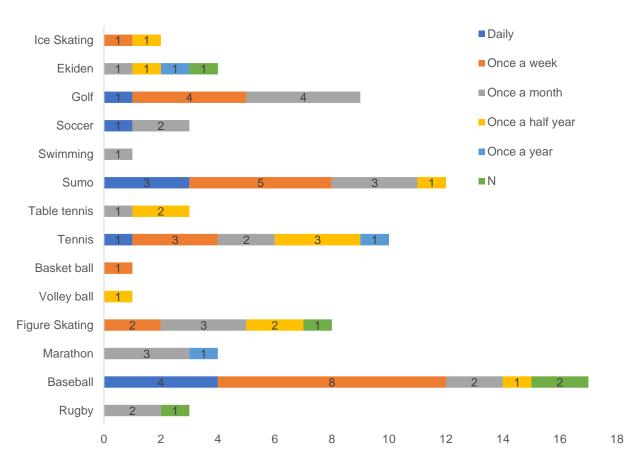
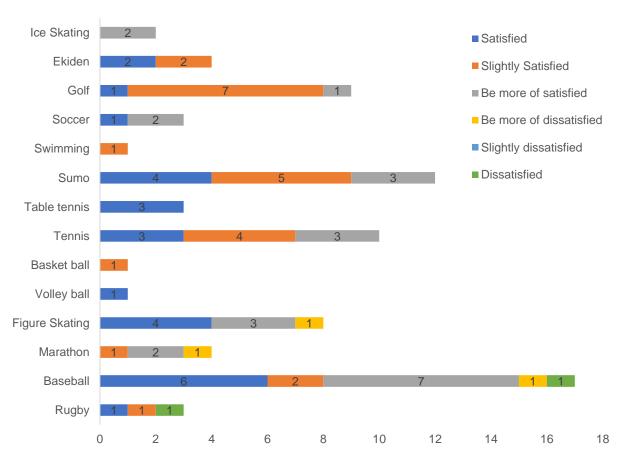


Figure 5. The kinds of sports that the respondents watch on TV and through media



**Figure 6.** The kinds of "watching sports" and breakdown of the frequency of "watching sports" on TV and through media.



**Figure 7.** The kinds of "watching sports" and breakdown of the degree of satisfaction of "watching sports" on TV and through media.

Table 3. Frequency of "watching sports" (stadiums, gymnasiums)

	Respondents	%
Daily	2	2.5
Once a week	1	1.3
Once a month	2	2.5
Once a half year	18	22.5
Once a year	19	23.8
Never	38	47.5

Table 4. Degree of the satisfaction of "watching sports" (stadiums, gymnasiums)

	Respondents	%
Satisfied	11	25.6
Slightly satisfied	11	25.6
Be more of satisfied	12	27.9
Be more of dissatisfied	3	7.0
Slightly dissatisfied	3	7.0
Dissatisfied	3	7.0

- My family is in the game Interesting I feel like I am participating
- · Presence · Atmosphere · The place of the game is near · Presence
- I can support my favorite player Team play Presence

The following opinions are the reasons why respondents answered "dissatisfied", "slightly dissatisfied" and "be more of dissatisfied" of "watching sports" at stadiums and gymnasiums.

- There are not many big games in Nagoya The venue of the game is far away
- I don't want to go far for watch the game I'm not interested
- I don't like crowds The price of the tickets are expensive I can't watch the details

Moreover, 28 respondents (35.4%) answered that they watch "baseball", then, 3 respondents (7.3%) answered they watch "marathon" (Fig. 8) at stadiums and gymnasiums. Additionally, there are documents on the frequency and the degree of satisfaction of "watching sports" for each sport (Fig. 9, 10).

In the questions of "doing sports", 37 respondents (47.4%) answered, "never", which was the most popular answer. Then, 24 respondents (30.8%) answered, "once a week" (Table. 5) and this paper analyzed the frequency of "doing sports" by the frequency of "watching sports" on TV/ through media and at stadiums/ gymnasiums (Fig. 11, 12). In addition, "swimming" is the most popular "doing sports" for older adults (29.3%) (Fig. 13).

