

GEOSPORT FOR SOCIETY

Scientific Journal founded in 2014 under aegis of University of Oradea (Romania),
University of Debrecen (Hungary), University of Gdansk (Poland)

ISSN 2393-1353

Edited by Oradea University Press
1, University Street, 410087, Oradea, Romania

Journal homepage: <http://geosport.uoradea.ro>



The possibilities and results for the scientific research into the relationship between settlements and sport

Gábor KOZMA^{1*}, Zoltán BÁCS², Zsombor ZILINYI³

1. University of Debrecen, Department of Social Geography and Regional Development Planning, 1. Egyetem sq, 4032 Debrecen, Hungary, e-mail: kozma.gabor@science.unideb.hu
2. University of Debrecen, Department of Accounting, 138. Bőszörményi st, Debrecen, Hungary, e-mail: bacs.zoltan@econ.unideb.hu
3. Local authority of Debrecen, 11. Kálvin sq, 4026 Debrecen, Hungary, e-mail: zizso89@gmail.com

* *Corresponding author*

Article history: Received: 11.06.2015; Revised: 23.08.2015; Accepted: 22.09.2015, Available online: 10.10.2015

Abstract. The scope of tasks organised and performed by settlements and their leaders has continuously broadened since the beginnings of time. Initially, the leaders of settlements were primarily expected to provide for the safe operation of the settlement, the creation of the conditions of commerce, as well as the administration of justice. However, from the 18th and 19th centuries onward, settlements started to play an increasingly important role also in the areas of education, social and healthcare services. In the 20th century, parallel with the spread of the notion of the welfare state, activities related to the useful spending of free time have gained importance, among which, in addition to culture - primarily in the most recent times - sports has played an increasingly significant role as well. The aim of this paper is to explore the possible areas of researching the relationships between settlements and sports. Further developing the tetrahedron model of the settlement, the truncated triangular pyramid model has been created, the two bases of which are the natural environment and the municipal administration, while the sides are the infrastructural, economic and social spheres. The paper will present the results of and further possibilities in sports-related research aimed at each of these spheres, as well as the sports-related characteristics of the interactions taking place along the edges of the truncated triangular pyramid.

Keywords: settlement, sport, local authority, sporting event, society, sports facility

Introduction

There is a lively debate these days in Western Europe, North America, and also in Hungary, on the cost-effectiveness of sports facilities (mainly stadiums) and sporting events (especially Olympic Games), as well as the usefulness of the construction and organisation of such facilities and events (Ilies et al., 2014). In the background of these debates we can primarily find the fact that postmodern cities showing considerable development in recent times (Bramham & Wagg, 2009) devote an increasing amount of attention to satisfying the needs of their own citizens as well as tourists coming to the settlement. In the framework of the above, special emphasis is given to the extension of entertainment possibilities, among which events related to sports also play an important role in addition to culture.

At the same time, the above processes called the attention of researchers to the fact a multitude of links connect settlements (and specifically among them, cities) and sports, and that they mutually influence each other's development. As a result, research projects were started primarily from the perspective of urban studies, which analysed the various forms of expression of the connection between the two areas.

One possible starting point of the theoretical and practical examination of the connections could be the tetrahedron model of József Tóth (1981), according to which the settlement is the cooperating system based on the interaction between the natural/physical, social, economic and infrastructural realms. The four realms may be illustrated by way of four equilateral triangles which constitute a tetrahedron (fig. 1). All realms have connections with all other realms, and as a result there are interactions along the sides of the triangles: changes in each of the realms may cause significant changes in the way the other three realms operate.

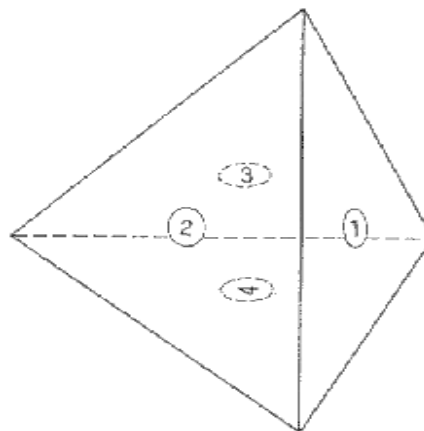


Figure 1. The tetrahedron model of settlement
(1 – social realm, 2 – economic realm, 3 – infrastructural realm, 4 – natural/physical environment)
(Source: Tóth, 1981)

However, this model does not cover the realm of public administration otherwise fulfilling a very important function these days in the lives of settlements,

which in the specific case means the administration provided by the local authorities, and which plays a role in the life of the settlement primarily by way of the local ordinances and decisions adopted by the local councils. As a consequence, in the framework of the further development of the tetrahedron model, it is expedient to cut off the top part of the social, economic and infrastructural sides and to create a truncated pyramid by way of putting a new base parallel with the natural/physical realm (fig. 2).

