



# The Impact of NBA All-Star Game Format Change on Fan Attachment

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**Abstract.** NBA tended to improve fans' enjoyment and attachment during the All-Star Game by changing the game format, but whether these changes took effect remains unknown. Therefore, this paper uses comparative analytical method and questionnaire method to research on the fan attachment in the past decade, 2013 to 2022. This research found that both game format changes in 2018 and 2020 failed to have a positive effect on fan attachment. Instead, a proportion of NBA fans began to lose interest in NBA All-Star Game and prefer to watch highlights after the game rather than watch the live broadcast of the entire match. The result of this paper can serve as a reference for organizers of sport events, especially NBA All-Star Game, helping them understand fans' enjoyment on different game formats and optimize their sport management.

**Keywords:** NBA · All-Star Game · Fan attachment

## 1 Introduction

NBA All-Star Game is an exhibition game during the All-Star Weekend, featuring the NBA League's most popular players. It's a pure carnival for all the basketball fans worldwide because they don't take a side and just enjoy the game itself. NBA All-Star Game has a long history. Boston Garden Arena hosted the first NBA All-Star Game on March 2, 1951, when the Eastern team defeated the Western counterpart by 17 points. For a long period of time, Eastern-versus-Western was the known-to-all format for NBA All-Star Game. However, the current game format is very different from the traditional one. There were two major format changes in 2018 and 2020, involving the method team members were selected and the scoring system of the match.

One of the main reason the All-Star Game format was altered is that the League appeals for doing more charities during the All-Star Game. Under today's format, each team captain selects a domestic charity beneficiary whom his team will play for. For instance, more than \$1million was contributed to Chicago community non-profit organizations through NBA Cares outreach efforts during the NBA All-Star 2020. Another reason is that the League intends to create more hot topics by creating more flexible grouping of popular superstars. By doing so, the players are able to increase the level of competition excitement by playing more beautiful basketball, and meanwhile, more marketing strategies can be used in the All-Star Game. It's undeniable that the NBA,

one of the most successful sport leagues in the world, has seen a decline in viewership [1]. According to Kevin Clark, a sport columnist, players nowadays are more willing to pass shorter and more secure balls, and they prefer to shoot more three points from outside rather than have body contact and try to make slam dunks in regular seasons and playoffs, which makes the game less enjoyable. That is reasonable because victory is the first priority in those games and making safe passes and shoots is the safest way to guarantee the win. Therefore, the NBA All-Star Weekend, which requires a lot of commercial support, have to seek changes to add more entertainment to get higher attention. In the past, marketing and home game attendance were closely related. Teams were using different marketing techniques to increase game attendance [2]. Past research has discovered that superstar athletes have the ability to attract large audiences (Jane, 2016; Lewis & Yoon, 2018; Ormiston, 2014) [3]. According to the research conducted by the Ohio State University, even a single visiting superstar will increase attendance in NBA matches (Zhuo Li, 2018) [4]. Another research suggested that the significance of star power is only uncovered in a multiplicative model rather than in the commonly employed linear form (David J. Berri, 2004) [5]. However, with the development and innovation of media broadcast, in the 21st century, television broadcasting has become one of the largest revenue sources for most professional sports (Gough, 2009) [6]. The people who come to All-Star probably represent 0.1% of the people who are impacted by All-Star Weekend [7]. Previous researches all focused on the relationship between superstars and fan interest during the NBA regular season and playoffs. Few researches examined this connection in All-Star Games, and none of the past researches added game format as an influence factor because it just occurred in recent 5 years. Where are the differences in marketing between NBA regular games and All-Star Game? What are the effects of game format on fans attachment? Do the different groupings of players affect fan favorites? Therefore, this paper uses television viewership as the main indicator representing fans enjoyment. This paper uses comparative analytical method to examine indicators representing fans enjoyment in the recent 10 years of the All-Star Game of the National Basketball Association. The author also analyzes questionnaires from NBA fans in China and America to confirm the research result.

## 2 Data and Method

This paper focuses on the last major event of the All-Star Weekend, the All-Star Game. In order to analyze the variation tendency of fan attachment, the dataset includes the 2013–2022 NBA All-Star Games, which is five years prior and later to the game format change in 2018. Since NBA is a cross-year event where a season usually begins in the fall of the first year and concludes in the spring of the second year, notice needs to be given that in this paper, the game labeled 2013 stands for the All-Star Game taking place in the 2012–2013 season. TNT has been the official broadcaster for NBA All-Star Game since 2003, and TBS has become another broadcaster since 2015. Therefore, this paper uses the ratings and viewership data of these two broadcasters.

