

THE EFFECT OF ORGANIZING MAJOR SPORTS EVENTS ON PUBLIC INTEREST IN SPORT – EXAMPLE OF THE 2018 EUROPEAN HANDBALL CHAMPIONSHIP ANALISED WITH GOOGLE TRENDS TOOL

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Abstract

The European Handball Championship (EHC), along with the Olympic Games and the World Championships, is the largest sports event in handball. In everyday practice, there is a need for exact measuring of interest for some activity or sport in a particular geographical area. The aim of this paper is to investigate the impact of the organization of the 2018 EHC on public interest in Handball in the territory of the Republic of Croatia. Keywords entered into an Internet search engine can be a useful resource for analyzing the public interest. For the purposes of this study we used the Google Trends network tool for detecting interests before, during and after the EHC. The results show that the greatest interest for handball was expressed in Varaždin county, whereas the 5 top cities were: Varaždin (100%), followed by Osijek (63%), Zagreb (61%), Split (55%), and Rijeka (52%). The presented results show that the organization of major sports events as the EHC affects the increase of interest, and in the analyzed case the interest during the EHC increased up to twenty times compared to the average values (3.14% max values) that occur during the analyzed period.

Keywords: handball; European championship; public interest; sport popularity

Introduction

European Handball Championship, along with the Olympic Games and World Championship, is the largest sports event in handball. Even though it is a complex event, which has changed significantly over the last decades, including an increasing number of participants and more than one organizer, the European championship represents a great opportunity, not only for promotion but also for generating numerous direct and indirect positive economic and social effects. For countries that have adequate infrastructure at their disposal, the organization of large competitions represents a flywheel for activating sports and touristic subjects, increasing income, employment, productivity, and return on cash flow invested in sports by the country through budgetary resources. Even though the government bodies, sports associations, and public funding providers often need exact criteria to assess the interest and trends related to a certain sport, there is neither a unique definition of popularity factors nor a special tool designed for reliable and

valid measurement of the effect of organizing major sports events on popularity, i.e., the public interest of a certain sport. In everyday practice, government bodies and local organizations make decisions on financing a certain project based on certain indicators, and one of the criteria is often popularity, i.e., interest for a certain activity or sport in some area. Keywords entered into an internet search engine can be a useful resource for detecting people's need for information on a certain topic (*Murata, 2006; Segev & Ahituv, 2010*). This approach has already been used for studying different trends and interests in the world, however, according to the available information, Čular et al. (2020) were the first to use it for measuring specific interest for some sport in a specific geographic area (Croatia). This study represents a logical continuation of the previous study, and its specificity and value are reflected in the fact that the method of entering keywords into an internet search engine has never before been used to investigate the interest generated by the organization of a major sports

event in Croatia. This study aims to determine the effect of the organization of the 2018 European Handball Championship on public interest in Croatia.

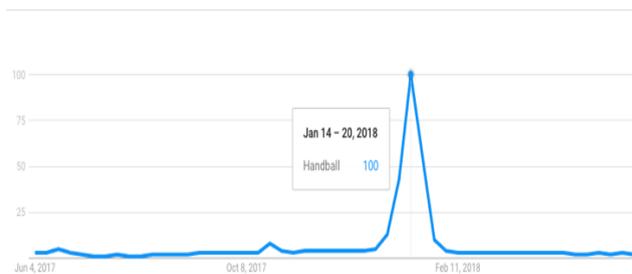
Methods

To analyze the effect of the organization of the 2018 European Handball Championship on public interest for handball in Croatia, we used a methodological approach (Čular et al., 2020) of gathering data through a Google Trends application (hereinafter *GT*) as a network tool for identification of interest for Handball in the period: before, during and after the organization of the European Handball Championship in January 2018 in Rijeka, Varaždin, Zagreb, and Split. *GT* (Nutti et al., 2014) provides access to internet search by analyzing a portion of all web queries on Google Search webpage and other linked Google web pages. To review the interest in Handball, we analyzed a one-and-a-half-year period (from 1 June 2017 to 30 May 2018), i.e., 6 months prior and 4 months after the 2018 European Handball Championship. The study was conducted by using a method of collecting data through an internet database (*Google search*). The following combination of queries was entered on the Google Trends application webpage (<https://trends.google.com/trends/?geo=S>): a) name of the sport: handball; b) location: Republic of Croatia; c) time frame: from 1 June 2017 to 30 May 2018; d) search category: all categories; e) type of search: web search. The graphic representation (Image 1) of the trend of interest was downloaded together with the results in the .csv format from the *GT* web page. Analysis was conducted using the application Microsoft Excel for Mac Os Version 16.43. The values are expressed on a scale from 0 to 100, with 100 representing the highest popularity and other values representing the portion in the overall searches at a given time (*week*), for example, the value of 50 indicates half of the searches entered compared to the highest expressed interest (value of 100).

Results and discussion

The results presented in Image 1 indicate that the peak of interest (100%) for handball in the Republic of Croatia occurs in the week between 14 and 21 January 2018, i.e., during the European Handball Championship (12 – 28 January 2018). In the month of the European Championship, the interest is increased up to twenty times compared to the stable average values occurring during the analyzed year, which range from 1 to 5% of the maximum value from January 2018.

Image 1- Trend of interest in handball



Data source: Google Trends (<https://www.google.com/trends>).

Legend: The curve represents the trend of interest for the search of the term Handball in the analyzed period (from 1 June 2017 to 30 May 2018)

Table 1- Review of interest in Handball by week (31 December 2017 to 28 January 2018).