Considering the truncated pyramid model from the side of sports, however, in my opinion, yet another addition must be made: in the lives of settlements, sports appear in most cases in the form of various sports events, which – due to the fact that they are fundamentally in connection with each of the elements of the form – is expedient to be included in the model as a sphere inside the pyramid.

In the later parts of the study, relying on the results of both Hungarian and international research projects, I will discuss the individual realm's various forms of manifestation related to sports; in addition, I will also analyse the sports-related elements of the interaction between the realms. In the studies, the settlements fundamentally appeared in two types of relationship systems: on the one hand, researchers have explored the differences between the settlements, and on the other hand, they identified the processes taking place within the settlements.

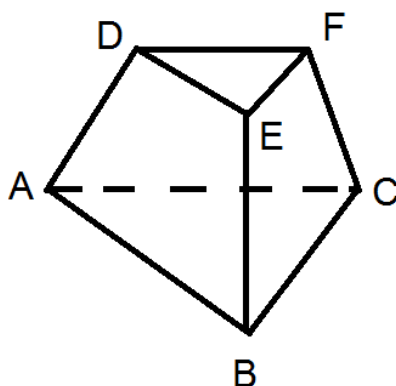


Figure 2. The truncated pyramid model of the settlement
(ABC – natural/physical environment, ABED – social realm, BCEF – economic realm, ACDF –
infrastructural realm, DEF – local administrative realm)
(Source: Kozma, on the basis of Tóth, 1981)

We think to this analysis it is necessary to describe the meaning of sports and sporting activities. According to the European Sports Charter (1992): ‘Sport’ “means all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels.” The Hungarian I. act about sport (2004) expands this definition with intellectual activities (for example chess is also a sport), besides the law states that sport and sporting activity is a desirable goal and a basic value for the nation. If we can accept these concepts, wide variety of activities can be specified as sports.

The individual realms' forms of manifestation related to sports

From the point of view of the manifestation of the individual realms related to sports, the *natural/physical realm* is in a special position, due to the fact that – by way of the edges of the truncated pyramid – it has an effect/influence on the other three realms; at the same time, it cannot be examined in itself, and therefore, it will be analysed only in the next chapter.

In the course of the examination of the *social realm* and sports, the sports-related activities of the local population and civil organisations are in the centre (Major et al., 2014). On the basis of the Eurobarometer public opinion survey regularly prepared for the European Commission on the willingness of the population to engage in sports, significant differences can be observed on the basis of countries, gender, age and education (Perényi, 2011). With respect to the differences between settlements, the results indicate the importance of the type of communities (table 1): in big cities, a larger proportion of frequent engagement in sporting activities can be observed than in villages and rural areas.

Table 1. The frequency of sporting activities on various types of communities in the European Union in 2013 (%)

	rural area or village	small/medium town	large town	EU 28
1 time a week or more	35.9	40.4	41.3	39.1
1 to 3 time a month	4.9	5.5	6.0	5.4
less often	13.1	13.0	12.5	12.9
never	46.1	41.1	40.2	42.6

Source: European Union, 2014

Civil organisations primarily play an important role in the organisation of society's sporting activities (Bács, 2011), and their significance is clearly indicated by the fact that in terms of absolute numbers, they constitute the largest group of the civil sector in Hungary (this meant nearly 12% of the entire sector in 2013). If we examine the characteristics of civil organisations working in the field of sports according to settlement types (table 2), on the one hand we can observe a lower share in the case of Budapest, and an overrepresentation as far as towns other than county seats and other settlements are concerned.