Rating is the percentage of potential audience members – whether tuned into any program or not – who are tuned into a particular program or station at a given time [8]. See Eq. (1).

$$\text{TVR} = \frac{\text{minutes viewed}}{\text{minutes available}} + \frac{\frac{\text{minutes viewed}}{\text{minutes available}}}{N} \times 100 \quad (1)$$

The author hypothesizes that the NBA All-Star Game saw a continuous decline in popularity and fan attachment prior to the 2018 revamp, but the change was ineffective so changes were sought again in 2020. To validate this hypothesis, graphical analysis, literature review and questionnaires are the methods used in this paper. Firstly, in order to illustrate the data fluctuation more intuitively, Microsoft Office Excel is the software used to analyze the data and plot the graphs. Secondly, questionnaires are given out to basketball fans in China and the United States to investigate their willingness to watch NBA All-Star Game in 2013 to 2022.

### 3 Result

#### 3.1 Ratings

Figure 1 and Table 1 reveal a continuous decline in ratings of NBA All-Star Game except 2020. Comparing the data trends before 2018 and after 2018, it can be seen that although there was a general downward trend before 2018, the change from year to year was subtle, while after the year of 2018, although there was a rebound in 2020, the degree of decline in other years was sharp. The average rating of these 10 years was 4.01. All the years prior to the first game format change in 2018 were above this average rating, while after that year, only 2020 reached the average rating. The linear trendline fitted by the data proves that there has been an overall downward trend in ratings in the past decade.

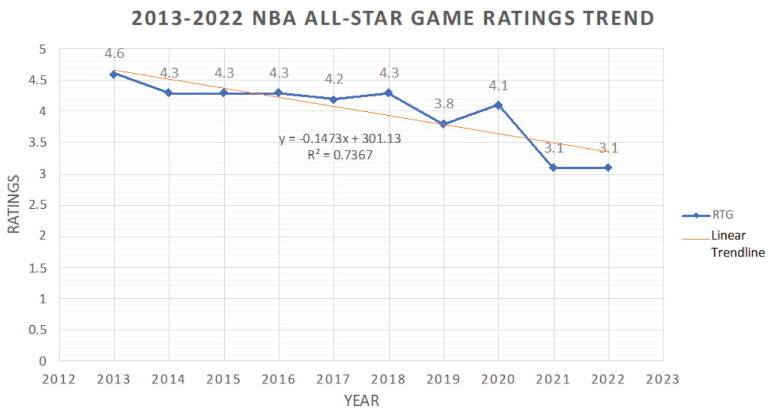
#### 3.2 Viewership

Table 2 and Fig. 2 present information about the total number of viewers who watch the NBA All-Star Game via TNT and TBS each year. The linear trendline indicates the downward trend in the viewership in the past decade. The viewership fluctuated between 2013 and 2017. When the two format changes occurred in 2018 and 2020, the viewership on these two years maintained at a high level, 7.654 million and 7.282 million respectively. However, the years after the format changes witnessed dramatic shrink on total viewership, when the growth rate slumped to  $-11.20\%$  in 2019 and  $-18.39\%$  in 2021. Both ratings and viewership hit the record-low, 3.1 and 5.943 million respectively, in 2021, the next year after the second format change.

The changes in the format did not change the trend of declining viewership. Even worse, they accelerated the rate at which the total number of viewers decreased. Instead of being bored of the traditional game format (East versus West), a large proportion of fans showed their dissatisfaction with the format change after watching the All-Star Game with the new format in the first year, and then stopped following the game in the

**Table 1.** NBA All-Star Game Ratings Between 2013 and 2022

YEAR	CITY	RESULT	NET	RTG
2013	Houston	West +5	TNT	4.6
2014	New Orleans	East +8	TNT	4.3
2015	New York	West +5	TNT/TBS	4.3
2016	Toronto	West +23	TNT/TBS	4.3
2017	New Orleans	West +10	TNT/TBS	4.2
2018	Los Angeles	Team Lebron +3	TNT/TBS	4.3
2019	Charlotte	Team Lebron +14	TNT/TBS	3.8
2020	Chicago	Team Lebron +2	TNT/TBS	4.1
2021	Atlanta	Team Lebron +20	TNT/TBS	3.1
2022	Cleveland	Team Lebron +3	TNT/TBS	3.1
<b>AVERAGE</b>				<b>4.01</b>



