Original Article

Investment expenditure on sport infrastructure in Poland: diagnosis, general trends, and possible prospects

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Published online: April 30, 2020

(Accepted for publication: April 15, 2020)

DOI:10.7752/jpes.2020.s2154

Abstract:

An increasing pace of life, high expectations regarding professional activity, achievements in the field of science and technology as well as an expanding offer of alternative ways of spending freetime and the associated habits contributing to physical inactivity result collectively in a significant and growing limitation of the physical activity of Europeans, including Poles. It seems that reversing this trend is impossible without continued and increased education combined with a consistent creation of proper physical environment that supports the development of recreation and sports, including in particular activities leading to greater availability and improved quality of sport facilities and other recreation venues. Therefore, this article discusses the efforts made in this respect so far, by analysing primarily the value of government expenditure on recreation and sports in Poland and other European Union member states as well as the intensity of investing in sport infrastructure in Poland. The goal of this study is to evaluate the committed expenditure, including investment outlays, from the perspective of emerging needs and past events discovered through the performed international comparisons. To achieve this goal we used varied data sources, which included mainly: data from the Eurostat, the Statistics Poland, and unpublished information from the Polish Ministry of Sport and Tourism. Our findings indicate that despite considerable efforts, Poland continues to fall behind many EU countries in this respect. There is still a gap between existing and emerging needs, on the one hand, and the possibilities of satisfying them, on the other. Bridging this gap seems to be one of crucial conditions for a sustainable development of the Polish society. Our study strongly supports recommendations to include a planned development of sport infrastructure in the developed strategic programmes, with a special focus on the issue of demographic changes, an even distribution of this infrastructure in the country, ensuring its continuous adjustment to the changing needs and preferences as well as continuing the policy aimed at supporting recreation and sport activities.

Key Words: investment, capital expenditure, sport facilities, recreation and sports, physical activity, quality of life.

Introduction

Scientific and technological development combined with the IT revolution contribute to reducing physical activity almost everywhere around the world¹. Human work is being increasingly replaced by machines and tools, means of communication and computerization. Almost every day, applications are filed in patent offices around the world for inventions that serve the elimination of physical activity. An increasing number of jobs is performed in a seated position. As follows from a survey conducted in 2017 for the European Commission, as many as 41% of Europeans declare that the time they spend sitting is over five and a half hours daily. Worse still, considering the findings of an earlier survey (carried out in 2013), this proportion increased over time by 4 percentage points (European Commission, 2014; 2018). Therefore, it may be concluded that the need for physical activity as a necessary means for achieving many goals drastically decreases. Given the fact that physical activity is an important determinant of human health (Cavill et al., 2006; Jansen & LeBlanc, 2010; Crane et al., 2014; Sallis et al., 2016; Guthold et al., 2018; Eigenschenk et al., 2019; Ozemek et al., 2019; Skrok et al., 2019) (it is a factor that boosts immunity to diseases, thus largely contributing to delaying the ageing process, etc.), it can be considered a paradox of the modern world that scientific and technological development results in the reduction of physical activity.

Therefore, it is extremely important to strive towards changing the human lifestyle through the promotion of sport understood as “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

¹ The latest analyses (Guthold et al., 2018), including data from 1.9 million survey participants (representing 96% of the global population), show that globally, in 2016, more than a quarter of all adults was not getting enough physical activity.

results in competition at all levels.” (Council of Europe 1992; Statistics Poland, 2019d)². It seems that the popularization of sport is particularly necessary in the Polish society. The above findings of the Special Eurobarometer 472 report (European Commission, 2018) also indicated that in 2017, as little as 5% of Poles declared being physically active regularly, and 23% declared being active with some regularity. As many as 56% of Poles did not play sport or exercise. Moreover, as compared to the 2013 survey, the proportion of Poles who did not engage in physical activity increased by 4 percentage points (Table 1). An increase in the share of people who do not play sport was also reported by the Public Opinion Research Centre (an increase by 5 percentage points in 2018 as compared to 2013 results). According to this organization, the observed trend can be attributed to the ageing process of the Polish society (CBOS, 2018). Due to these results, Poland’s ranking was one of the lowest in the European Union. Only Bulgaria, Greece, Portugal, Romania and Italy performed worse. Interestingly, as compared to the 2013 survey, in as many as 21 EU countries, the share of people that declared not to engage in physical activity increased (European Commission, 2018).