Table 2. The distribution of civil organisations working in the field of sports and all civil organisations according to settlement types in Hungary in 2013 (%)

	Budapest	county seat	non county seat towns	villages	total
civil organisations active in the field of sports	18.3	21.7	33.0	27.0	100.0
all civil organisations	24.3	21.0	29.8	24.9	100.0

In the analysis of the *infrastructural realm*, researchers mainly concentrated on the examination of the location of sports facilities. On the basis of the findings, three main types can be differentiating: location in or near the centre, within the

settlement limits, and in the suburbs (Thornley, 2002). The *first type* evolved mainly for historical reasons, since in this case the facility was formerly located on the edge of a settlement at one point, and due to its growth and spatial spreading, the location of the sports facility can be now considered as central. On the other hand, since the 1990s, due to the growing importance of renewing the deteriorated economies of inner cities, mainly in the United States of America, this location has once again come to the foreground (Turner & Rosentraub, 2002; Nelson, 2007).

The *suburban location* became very popular in the United States in the 1960-70s, due to several reasons (Bale, 2003; Barghchi et al., 2009). On the one hand, due to the difficulty of extending/modernising facilities in their existing locations – in line with the decentralisation of the cities in the 1960s – the option of using cheap suburban sites emerged as a matter of course, and economic efficiency was further increased by the fact that the real estates on which the earlier facilities were located could be sold at favourable prices (Chapin, 2000). On the other hand, these sporting facilities were located close to motorways, in well-accessible locations, and there was no danger that they would cause disturbance to those living nearby.

On the European continent, the suburbanisation of sports facilities (primarily football stadiums) gained momentum from the early 1980s, with two factors in the background. First, due to the growing popularity of football, the existing facilities increasingly turned out to be too small, and in order to increase their incomes, football clubs set as an objective the construction of larger facilities. Second, as a consequence of Hillsborough disaster of 1989, increasingly strict regulations were introduced regarding the standards of equipment at the stadiums, and in most cases the new demands could not be satisfied, and as a consequence, suburban sites as an option came to the foreground.

There may be several factors behind the increasingly popular location *within the settlement but at a certain distance from the centre* (Barghchi et al., 2009). On the one hand, this choice may be caused by the fact that at the existing location the necessary modernisation/extension of the facility is not possible; at the same time, however, the team – partly motivated by the desire to stay close to their supporters – does not wish to relocate at a large distance. On the other hand, also in case of newly constructed, larger sports facilities (e.g. investment projects related to Olympic Games), real properties within the city boundaries with good accessibility by way of public transportation also come to the foreground. In both cases, the facilities are often built on deteriorated, earlier industrial locations, with the hopes that the new facility will play the important role of being a catalyst in the renewal of the neighbourhood concerned.

From the point of view of the connection between the *economic realm* and sports it is of outstanding significance to examine the role played by sports in the economic life of the settlements and what characterises the situation of business enterprises working in the field of sports. If we consider the situation in Hungary, we can conclude that companies listing sports as their principal activity are in a more unfavourable situation both in terms of their revenues and the number of employees relative to the average of all businesses. The most important influence on the distribution of the organisations concerned according

to counties are GDP and total domestic revenue, and as a consequence, the most favourable results can be found in Budapest, as well as Pest, Győr-Moson-Sopron, Fejér and Vas counties (KSH, 2014).

The activities of *local authorities* related to sports can be traced back to different reasons. First, the successes of local athletes (here we should primarily think of team sports) may play a very important role in increasing the pride and the positive self-image of those living on the given settlement, and local authorities may use them in the course of their marketing activities. Second, supporting mass sports will improve the health status of the population, and third, sporting events may be a significant source of income for local authorities and local businesses.

The activities of Hungarian local authorities related to sports are fundamentally governed by two groups of legal provisions: those applicable to local authorities on the one hand, and those related to sports on the other hand. Act LXV of 1990 on local authorities listed supporting sports as one of the tasks of local authorities, which function was reinforced by the new law, Act CLXXXIX of 2011 on the local authorities of Hungary. The most important legal provisions on sports (Act LXIV of 1996, Act CXLV of 2000 and Act I of 2004) regulate this area in much more detail, and on the basis of the tasks to be performed, they differentiate between county and settlement-level local authorities, and within the latter group, deal with cities of county rank separately.

The performance/organisation of tasks related to sports within the local authority may take place in different ways: there may be a separate official in charge of this issue within the mayor's/county assembly's office; the local council (or in cities of county rank and county governments, the general council) may establish a separate committee (Kozma & Radics, 2011) that is in charge of this area; they may create local provisions of law in which the principles related to sports are laid down (such as a local sports concept, and in case of settlements with a population less than 10,000, the mandatory sports ordinance); or they may establish a municipally owned company for the performance of the specific tasks (Bukta, 2011).

