Abstract

Title: The Impact of Stadium Spectators on the Home Advantage Phenomenon in

European Football

Objective: The aim of this thesis is to identify the magnitude of home advantage in selected

football leagues during the seasons before COVID-19 and in the 2020/21 season,

and to determine whether the presence of spectators significantly influences HA.

If confirmed, the study will also examine whether the number of spectators is a

significant factor.

Methods: The magnitude of HA is identified using the method of percentage home point

success. To test the significance of the presence and number of spectators on HA,

paired and unpaired two-sample t-tests are used, respectively. The normality of

input data is verified using histograms and the Shapiro-Wilk test. Visualization

of the dataset distribution is conducted using boxplots.

Results: The results of all examined leagues collectively show a statistically significant

decline in HA during the COVID-19 season compared to the ten-year pre-

pandemic average. This finding indicates that the presence of spectators is very

important for HA. Conversely, the difference in HA decline between two groups

of leagues, categorized by the size of their spectator attendance, was not

statistically significant. This suggests that the mere number of spectators may

not play a crucial role in the development of HA. The study also identifies that

not all leagues respond to the absence of spectators in the same way, indicating

that other factors such as cultural and geographical aspects, competitive balance,

and specific characteristics of individual leagues may influence HA.

Additionally, the element of randomness cannot be overlooked, given that only

one season was played entirely without spectators.

Key words: football leagues, stadium spectators, football, COVID-19, spectator ban