Table 1. Share of the survey respondents exercising or playing sport: Poland and the European Union (percentage)

Year of the study	Regularly		With some regularity		Seldom		Never		Don’t know	
	Poland	EU	Poland	EU	Poland	EU	Poland	EU	Poland	EU
2009	6%	9%	19%	31%	24%	21%	49%	39%	2%	0%
2013	5%	8%	23%	33%	18%	17%	52%	42%	2%	0%
2017	5%	7%	23%	33%	15%	14%	56%	46%	1%	0%
<i>Change 2017/2009</i>	<i>-1 pp</i>	<i>-2 pp</i>	<i>+4 pp</i>	<i>+2 pp</i>	<i>-9 pp</i>	<i>-7 pp</i>	<i>+7 pp</i>	<i>+7 pp</i>	<i>-1 pp</i>	<i>0 pp</i>

Source: own study based on European Commission (2009; 2014; 2018).

The Special Eurobarometer 334 survey (European Commission, 2009) identified “alarmingly high” rates of physical inactivity in the European Union (hereinafter “the EU” or “the EU-28”). Since then, the proportion of Europeans that never exercise or play sport increased even further, from 39% in 2009 to 42% in 2013 and 46% in 2017 (Table 1). The surveys also show large disparities among EU member states. The more physically active countries tend to be clustered in the Northern part of the EU (particularly the Nordic countries), while the lowest proportions of active Europeans can be found in the Southern EU Member States (Fig. 1). A view is expressed in the survey that these variations reflect, in particular, the facilities and the availability of recreation and sport infrastructure (European Commission, 2018).

Fig. 1 Share of the survey respondents (the EU citizens) never exercising or playing sport (percentage)
Source: adopted from European Commission (2018).

It seems that the increasing pace of life, higher expectations related to professional activity and the expanding offer of alternative leisure activities as compared to Recreation and Sports (R&S) contribute to the inactivity of Europeans, including Poles, as regards building the habits of spending time actively. This indicates a continuous need for general education about the positive effect of various forms of physical activity on the physical and mental health, the improvement of the general well-being, the help in combating stress, the fight with obesity and numerous illnesses, as well as the mitigation of the effects of incapacity age, and, finally, the

² It should be added that according to the Statistics Poland (2019), sport also includes competition based on intellectual activity, aimed at obtaining a sport result.

costs related to healthcare services (Sari, 2009; Rasciute & Downward, 2010; Pawlowski et al., 2011; Rowe et al., 2013; Kozma et al., 2015; Kaveeva et al., 2017; Smith et al. 2019). All of the above proves that the popularization of R&S in the Polish society should become a crucial element of the programmes aimed at the improvement of public health. These programmes should incorporate the experiences and findings of scientific research, which indicate a special significance of physical activity in building the biological, mental and social potential of individuals and entire populations. What is also needed is a constant development of the infrastructure used for recreation and sport purposes in all its possible forms. In the literature on the subject, the focus is on the importance of the availability of recreational infrastructure as an element of building an environment that positively influences physical activity (e.g. Standeven & De Knop, 1999; Limstrand, 2008; McCormack & Shiell, 2011; Hallmann et al. 2012; Wicker et al., 2013; Veitch et al., 2016; Koohsari, 2016; Heesch et al., 2015; Eime et al., 2017; Mackenbach et al., 2018). Achieving these goals, i.e. the intensification of physical activity and the associated improvement of health, seems to be impossible without the creation of conditions for physical training and sports or the developed sport infrastructure available to all groups of population (KPMG, 2018). Therefore, the principal purpose of this paper is to analyse and evaluate: 1) the general expenditure on recreation and sports in Poland and in the EU and 2) the investment outlays on sport infrastructure in Poland.