As far as *sporting events* are concerned, on the basis of their effect on the life of the settlement, two basic types can be identified: closed and public events (Hall, 1992). In the former category we primarily find the training camps that the local population (and even groups who like sports) are usually not very much aware of, and they hardly even affect the everyday life of the settlement. By contrast, in case of public sporting events, the situation is the exact opposite: even those who are not close to sports are aware of their existence in most cases, and they often influence the life of the entire settlement (e.g. the closing of roads due to a running race in the streets).

The examination of the relationship between the individual realms

The effects related to the natural realm

The analysis of the effect of the natural conditions on sports in terms of the differences between settlements, we can conclude that some of the settlements offer more favourable conditions for certain types of sports than others (Bale, 2003; Bánhidi, 2011). In addition to mountainous regions being the primary locations for

winter sports and settlements along rivers for water-based sports, we should definitely mention that from the point of view of training camps, settlements at a higher altitude above sea level enjoy a significant competitive advantage, as do in case of open-air team sports (especially football), in the winter preparation period (Koc, 2005), settlements offering favourable conditions (e.g. the Mediterranean coast of Turkey).

Due to its size, the various parts of a given settlement very rarely offer differing natural conditions, and as a result the relationship between nature and the conditions for sports within a settlement can only be examined with certain limitations. As far as sporting facilities are concerned, it is primarily in case of football fields that such a relationship can be observed: in the designing of such facilities, in most cases special attention is devoted to ensuring that the afternoon sun should not disturb goalkeepers, and therefore, the north-south orientation is preferred over the east-west orientation.

Another important area of the relationship between the natural environment of a settlement and sports is the analysis of the *effect of sports on the natural environment*. In recent decades, several unfavourable phenomena have come to the surface (e.g. the harmful consequences of the use of artificial snow and the use of land for golf courses); at the same time, studies also point out that the idea of environmental sustainability has received insufficient attention among operators of sports facilities (Mallen et al., 2010) and organisers of sporting events (Leopkey & Parent, 2009), and significant progress would still be necessary in this respect.

Effects related to local authorities

The activities of local authorities related to sports may be realised in different forms, and the effects of such activities can be identified in case of several realms. First, the local authority defines the potential spatial configuration of the *sports-related infrastructure* in different urban planning documents (e.g. settlement structure plan), in the course of which special emphasis has been given, for a long time, to questions of accessibility, the location of available free land areas, and the presence of the market of consumers. In addition to the above, an increasing role is also played in recent times by the possibility of linking with existing facilities (Kozma et al., 2014), as a consequence of which we can now observe the emergence of complex sports centres/zones in an increasing number of settlements (e.g. Győr, Debrecen).

Secondly, by way of using different tools (e.g. organising events, operating a local sports school, the development of sports facilities), local authorities may significantly broaden the sporting opportunities available to the *local society*, thereby contributing to the propagation of the ideals of a healthy lifestyle. According to the data the level of satisfaction with actions of local authorities in this field has influence on sport and physical activities of inhabitants: among those dissatisfied with the contribution of local authorities a higher rate of inactivity, while among those formulating a less critical opinion a higher rate and higher frequency of participation was recorded (table 3).

Table 3. Consideration of local authorities' contribution to creating sporting opportunities (%) in the European Union in 2013

frequency of sport activity	contribution of local authorities (local authority does not do enough for its citizens in relation to sport and physical activities)			
	A	B	C	D
1 time a week or more	39.6	37.0	41.9	46.0
1 to 3 time a month	5.8	5.5	5.7	5.9
less often	12.0	14.1	14.0	11.4
never	42.6	43.5	38.4	36.7
total	100.0	100.0	100.0	100.0

Source: European Union, 2014

Thirdly, local governments also play an important role in the *financing of the local sports life*, with respect to which researchers have established several categories (Gyömöri, 2014):

- financial support given to companies engaged in various activities related to sports;
- support for the organising of sporting events (direct financial aid or the possibility of using sports facilities owned by the local authority free of charge);
- support for non-profit organisations engaged in sports-related activities;
- financing sports-related developments.