There were 17 "yes" (22.4%) and 59 "no" (77.6%) respondents on "supporting sports" (Table. 6), and this paper analyzed the relationship between the frequency of "watching sports" on TV/ through media and at stadiums/ gymnasiums (Fig. 14, 15). In addition, 4 respondents (23.5%) were classified as "Coaches", 11 respondents (64.7%) were classified as "Support/help" and 2 respondents (11.8%) were classified as "Volunteer" (Table. 7).

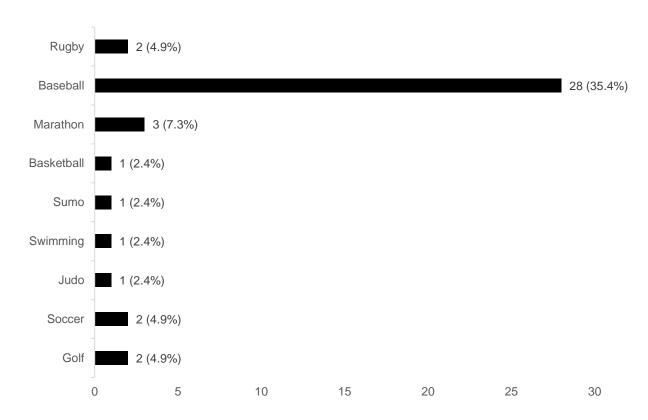
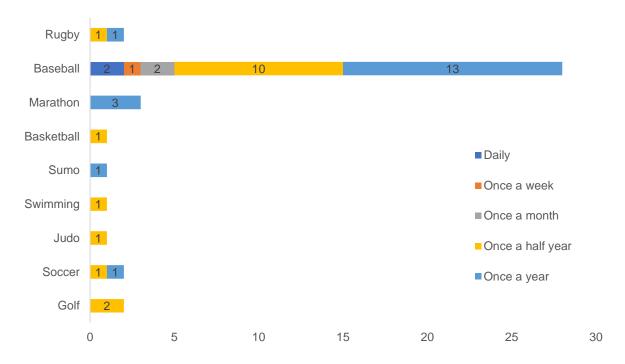
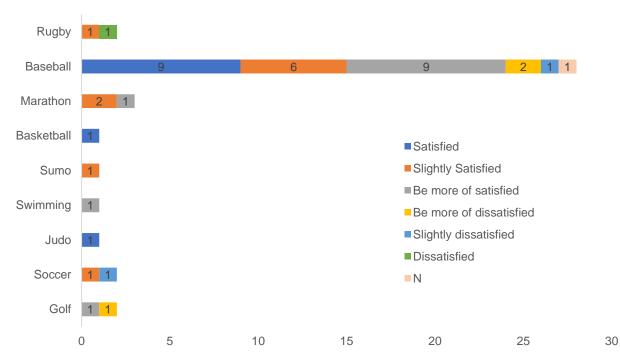


Figure 8. The kinds of sports that the respondents watch at stadiums and gymnasiums



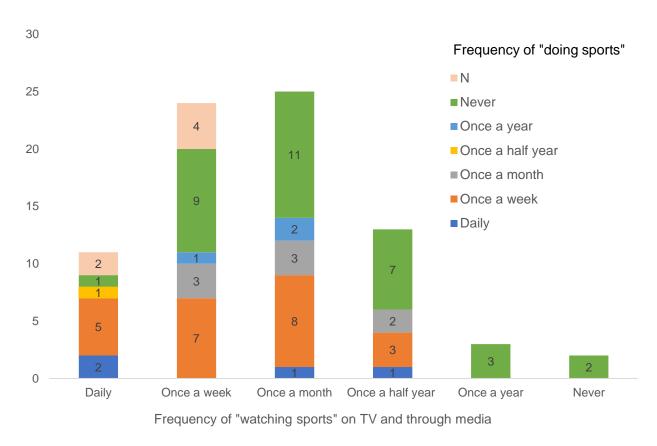
**Figure 9.** The kinds of "watching sports" and breakdown of the frequency of "watching sports" at stadiums and gymnasiums.