Material & methods

The study is based on information obtained from the official statistical sources, including the Eurostat and the Statistics Poland. It also presents unpublished data from the Ministry of Sport and Tourism of the Republic of Poland. The study covers the years: 2009-2017 (data from the Eurostat), 2009-2018 (data from the Statistics Poland) and 2009-2019 (data from the Polish Ministry of Sport and Tourism). The information includes the following: 1) R&S government expenditure, R&S expenditure *per capita* and in relation to GDP in Poland and in the EU, 2) investment outlays on sport, amusement and recreation activities (IOS), IOS in relation to GDP and in relation to total investment outlays in Poland, as well as 3) the value of funding for investment in sport facilities from the Physical Culture Development Fund. It should be noted that the R&S government expenditure presented by the Eurostat is the broadest set of expenditure, covering total expenses, both current and capital expenditure. The data presented by the Statistics Poland is limited to investment outlays. Simultaneously, part of these outlays concern co-financing sport facilities from the Physical Culture Development Fund originating from the Ministry of Sport and Tourism. The use of various types of data is subject to its availability and gives a broad overview of the analysed subject. The study uses methods such as statistical and economic analysis, comparison, analogies, synthesis as well as the method of measuring and aggregating data, graphical and tabular method. The choice of economic parameters presented below and the related parameter formulas, as proposed by the authors, are based on the results of the preliminary query of the scientific literature on the subject, the available statistical data, as well as the authors' research experience and own conclusions.

Results

In general, the government R&S expenditure has remained relatively stable in the European Union (EU) since 2001, especially when measured as a percentage of total expenditure or in relation to GDP. In the first case, its share was between 0.7 and 0.8%, and in the latter, it ranged from 0.3 to 0.4% (Eurostat 2020). In the 2009-2017 period analysed in this paper, the average annual value of government R&S expenditure in all the EU-28 countries was close to EUR 50 billion (Table 2), and its level in the different years differed by an average of EUR 1.03 billion, i.e. by about 2.1%. A similar stability can be identified with respect to the discussed expenditure *per capita*. The average value of government R&S expenditure *per capita* in the period from 2009 to 2017 amounted to EUR 98.5 (Fig. 2), while its level in the different years differed by an average of EUR 2.28, i.e. by about 2.3%.

Fig. 2 General government expenditure on Recreation and Sports (R&S) in the European Union, 2009-2017 (annual average): R&S expenditure *per capita* (EUR) and in relation to GDP (percentage)

Source: own study based on Eurostat data, 12/02/2020.

What is particularly interesting is the variation in the value of funds allocated for R&S by different EU member states. In the period between 2009 and 2017, the highest annual spending in this respect, in absolute values, was reported for France (EUR 12.1 billion), Germany (EUR 7.6 billion) and the United Kingdom (EUR 5.7 billion), and the lowest for Latvia (EUR 60 million), Croatia (EUR 38 million), and Malta (EUR 10 million) (Eurostat 2020). In an attempt to relate this general assessment to the sizes of the analysed countries (Fig. 1), it should be however indicated that the highest average annual general government R&S expenditure *per capita* was reported for Luxembourg (EUR 398.9), Sweden (EUR 231.2) and the Netherlands (EUR 216.5), while the lowest for Lithuania (EUR 20.9), Bulgaria (EUR 15.7) and Croatia (EUR 9.0). Analogically, i.e. considering the sizes of the different countries' economies, it can be indicated that the highest share of R&S expenditure in relation to GDP was reported for France (0.55%), the Netherlands (0.55%) and Hungary (0.54%), and the lowest for Ireland (0.15%), Malta (0.12%) and Croatia (0.10%). Considering the measures mentioned herein, it should be underlined that in the 2009-2017 period (Fig. 2, Table 2), Poland ranked 8th among the EU-28 countries in terms of total annual general government R&S expenditure (EUR 1.8 billion), 20th in terms of R&S expenditure *per capita* (EUR 46.6), and 8th in terms of R&S expenditure in relation to GDP (0.44%).