Examining the effects of the individual realms, we can conclude that *sporting events* also have an influence on the activities of local authorities, and sporting events may generate income directly (in the form of tourism tax) or indirectly (by way of the local business tax of the companies participating in the organisation of the sporting events) for the local authorities. The *sports facilities* constructed often fulfil an important role in the development of a given part of a settlement, and in relying on them the local authorities may successfully apply to host subsequent events as well. In addition to the above, both sporting events and sports facilities may constitute important elements of the *marketing activities* of the local authority (Rein & Shields, 2007; Kozma, 2010), the purpose of which is to contribute to the image of a dynamic city capable of satisfying a variety of demands.

Interactions between the social, economic and infrastructural realms

The three lateral sides of the truncated pyramid are connected to each other by way of multiple threads. Local society, non-profit organisations and businesses active in the field of sports are users of sports facilities, and accordingly, it can be observed in several cases that entities in the latter two categories are also the owners or operators of the sports facilities.

In terms of the interaction between the *infrastructure and the economy*, the most important question was how sports facilities influence the economic lives of cities. For a long time, the opinion has dominated among researchers (e.g. Baade, 1996; Zimbalist, 1998) that sports facilities have no significant positive economic

influence, and that no measurable effect on job creation or the increase of personal income or local tax revenue can be attributed to them.

In the new millennium, however, changes occurred from two points of view. On the one hand, some of the researchers have pointed out that the earlier analyses were based on surveys examining sports facilities with peripheral or suburban location. By contrast, from the 1990s, primarily in the United States, an increasing role is played by facilities located in the inner parts of cities, often within the CBD, which are architecturally novel, also function as tourist sights and play an organic part of the renewal of the inner cities. In the case of these sports facilities, a significant economic effect can, in fact, be observed (Nelson, 2007).

On the other hand, an increasing number of studies have addressed the non-economic, and therefore less measurable effects of the new facilities. These include the changes in the self-confidence and pride of the local population, the role of the facilities in the modification of the image of individual settlements, and in the opinion of the researchers, some favourable processes can be observed in this respect (Davies, 2006).

One of the possible areas of inquiry into the relationship between the *infrastructure and the social realm* is the analysis of the sites where the population can engage in sports and other physical activities, in which field in significant differences between the settlements types within the European Union can only be observed in a few cases (table 4). Such activities being performed at home is mainly typical in villages, while in case of large cities, the importance of activities tied to fitness centres is above the average.

Table 4. The sites where the population engages in sports and other physical activities in case of various settlement types in the European Union (%)

	at home	at a health or fitness centre	at a sports centre	on the way between home and school or work
rural area or village	42	11	6	22
small/medium town	34	15	9	26
large town	31	21	9	28
EU 28	36	15	8	25

Source: European Union, 2014

The other side of the relationship between infrastructure and the social realm is how the events concerned (and the sports facilities serving as their location) influence society. Relying on the increasingly widespread notion of NIMBY (Not In My BackYard), for a long time the perception that dominated was that due to the various unfavourable effects (e.g. the appearance of crowdedness, garbage and noise, disturbances accompanying the events), the sports facilities cause the value of real properties to decrease.

However, in the decade after 2000, a significant part of the empirical research projects carried out in various countries and cities (e.g. Tu, 2005; Ahlfeldt & Maanning, 2008) came to the exact opposite conclusion. The appearance of sports facilities had a positive effect on the value of real properties, in the background of which we can identify the leisure and entertainment opportunities offered by the

infrastructural development following the construction of such facilities, as well as those offered by the new facility itself.

The relationship between sporting events and the individual realms

The relationship between the natural environment and local authorities in terms of sporting events was discussed above, and therefore, we will not deal with these two areas in the following.

The relationship between *sporting events and the infrastructure* is very clear: facilities serve as the venues for the local sporting events, and it can be observed in several cases that behind the construction of a given facility is the purpose to serve as a venue for some larger event (this is primarily true for Olympic Games, as well as for European and world championships in football, but the primary purpose for which the Fónix Hall in Debrecen was erected was also to provide a location for the gymnastics world championship in 2002). Recently, however, it has been a problem on several occasions that the rate of utilisation of the facilities constructed for a larger event (e.g. the Athens and the Beijing Olympic Games, or the European Football Championship in Portugal) decreased to a very low level after the event, and their maintenance consumed considerable amounts. In the interest of avoiding such a situation, various methods are used these days.