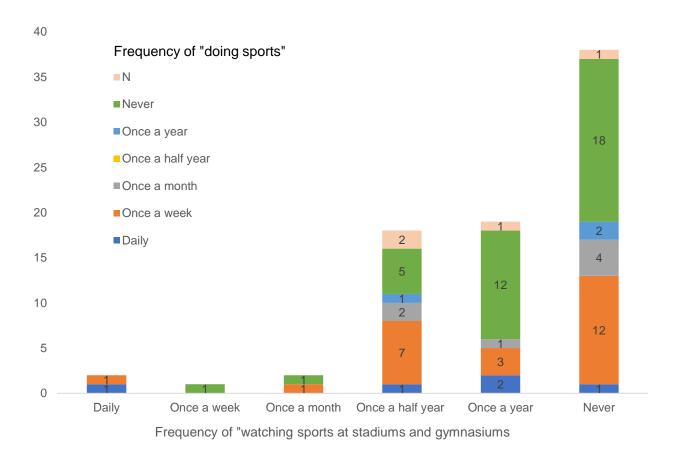
**Figure 10.** The kinds of "watching sports" and breakdown of the degree of satisfaction of "watching sports" at stadiums and gymnasiums.

Table 5. Frequency of "doing sports"

	Respondents	%
Daily	5	6.4
Once a week	24	30.8
Once a month	8	10.3
Once a half year	1	1.3
Once a year	3	3.8
Never	37	47.4



**Figure 11.** The frequency of "watching sports" on TV and through media and the frequency of "doing sports".



**Figure 12.** The frequency of "watching sports" at stadiums and gymnasiums and the frequency of "doing sports".

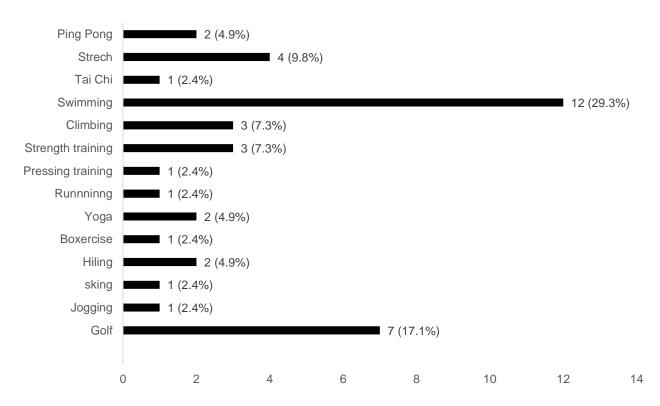
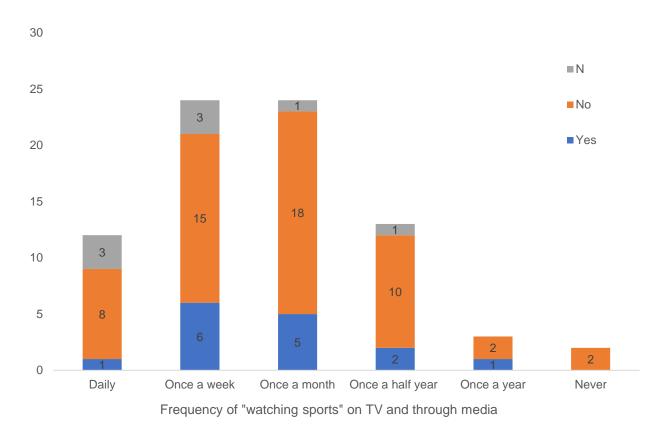


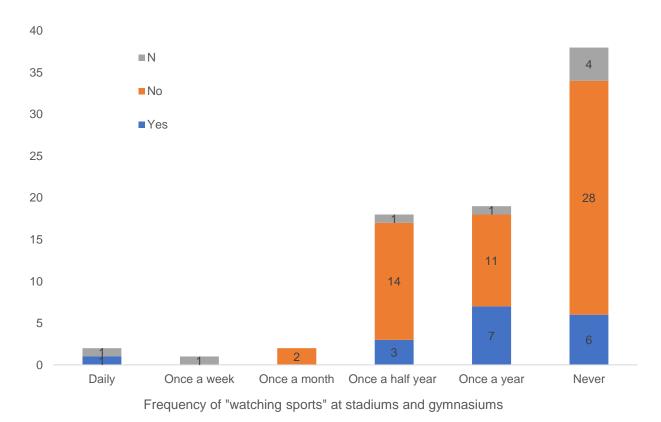
Figure 13. The kinds of "doing sports"

Table 6. Have you ever participated in "supporting sports"?