Table 2. General government expenditure on Recreation and Sports (R&S) in the European Union and Poland, 2009-2017 (annual average)

Category	Region	2009-2017	R&S expenditure in the years:		
			2009-2011	2012-2014	2015-2017
Total R&S expenditure (EUR million)	EU-28	49 995.0	51 129.9	48 883.3	49 971.9
	Poland	1 792.9	2 014.3	1 738.1	1 626.3
R&S expenditure <i>per capita</i> (EUR)	EU-28	98.5	101.5	96.4	97.8
	Poland	46.6	52.3	45.1	42.3
R&S expenditure in relation to GDP (%)	EU-28	0.36	0.40	0.37	0.30
	Poland	0.44	0.57	0.43	0.37

Source: own study based on Eurostat data, 12/02/2020.

In Poland, annual government R&S expenditure (EUR 1.8 billion) differed in the different years of the 2009-2017 period by an average of EUR 201.3 million, i.e. by about 11.2%. The highest values were reported for the years 2009-2011 (EUR 2.0 billion annually), which should be most probably attributed to the increased intensity of spending in the period of preparations for the 2012 UEFA European Football Championship (UEFA Euro 2012) hosted by Poland and Ukraine. Subsequent periods brought a substantial decrease – R&S expenditure amounted to EUR 1.7 billion in the years 2012-2014 and to EUR 1.6 billion in the years 2015-2017. A similar decrease can be observed when analysing relative figures, i.e. R&S expenditure *per capita* and in relation to GDP. In the period from 2009 to 2017, the government R&S expenditure *per capita* in Poland constituted 47.3% of the EU-28 average. In the years 2009-2011, its value equalled EUR 52.3 per year (51.5% of the EU average), but in subsequent periods, it was lower and amounted to EUR 45.1 (46.8%) in the years 2012-2014 and EUR 42.3 (43.3%) in the years 2015-2017. Interestingly, despite the generally low value of funds spent on R&S in Poland in comparison to the European Union level, the intensity of spending measured by its relation to GDP was higher than the EU-28 average over the entire analysed period – 0.44% compared to 0.36% at EU level. These levels were also higher for Poland in the sub-periods 2009-2011, 2012-2014 and 2015-2017, and amounted to 0.57% (as compared to 0.40% for EU-28), 0.43% (as compared to 0.37%) and 0.37% (as compared to 0.30%) respectively (Table 2).

According to the data of the Statistics Poland (2019a), the average annual investment outlays on sport, amusement and recreation activities in Poland in the years 2009-2018 amounted to almost PLN 4.2 billion (Fig. 3, Table 3). A substantial growth of the analysed investment outlays was reported in the years 2009-2011, with the record level of over PLN 6 billion in 2010; this was caused mainly by the expenditure on the construction of stadiums in connection with the UEFA Euro 2012 and the access to a relatively large pool of EU funds under the 2007-2013 financial perspective. A significant share in the discussed expenditure can be also attributed to investment made under the programmes 'My Sports Field – Orlik 2012' (in Polish: *Moje Boisko – Orlik 2012*) and 'White Orlik' (in Polish: *Biały Orlik*) (Ministry of Sport and Tourism of the Republic of Poland, 2015a, p. 49). The implementation of these programmes made Poland witness the establishment of 2,604 modern complexes of sport fields (in the years 2008-2012) as well as 119 seasonal and permanent ice-skating rinks (in the years 2010-2012). These investment projects were financed from the national budget and the budgets of the local authorities. The state budget expenditure on this purpose amounted to almost PLN 1 billion, of which almost PLN 970 million was spent on the construction of sport fields, and PLN 27.5 million on the construction of seasonal and permanent ice-skating rinks (Ministry of Sport and Tourism of the Republic of Poland, 2015b).

Following the completion of investment related to the construction of stadiums for the UEFA Euro 2012, the annual investment outlays on sport, amusement and recreation activities in Poland has never been over PLN 5 billion. The lowest value of these outlays was reported in 2016 (PLN 2.7 billion). In the last year of the

analysed period, the discussed investment outlays increased significantly, reaching a level close to the spending in the period of preparations for the UEFA Euro 2012 (over PLN 4.9 billion).