At the professionalized era of sport the national sport associations determine the requirements for the sports-related facilities. These buildings have shorter amortization period due to their intensive usage and have to be rebuilt or renovate in every 30-40 years. More emphasis is placed on the construction of multifunctional facilities; moreover the possibility for reducing the capacity of the facilities concerned after the event is also created; and finally, an attempt is made to curb excessively large-volume constructions. As the National Olympic Committee's acknowledged "Agenda 2020" program expresses, sport events in the future will be held in an economic and reasonable environment. This program gives the opportunity for smaller countries and capitals to organize the Olympic Games with lower budgets. As Hungary is 9th at the race between the all-time medallists, the country has the sports-professional background and reason for organizing such a worldwide event.

The analysis of *the effect of sporting events on the economic life of the settlement* hosting them is one of the most important areas of sports-related research projects, which is also perhaps the one that the public is most interested in. In this topic the analyses that have attracted most attention are those related to Olympic Games, which address the economic benefit of the games as well as the exaggeration of the assumed multiplier effect (Preuss, 2004). At the same time, attention is also called to the importance of examining the long-term effects (e.g. new infrastructural facilities also serving the interests of the city) of the events (Gratton & Preuss, 2008), the inaccuracies of preliminary estimates of costs (Matheson & Baade, 2006), as well as to the fact that major differences can be observed between larger and smaller-scale events (O'Brien, 2007).

From the point of view of *the relationship between sporting events and the social realm*, one of the most important topics is the willingness of the population to

participate at the events as spectators. According to the research projects (e.g. Turco et al., 2003), from among the various socio-economic characteristics of the population, it is the effect of the age distribution and educational attainment that can emphasised most: participation at sporting events can be observed with much bigger frequency among younger people, and this is also true for those with higher levels of educational attainment, and in case of sporting events held in Hungary on settlements other than one's own, also for those living in Budapest (Kozma et al., 2014).

Conclusions

I think that we have managed to prove convincingly that there are lots of interactions between different realms of settlements and sports and in this way my article will inspire further researches in this area.

Acknowledgements

The publication was supported by the **SROP-4.1.2.E-15/1/KONV-2015-0001 (TÁMOP-4.1.2.E-15/1/KONV-2015-0001)** project. The project has been supported by the European Union, co-financed by the European Social Fund.

References

- Ahlfeldt, G. M., Maenning, W., (2008), *Impact of sports arenas on land values: evidence from Berlin*, in *The Annals of Regional Science*, vol. 44, no. 2, pp. 205-227;
- Baade, R. A., (1996), *Professional Sport as Catalyst for Metropolitan Economic Development*, in *Journal of Urban Affairs*, vol. 18, no. 1, pp. 1-17;
- Bale, J., (2003), *Sports geography*. Routledge, London – New York;
- Bács, Z., (2011), *A magyar sport működési szerkezetének lehetséges szegmense: a felsőoktatási sportszervezetek*. Magyar Sporttudományi Szemle, vol. 12, no. 3, pp. 21-23;
- Bánhidi, M., (2011), *Sportföldrajz*. Dialóg Campus Kiadó, Budapest – Pécs;
- Barghchi, M., Omar, D., Aman, M. S., (2009), *Cities, Sports Facilities Development, and Hosting Events*; in *European Journal of Social Sciences*, vol. 10, no. 2, pp. 185-195.
- Bramham, P., Wagg, S. (eds.), (2009), *Sport, leisure and culture in postmodern cities*. Ashgate, Farnham;
- Bukta, Zs., (2011), *Jogos-e a versenylőny*, in *Civil Szemle*, vol. 8, no. 3, pp. 61-82.
- Chapin, T., (2000), *The political economy of sports facility location: An end-of-the century review and assessment*, in *Marquette Sports Law Journal*, vol. 10, pp. 361-382;
- Davies, L.E., (2006), *Sporting a new role? Stadia and the real estate market*, in *Managing Leisure*, vol. 11, no. 4, pp. 231-244;
- Gratton, C., Preuss, H., (2008), *Maximizing olympic impacts by building up legacies*, in *International Journal of the History of Sports*, vol. 25, no. 14, pp. 1922-1938;
- Gyömörei, T., (2014), *Az önkormányzatok sportfinanszírozása Magyarországon*, in *IDResearch Kutatási és Képzési Kft.*, Budapest;
- Hall, C. M., (1992), *Hallmark tourist events*. Belhaven Press, London;
- Ilies, A., Dehoorne, O., Wendt, J., Kozma, G., (2014), *For geography and sport, sport geography or geography of sport*, in *Geosport for Society*, vol. 1, no. 1-2, pp. 7-18;
- Koc, E., (2005), *New product development in the Turkish tourism market: the case of football tourism*, in *Journal of Sport and Tourism*, vol. 10, no. 3, pp. 165-172;
- Kozma, G., (2010), *Sport as an element in the place branding activities of local governments*, in *GeoJournal of Tourism and Geosites*, vol 3, no 2., pp. 133-143;
- Kozma, G., Radics, Zs., (2011), *The place of sports in the committee structure of Hungarian local councils*, in *Scientific Report Series Physical Education and Sport*, vol. 15., no. 1., pp. 92-97;