	Respondents	%
Yes	17	22.4
No	59	77.6



**Figure 14.** The frequency of "watching sports" on TV and through media and the experience of "supporting sports".



**Figure 15.** The frequency of "watching sports" at stadiums and gymnasiums and the experience of "supporting sports".

Table7. Lists of "supporting sports"

	Respondents	%
Coach	4	23.5
Support / help	11	64.7
Volunteer	2	11.8

#### Discussion

The purpose of this paper was to investigate whether there is an environment where the older adults can actively watch sports at present. From the results, first of all, from the aspect of "watching sports" on TV and media, many older adults watched sports on TV and through media. More than half of the older adults felt "satisfied", "slightly satisfied" and "be more of satisfied" with regard to "watching sports" on TV and through media. The reason is that older adults can watch in an environment that is convenient for them, and older adults can understand sports through commentaries and various video technologies.

On the other hand, many older adults answered "never" or "once a year" with regard to "watching sports" at stadiums and gymnasiums. However, in terms of the degree of satisfaction, more than half of the older adults were "satisfied", "slightly satisfied" and "be more of satisfied". The reason is that many respondents answered that there was an atmosphere, presence, and excitement that could only be obtained on site. In other words, it was found that as long as there was an environment for older adults to watch sports, they would actively watch sports. However, the frequency of "watching sports" at stadiums and gymnasiums has been reduced because of the risk of going out. In order to further expand the sports market, this paper says that measures to reduce the risk of going out for the elderly are necessary.

In addition to that, the paper found many older adults chose baseball as an option to watch sports from the results of the kinds of sports that they watch on TV/ through media and at stadiums/ gymnasiums. Focusing on baseball, one of the competitions of Tokyo 2020 (TOKYO2020, 2019), may lead to the expansion of the sports watching population of the older generation. With regard to the frequency of "watching sports" for each sport, the

frequency of "watching sports" is increasing in sports (for example, baseball and sumo) that many older adults watch on TV and through media. In terms of the frequency of "watching sports" at stadiums and gymnasiums, this paper was unable to find the frequency characteristics because there were few responses other than "baseball". Regarding the degree of satisfaction of "watching sports" for each sport on TV and through media, "golf", "sumo", and "tennis", which received many answers, were highly satisfied by the older adults. The characteristics of the degree of satisfaction of "watching sports" for each sport at stadiums and gymnasiums were not found because there were few answers other than "baseball".

According to the questionnaire results of "doing sports" and "supporting sports", 37 respondents (47.4%) answered "never", and many older adults have never participated in "supporting sports". The relationship between the frequency of "watching sports" and "doing sports" was not as expected. Even if the frequency of "watching sports" is high, this paper cannot be said that the frequency of "doing sports" is high. On the other hand, when the frequency of "watching sports" is low, the frequency of "doing sports" also is low. There was a variation in the relationship between "watching sports" and "supporting sports". Increasing the older population of "doing sports" and "supporting sports" through "watching sports" is one of the challenges of the sports industry.

However, this survey method was not statistically good. This is because the survey mainly prepared questions that allowed respondents to choose an answer. As a result, this paper only gave simple results. The survey also failed to compare the frequency and the degree of satisfaction of "watching sports" between TV / media and stadiums / gymnasiums. This is because there was a problem in how to make a questionnaire. In addition, the disadvantage of this survey method was that all of the answers were only within the memory of the older adults.

Therefore, in this questionnaire, older adults answered while remembering their experiences of "watching sports".

The results of this survey were the numerical value of each questions and the free description answers. From this survey, the most important harvest of this survey was to understand the current state of participation in sports watching for the older adults.