**Fig. 1.** 2013–2022 NBA All-Star Game Ratings Trend

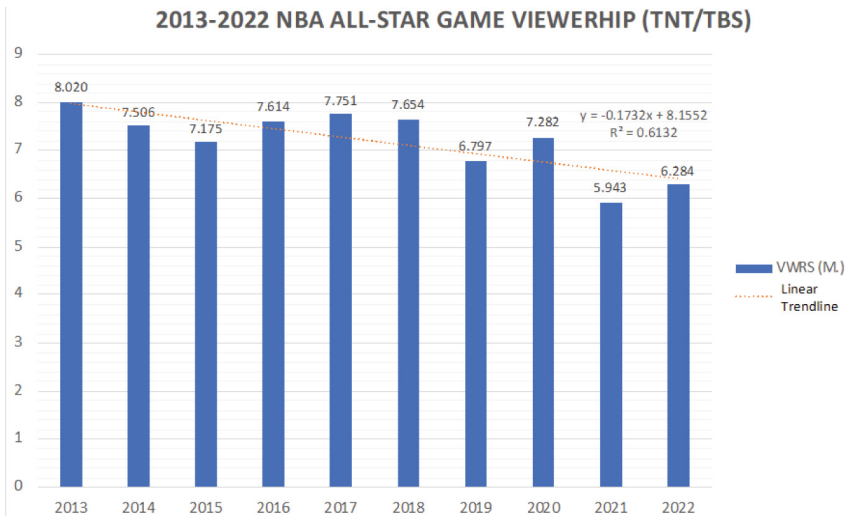
following year. Therefore, in consideration of fans attachment, the two format changes cannot be defined as a success. The NBA League needs to look for a better method to retain and redeem those basketball fans.

### 3.3 Validation

In order to prove the validity of the result, the research uses the questionnaire method to verify the results obtained in the previous section. The questionnaire has at most 11 questions related to the research. It was answered by 97 respondents from China, America and Australia via Internet.

**Table 2.** NBA All-Star Game Viewership Between 2013 and 2022

YEAR	CITY	NET	VWRS (M.)	Growth Rate
2013	Houston	TNT	8.020	
2014	New Orleans	TNT	7.506	-6.41%
2015	New York	TNT/TBS	7.175	-4.41%
2016	Toronto	TNT/TBS	7.614	6.12%
2017	New Orleans	TNT/TBS	7.751	1.80%
2018	Los Angeles	TNT/TBS	7.654	-1.25%
2019	Charlotte	TNT/TBS	6.797	-11.20%
2020	Chicago	TNT/TBS	7.282	7.14%
2021	Atlanta	TNT/TBS	5.943	-18.39%
2022	Cleveland	TNT/TBS	6.284	5.74%
<b>AVERAGE</b>			<b>7.2026</b>	



**Fig. 2.** 2013–2022 NBA All-Star Game Viewership (TNT/TBS)

**3.3.1 Reliability of the Questionnaire**

Firstly, this questionnaire has been read through and filled in by an expert at sports, Professor Antonio Cicchella. He evaluated all the questions and confirmed that all of them captured the topic under investigation. Secondly, I chose 30 respondents who watched NBA over a decade as a subset of my intended population to did a pilot test. The result of the pilot test also proved the validity of my questionnaire. Thirdly, reliability

analysis using Cronbach’s alpha was applied and the result is 0.913, which guaranteed the effectiveness of my data. Equation (2) demonstrates how Cronbach’s alpha is calculated [9].

$$\rho_T = \frac{k}{k - 1} \left( 1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_X^2} \right) \tag{2}$$

### 3.3.2 Result

In Question 9 to 11, respondents answered to what extent do they like the NBA All-Star Game format before 2018, during 2018 to 2019 and after 2020. The highest score is 10 (like) while the lowest score is 0 (hate). The average score for “Format Before 2018” is 7.76, “Format in 2018 and 2019” is 7.06, and “Format after 2020” is 7.24. 89.53% of 86 respondents gave a score higher than 6 (including 6) to the traditional East-VS-West game format. However, the proportion shrinks to 74.41% after the first format change and 77.91% after the second one. To conclude, the result reveals people are most satisfied with the traditional format and least satisfied with the 2018-to-2019 game format. For the present format, the data shows a polarization, with those who like it particularly liking it and those who don’t particularly disliking it. Figure 3, 4, 5 presents the accurate data of these three questions.