- Kozma, G., Teperics, K., Radics, Zs., (2014), *The Changing Role of Sports in Urban Development: A Case Study of Debrecen (Hungary)*, in *The International Journal of the History of Sport*, vol. 31, no. 9, pp. 1118-1132;
- Kozma, G., Michalkó, G., Kiss, R., (2014), *The socio-demographic factors influencing visitors participation in Hungarian sports events*, in *Journal of Physical Education and Sport*, vol. 14, no. 3, pp. 391-396;
- Leopkey, B., Parent, M.M., (2009), *Risk Management Issues in Large-scale Sporting Events: a Stakeholder Perspective*, in *European Sport Management Quarterly*, vol. 9, no. 2, pp. 187-208;
- Major, D., Bujdosó, Z., Csernák, J., (2014), *A Károly Róbert Főiskola hallgatóinak utazási szokásai*, in *Acta Carolus Robertus*, vol. 4, no. 1, pp. 91-100;
- Mallen, C., Adams, L., Stevens, J., Thompson, L., (2010), *Environmental Sustainability in Sport Facility Management: A Delphi Study*, in *European Sport Management Quarterly*, vol. 10, no. 3, pp. 367-389;
- Matheson, V.A., Baade, R. A., (2006), *Padding required: Assessing the economic impact of the Super Bowl*, in *European Sport Management Quarterly*, vol. 6, no. 4, pp. 353-374;
- Nelson, S.L., (2007), *Sports Facilities: From Multipurpose Stadia to Mixed Use Developments*, in Paper presented at American Real Estate Society Conference, San Francisco;
- O'Brien, B., (2007), *Points of leverage: maximizing host community benefit from a regional surfing festival*, in *European Sport Management Quarterly*, vol. 7, no. 2, pp. 141-165;
- Perényi, Sz., (2010), *On the fields, in the stands, in front of TV - value orientation of youth based on participation in, and consumption of, sports*. *European Journal for Sport and Society*, vol. 7, no. 1, pp. 41-52;
- Preuss, H., (2004), *The economics of staging Olympics: a comparison of the Games, 1972-2008*, Edward Elgar, Cheltenham;
- Rein, I., Shields, B., (2007), *Place branding sport: Strategies for differentiating emerging, transitional, negatively viewed and newly industrialised nations*, in *Place Branding and Public Diplomacy*, vol. 3, no. 1, pp. 73-85;
- Thornley, A., (2002), *Urban Regeneration and Sports Stadia*, in *European Planning Studies*, vol. 10, no. 7, pp. 813-818;
- Tóth, J., (1981), *A településhálózat és a környezet kölcsönhatásának néhány elméleti és gyakorlati kérdése*, in *Földrajzi Értesítő*, vol. 30, no. 2-3, pp. 267-292;
- Tu, C.C., (2005), *How Does a New Sports Stadium Affect Housing Values? The Case of FedEx Fields*, in *Land Economics*, vol. 81, no. 3, pp. 379-395;
- Turco, D. M. – Swart, K. – Bob, U. – Moodley, V. (2003), *Socio-economic impacts of sport tourism in the Durban Unicity, South Africa*. *Journal of Sport Tourism*, vol. 8, no. 4, pp. 223-239;
- Turner, R.S., Rosentraub, M.S., (2002), *Tourism, Sport and the Centrality of Cities*, in *Journal of Urban Affairs*, vol. 24, no. 5, pp. 487-492;
- Zimbalist, A., (1998), *The economics of stadiums, teams and cities*, in *Policy Studies Review*, vol. 15, no. 1, pp. 17-29;
- *** European Commission, (2014), *Eurobarometer 80.2 (2013)*, TNS Opinion, GESIS Data Archive, Cologne. ZA5877 Data file Version 1.0.0, doi:10.4232/1.12010;
- *** KSH (2014), *Cég-Kód-Tár 2013*. KSH, Budapest;