

Necessary and Sufficient Factors for Stadium Attendance of the Minas Gerais State Championship between 2015 and 2018

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1. Introduction

Recent studies in the Marketing area have sought to identify the motivations of fans to attend stadiums and support their favorite football teams (Fagundes et al., 2013; Gasparetto et al., 2018). Some papers and thesis describe the structure of Brazilian football consisting of four main divisions of the national championship organized by the Brazilian Football Confederation (CBF) and other state professional championships, 27 just like the number of states in the country and each organized by their respective football federation.

A recent study showed that there are more than 28 thousand professional soccer players registered in Brazil, with the vast majority (82.4%) receiving monthly salaries close to the national minimum wage (CBF, 2019). This great mass of athletes acts, mainly, in the state championships which, although they are not more prestigious as in the past, still work as showcases for foreign markets, just like the negotiation of striker Gabriel Martinelli who worked in a state championship and was negotiated directly with Arsenal¹².

Although they are fundamental to the working ecosystem of Brazilian football, a portion of the Brazilian sports press calls for a significant change in the format of these tournaments:

"I do not defend the end of the States, but their total reformulation"¹³

"The state championships as we know them ended today"¹⁴

An important metric to guide a change in the format of competitions is to understand what reasons are necessary to attract the public to the stadiums to follow a match of these levels. The purpose of this work was to analyze 291 matches of the first division of the championship of the state of Minas Gerais to point out necessary and sufficient factors for the presence of the public in the stadiums between 2015 and 2018.

2. Theoretical Background and Literature Review

The occupancy rate of Brazilian stadiums is lower than other competitions in the world, such as the MLS or the Bundesliga, which denotes the importance of knowing the configurations that mobilize the presence

¹² <https://www.express.co.uk/sport/football/1107467/Arsenal-transfer-news-Gabriel-Martinelli-Unai-Emerly-Yannick-Carrasco>

¹³ <https://twitter.com/maurocezar/status/447879239300567040>

¹⁴ <https://www.uol.com.br/esporte/futebol/ultimas-noticias/2020/07/02/os-campeonatos-estaduais-como-a-gente-conhece-acabaram-hoje-diz-pvc.htm>

of the fans in following the matches (Azevedo et al., 2019). The complex behaviour of these industry spectators is due to the demands and objectives of the various factors involved.

The literature points factors as possible contributors to attendance in a match more than in others. This work used some of them as the average income of the city hosting the match, the importance of the match, the proportion of points earned by the teams, the squad value of the home team and visiting team and the rivalry between the teams (Azevedo et al., 2019). Likewise the classification of the visiting team and the home team in the championship, the average price of ticket and the reputation of the teams (Gasparetto et al., 2018).

3. Research Design, Methodology and Data Analysis

Provided by the Minas Gerais Football Federation we access the game registers of the Module I championships between 2015 and 2018 and organized the attendance rate, proportion of points in the championship and revenues. In sequence, we extract the squad values from the Transfermarkt's platform and the city's average income data through the government report of Instituto Brasileiro de Geografia e Estatística.

The approach used for analysis was the Coincidence Analysis with calibration for fuzzy-set which makes possible understand the notion of equifinality, that is, the various combinations and causal paths for a given event (Baumgartner, 2009). The set of crossover point was the median of attendance distribution data, the squad values, proportion of points earned and average city income.

4. Results/Findings and Discussion

We found a solution with parameters of consistency and coverage within the ideal values. It can be transcribed as:

There is a public presence in the stadium if and only if, the match involves a visiting team with a good position in the league table AND a non low value of average ticket OR, alternatively, the visiting team with a good proportion of points in the championship AND a high value of the visiting team squad OR a good ranking of the home team AND a good reputation from the visiting team AND an absence of importance of the round for the championship.

5. Conclusion, Contribution and Implication

In two of the conjunctions of the solution that point the cause of the public's presence in the stadiums, are present the value of the visiting team and the reputation of the visiting team. This implies the importance of high-ranking teams in attracting an audience to the stadiums for these competitions, leading to a strategy of maintaining these teams in the competition in view of the possible proposal to withdraw them from these tournaments.

This study expands the findings of Gasparetto et al. (2018) on the Brazilian state championships and their importance in the football work ecosystem. In addition, brings notes to the possible reformulations proposed by the sports media and the importance of high-ranking teams in the dispute.

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