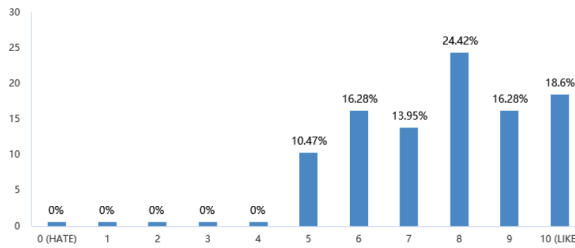


Fig. 3. The extent fans like the format before 2018

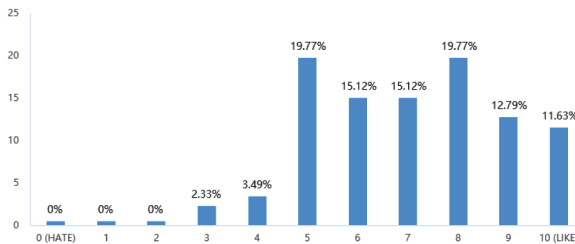


Fig. 4. The extent fans like the format in 2019, 2020

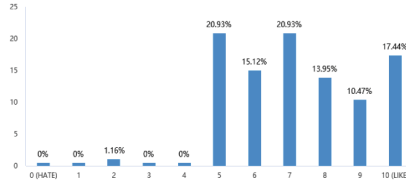


Fig. 5. The extent fans like the format after 2020

Table 3. Length of watching before 2018


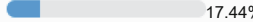
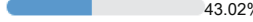
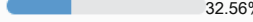
Option	Subtotal	Proportion
Watch only one quarter	1	1.79%
Watch half game	7	12.5%
Watch the entire game	34	60.71%
Watch the highlights after the game	14	25%
<b>TOTAL</b>	<b>56</b>	

Table 4. Length of watching in 2019 and 2020

option	subtotal	proportion
Watch only one quarter	2	2.94%
Watch half game	9	13.24%
Watch the entire game	37	54.41%
Watch the highlights after the game	20	29.41%
<b>TOTAL</b>	<b>68</b>	

In Question 6 to 8, the questionnaire researched viewer retention under different game formats. The result shows that decreasing number of spectators watch the NBA All-Star Game from beginning to the end, which indicates the reducing attraction of NBA All-Star Game after the attempt to change the game format. This proportion went down from 60.71% to 54.41% after 2018, and down to 43.02% after 2020. More fans chose to watch the highlights on YouTube or Tencent Sports after the game. This number rose from 25% to 29.41% after 2018, and rocketed to 32.56% after 2020. Table 3, 4 and 5 present the analysis of these three questions.

**Table 5.** Length of watching after 2020

option	subtotal	proportion
Watch only one quarter	6	 6.98%
Watch half game	15	 17.44%
Watch the entire game	37	 43.02%
Watch the highlights after the game	28	 32.56%
<b>TOTAL</b>	<b>86</b>	

## 4 Conclusion

This research discovered the negative effect of NBA All-Star Game format changes on fans attachment, which was more obvious in the year after the format change. Although the traditional East-versus-West All-Star Game format had lasted for decades of years, spectators didn't show any aesthetic fatigue. On the contrary, fans didn't show much interest in the new game formats and appeared to be reluctant to watch the entire game. This conclusion can be potentially explained by the following facts. Firstly, fans are accustomed to East-West rivalry. The format of the NBA Finals has been East-vs-West for a long time, and hasn't ever been altered. In the playoffs stage, teams in the Eastern will not play against the teams in the Western before the Finals. Therefore, this format may bring about a sense of geographical belonging. Even if his/her home team has been eliminated, he/she will still support the team from his/her region. Breaking this traditional rule to some extent dispels the opposition between fans from east and west, and relieves the tense atmosphere during the game. Secondly, the new game format can lead to an imbalance in the strength of two teams. As the players in each team are selected by the two team leaders, there's a possibility that one team is much more competitive than its competitor, which will lead to less excitement during the game.

This paper clarifies the impact of the two NBA All-Star Game format changes on fan enjoyment and fan attachment, which will help researchers in the NBA and related fields continue to optimize the game format. However, as the data of All-Star Game revenue are difficult to obtain, the marketing effect caused by the format change on fan attachment wasn't taken into account in this paper. The importance of sport marketing, especially in NBA, was highlighted through the works of Mullin, Hardy, and Sutton (2000), Schlossberg (1996), and Spoelstra (1997) [10]. Therefore, in order to facilitate in-depth analysis on the topic, further researches can focus on the changes of sponsors of NBA All-Star Game and look for the relationship between marketing and fan attachment.



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