Until today, there has been a lot of discussion about sports with the older adults. However, those are "sports for improving the quality of life of the older adults" (Yamaguchi et al., 1996) and "regular physical activity in the older adults promotes healthy aging" (Oka et al., 2004). As described above, there are many cases where sports are linked to the quality of life and health promotion of the older adults. There are few surveys on older adults and "watching sports" as in this paper. In addition, participation of older adults is indispensable for the expansion of the sports industry, which is one of the social issues in Japan.

In conclusion, this paper should be used for older adults to participate in the sports industry, and it should be used to make "watching sports" more accessible to many older adults.

### Acknowledgement

I would like to thank Prof. Kohei Watanabe for setting up a questionnaire survey for the older adults, your advice and review of this paper.

#### References

Asai, S. (2011). Programming of Terrestrial Broadcasters and BS Digital Broadcasters by Genre, JSICR Journal, 29(3), 1-12

International Olympic Committee. (2019.10/20/2019). 2020 Olympics - Next Summer Olympic Games | Tokyo 2020, 2019, https://www.olympic.org/tokyo-2020

Japan External Trade Organization. (2019.03/31/2019). 世界に向かうスポーツ産業, 2019, https://www.jetro.go.jp/world/reports/2019/02/03f9994684b788e5.html

Japan Sports agency and Ministry of Economy, Trade and Industry. (2016.12/10/2018). スポーツ未来開拓会議中間報告, 2019, https://www.meti.go.jp/press/2016/06/20160614004/20160614004-1.pdf

Masumoto, M., Honma, K. (2014). Olympic spiritual culture as an intangible Olympic legacy, The Philosophic study of sport and physical education, 36(2), 97-107

Ministry of Economy, Trade and Industry. (2016.12/13/2017). 全体報告書, 2019, https://www.meti.go.jp/meti\_lib/report/2016fy/000755.pdf

Ministry of Education, Culture, Sports, Science and Technology. (2011.07/27/2011). スポーツ立国戦略, 2019, http://www.mext.go.jp/a menu/sports/kihonhou/attach/1308935.htm

Ministry of Health, Labor and Welfare. (2018.06/02/2018). 今後の高齢者人口の見通しについて, 2019, https://www.mhlw.go.jp/seisakunitsuite/bunya/hukushi\_kaigo/kaigo\_koureisha/chiiki-houkatsu/dl/link1-1.pdf
Ministry of Internal Affairs and Communications Statistics Bureau (2019.09/20/2019). 人口推計 - 2019年(令

和元年) 9月報 -,

2019, https://www.stat.go.jp/data/jinsui/pdf/201909.pdf

Ministry of Internal Affairs and Communications Statistics Bureau (2018.10/26/2019). 国際比較で見る高齢者, 2019, https://www.stat.go.jp/data/topics/topi1135.html

Ministry of Land, Infrastructure, Transport and Tourism (2017.03/17/2017). 高齢者の生活・外出特性について, 2019, http://www.mlit.go.jp/common/001176318.pdf

Mochizuki, T., Kuwahara, J., Tomita, H. (2013). Research on Lifestyles, Sports Activities and Contact with The Sports Information in University Students. Bulletin of the Shizuoka Institute of Science and Technology, 21, 83-93 Nippon Professional Baseball Organization (2019.11/22/2019). 2019 Schedules, 2019, http://npb.jp/eng/

Oda, T. (2001). Predictors of the Length of TV-Watching of Elderly Japanese and Their Preference for TV Programs.

Bulletin of the Faculty of Human Development, 8(2), 283-302

Oka, K., Togo, F., Aoyagi, Y. (2004). A Prospective Study on Determinants of Objectively Measured Physical Activity among Elderly Japanese. Descente sports science, 25, 72-81

TOKYO2020. (2019.11/17/2019). Olympic Sports, 2019, https://tokyo2020.org/en/games/sport/olympic/
Yamaguchi, Y., Tohi, T., Takami, A. (1996). Assessing the Relationship between Quality of Life and Sport and Leisure
Activities A Comparison between the Middle-ages and the Elderly. Japan Journal of Sport Sociology, 4, 34-50