AW	PI (%)	AW	PI (%)
04/06/2017	4	03/12/2017	4
11/06/2017	3	10/12/2017	4
18/06/2017	6	17/12/2017	4
25/06/2017	3	24/12/2017	5
02/07/2017	2	31/12/2017	13*
09/07/2017	2	07/01/2018	44*
16/07/2017	2	14/01/2018	100*
23/07/2017	2	21/01/2018	57*
30/07/2017	1	28/01/2018	10*
06/08/2017	1	04/02/2018	3
13/08/2017	2	11/02/2018	4
20/08/2017	2	18/02/2018	3
27/08/2017	2	25/02/2018	2
03/09/2017	2	04/03/2018	3
10/09/2017	3	11/03/2018	3
17/09/2017	3	18/03/2018	3
24/09/2017	3	25/03/2018	4
01/10/2017	4	01/04/2018	4
08/10/2017	3	08/04/2018	3
15/10/2017	3	15/04/2018	2
22/10/2017	7	22/04/2018	2
29/10/2017	5	29/04/2018	2
05/11/2017	4	06/05/2018	3
12/11/2017	5	13/05/2018	2
19/11/2017	5	20/05/2018	3
26/11/2017	4	27/05/2018	2

The results presented in Table 1 indicate that the trend of increased interest* starts on 31 December 2017 and lasts until 28 January 2018 when it falls back into the frame of the entire year’s average which is 3.14% of the maximum interest recorded in the middle of January 2018 (14 January 2018).

Table 2- Review of interest in Handball by county (31 December 2017 to 28 January 2018).

County	PI (%)
V VARAŽDIN	100
II KRAPINA-ZAGORJE	77
VII BJELOVAR-BILOGORA	76
XV ŠIBENIK-KNIN	71
I ZAGREB	69
VI KOPRIVNICA-KRIŽEVCI	69
XVI VUKOVAR-SRIJEM	69
XX MEĐIMURJE	67
IV KARLOVAC	66
XVII SPLIT-DALMATIA	62
XXI ZAGREB CITY	62
XIX DUBROVNIK-NERETVA	61
XVIII ISTRIA	60
XIII ZADAR	58
XIV OSIJEK-BARANJA	57
X VIROVITICA-PODRAVINA	55
III SISAK-MOSLAVINA	54
XI POŽEGA-SLAVONIA	54
VIII PRIMORJE-GORSKI KOTAR	49
XII BROD-POSAVINA	45
IX LIKA-SENJ	38

Data source: Google Trends
(<https://www.google.com/trends>)

Legend: PI= percentage of interest in relation to the maximum interest (%)

As seen in the results presented in Table 2, the highest ratio of interest for Handball during the period of the European Championship is expressed in Varaždin (100%), Krapina-Zagorje (77%), and Bjelovar-Bilogora County (76%), whereas the lowest interest is expressed in Lika-Senj (38%), Brod-Posavina (45%), and Primorje-Gorski Kotar County (49%).

The presented ratios should be taken with some reservations as the counties differ in population size.

Table 3- Review of 5 cities with the highest interest for Handball in Croatia in the peak interest period (31 December 2017 to 28 January 2018).

City	PI (%)
Varaždin	100
Osijek	63
Zagreb	61
Split	55
Rijeka	52



Legend: PI= percentage of interest in relation to the maximum interest (%)

According to the results presented in Table 3, the highest interest for handball is expressed in Varaždin (100%), followed by Osijek (63%), Zagreb (61%) Split (55%), and Rijeka (52%). The list of 5 cities with the highest expressed interest includes three host cities in which the matches were played. According to the results downloaded from the GT application, the five most used search terms are: handball (100%), Croatia handball (30%), handball 2018 (30%), handball championship (22%), European Handball Championship (21%). When exact results are presented, a logical question arises about the purpose and use of these values. Beside curiosity, why is it important to have a precise tool to compare and measure the interest for a specific sport? On the global scene, the International Olympic Committee (IOC) conducts a selection process to include new sports in the summer or winter program of the Olympic Games. According to the Encyclopedia Britannica (<https://www.britannica.com/story/how-are-sports-selected-for-the-olympics>), when selecting a sport to include in the OG program, the IOC, apart from other indicators, must also consider the public interest. European funds, such as the Erasmus+ sports fund, support sports projects, however, it is expensive and impractical to conduct a separate research for each project to measure the impact of project activities on interest for certain sports or recreational activities. The National Sports Program (NSP 2018), as the principal Croatian strategic sports document adopted by the Croatian Parliament, defines the categorization of sport as a specific objective 1.1. Interest for a certain sport is surely one of the variables that must be included in the methodology of categorization of sports.

National sports federations need cost-benefit analyses before and/or after organizing major sports events to justify the resources invested, which, to some extent, come from public sources. Thus, the proposed model of research through the Google Trends application could be one of the acceptable solutions for measuring the effect that organization of major sports events has on public interest.

Conclusion

Despite the relative limits of the sample, which includes only the population that uses internet technology and information tools, which, according to Eurostat (*Source: online data code: isoc_ci_in_h*) refers to 72% of the Croatian population in 2018, we can conclude that GT provides precious data in the area of analysis of trends and interests in handball over the analyzed one-year period. The

presented results show that the organization of major sports events affects the increase of interest, and in the analyzed case the interest during the EHC increased up to twenty times compared to the average values (3.14% max values) that occur during the analyzed year. Future studies should investigate how the organization of major sports events affects new members joining sports clubs and compare sports by competition regulation & sport talent ethical approach.

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