The analysis of the intensity of spending on sport, amusement and recreation activities, measured in relation to total investment outlays and in relation to GDP, confirms a downward trend of the investment activity in the years 2012-2017. In 2016, when the value of the discussed investment outlays was at its lowest, their ratio to total investment outlays in the discussed year in Poland was 1.1%, while to GDP, it was 0.1%. For comparison, in 2010, when the value of investment outlays on sport, amusement and recreation activities was at its highest, the investment intensity measured by the indicated relations was 2.8% and 0.4% respectively (Fig. 3).

Fig. 3. Investment outlays on sport, amusement and recreation activities in Poland (PLN thousand, current prices) and their ratio to total investment outlays in national economy as well as to GDP (percentage), 2009-2018

Explanations: IOS – investment outlays on sport, amusement and recreation activities; IO – total investment outlays.

Source: own study based on Statistics Poland (2019a; 2019b; 2019c) data.

In the presented period, the public sector had the highest share in the investment outlays on sport, amusement and recreation activities (annual average of 86.0%). It should be, however, emphasised that the last three years of the analysed period saw a significant increase in the value of investment made by the private sector, which in 2018 reached the record value of almost PLN 721 million. A further analysis of the structure of the made investment outlays indicates that the period concerned saw a downward trend in the share of expenditure on buildings and structures, combined with a simultaneous increase in the share of outlays on machinery, technical equipment and tools, and transport equipment. These changes were particularly visible in the structure of investment of the private sector, in which the share of expenditure on machinery, technical equipment and tools, and transport equipment constituted about 45% of total investment outlays (Table 3).

Table 3. Investment outlays on sport, amusement and recreation activities in Poland (PLN million, current prices), 2009-2018

Specification	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	5 139	6 089	5 078	4 438	3 380	3 754	3 010	2 707	3 030	4 927
Buildings and structures	4 693	5 618	4 497	3 975	2 965	3 273	2 566	2 150	2 435	4 146
Machinery, technical equipment and tools	353	355	404	356	324	362	328	392	481	601
Transport equipment	75	91	124	67	73	106	98	148	104	152
Public sector	4 567	5 584	4 566	3 759	2 898	3 311	2 777	2 064	2 329	4 206
Buildings and structures	4 312	5 262	4 143	3 456	2 614	2 987	2 456	1 861	2 079	3 822
Machinery, technical equipment and tools	205	254	280	224	223	238	250	156	174	277
Transport equipment	33	50	91	42	43	71	54	34	72	85
Private sector	572	505	512	679	482	444	233	643	701	721
Buildings and structures	381	357	355	519	351	286	110	289	355	324
Machinery, technical equipment and tools	148	102	124	133	102	123	78	236	308	324
Transport equipment	41	42	33	26	29	35	44	114	32	67

Source: Statistics Poland (2019a).

An important source of financing investment in sport infrastructure in Poland is the Physical Culture Development Fund that is administered by the Minister of Sport and Tourism. In the years 2009-2018, the average annual share of these funds amounted to about 12% of investment outlays on sport, amusement and recreation activities.

recreation activities by public sector in Poland, while their highest share was reported in 2016, when they reached the level of as much as 21%. The funds accumulated in this Fund constitute 75% of the inflows from surcharges on games covered by state monopoly (Journal of Laws of 2009, No. 201, item 1540, Article 86, as amended) and may be used to co-finance investment tasks carried out under the programmes announced by the Minister of Sport and Tourism. Record values of funds accumulated in this Fund, exceeding the value of PLN 500 million, were reported in 2010 and 2018, while the lowest values (of less than PLN 400 million) in the years 2011-2015. Importantly, over almost the entire analysed period, the level of the funds disbursed in the particular years was close to the total amount of the concluded co-financing agreements. An exception in this respect were the years 2010-2012, in which period the disbursed funds were lower than the amounts stated in the co-financing agreements by 27.9%, 14.2% and 18.0% respectively (Fig. 4).

Fig. 4. Value of funding for investment in sport facilities from the Physical Culture Development Fund, (PLN thousand), 2009-2019

Source: own study based on unpublished data from the Polish Ministry of Sport and Tourism.

In the years 2016-2019, the value of agreements on co-financing sport facilities from the Physical Culture Development Fund reached the level of almost PLN 2.3 billion. Almost one third of these funds was allocated for the construction of sport facilities under the programme for investment of particular significance for sport (PLN 747.5 million; 32.5%). These were followed in terms of the value of the granted funds by investment made under the programmes for the development of local sport infrastructure – ‘Sporty Polska’ (in Polish: *Sportowa Polska*) (PLN 529.0 million; 23.0%), the development of school sport infrastructure (PLN 326.1 million; 14.2%), the development of regional sport infrastructure (PLN 211.4 million; 9.2%), and the modernization of sport infrastructure (PLN 171.9 million; 7.5%) (Table 4). Pursuant to the agreements concluded in the years 2016-2019, the co-financing covered the completion of 6,098 sport facilities, such as 3,139 multi-functional activity zones (i.e. outdoor gyms, playgrounds, ropes courses), 787 multi-functional sport fields, 542 athletics infrastructure facilities, 423 football pitches, 363 gyms, 280 support infrastructure facilities (locker rooms, technical facilities, storage rooms, canopies), 205 sport halls and 83 tennis, squash and badminton courts.

Table 4. Value and structure of funding for investment in sport facilities from the Physical Culture Development Fund by investment programme (PLN thousand, percentage), 2016-2019

Programme	Co-financing from the Physical Culture Development Fund (PLN thousand)	Distribution (%)
Programme for investment of particular significance for sport	747,512	32.5
Sporty Poland – programme for the development of local sport infrastructure	529,044	23.0
Programme for the development of school sport infrastructure	326,133	14.2
Programme for the development of regional sport infrastructure	211,416	9.2
Programme for the modernization of sport infrastructure	171,933	7.5
Programme for the development of small multi-generational sport and recreation infrastructure – ‘Open Activity Zones’ (in Polish: <i>Otwarte Strefy Aktywności</i>)	99,196	4.3
Programme for the development of infrastructure at supra-local level	93,645	4.1
Programme for the development of athletics infrastructure	81,872	3.6
Pilot programme for the modernization of sport infrastructure – ‘Small Sports Club’ (in Polish: <i>Mały Klub</i>)	37,559	1.6
Total	2,298,310	100.0

Source: own study based on unpublished data from the Polish Ministry of Sport and Tourism.

Discussion

Poland belongs to a group of the least physically active EU countries. Unfortunately, this situation has intensified over the last decade. Therefore, any efforts aimed at the improvement of the *status quo* seem necessary. However, it should be remembered that important reasons for physical inactivity are the limited access to recreation and sport infrastructure and the low level of its quality. What is of major importance besides properly educating the society about physical activity's significance for the maintenance of health and the improvement of the quality of life is striving (especially by state authorities) towards creating a proper physical environment that supports physical activity, combined with promoting a healthy lifestyle.

The value of total government expenditure – current (associated with promotion, support of physical activity, maintenance of existing physical infrastructure, etc.) and capital expenditure on recreation and sports, calculated *per capita* (R&S expenditure ratio) – makes Poland rank low, i.e. 20th, among the EU countries. The picture changes, however, if we consider the R&S expenditure in relation to GDP. According to this parameter, Poland ranks 8th, behind Luxembourg, Sweden, the Netherlands, France, Hungary and Estonia. This means that considering the existing possibilities, the Polish government and local authorities allocate relatively substantial funds for recreation and sports. These funds prove, however, to be insufficient. The expected social and economic growth combined with the targeted and desired change in the lifestyle of Poles create new increasing needs. To satisfy them, one must duly prepare for the upcoming changes, by including in the adopted strategic programmes more intense activities aimed at increasing the level of physical activity in the society, including the proper development of sport infrastructure. At least two important matters should be considered in this regard. First, in the context of the already mentioned demographic changes in Poland, the developed sport infrastructure should not only fulfil the expectations of children, youth, younger and older adults but also suit the needs of senior citizens. Second, it should be ensured that the infrastructure is evenly distributed; this means that its availability should be guaranteed to citizens of not only larger cities but also smaller ones, which is advocated in this paper. At the same time, it should be underlined that also the continuity of activities in the implemented policy seems crucial. The information published by the Statistics Poland, i.e. concerning capital expenditure only, indicates that following a period of intensified investment in the years 2009-2011, mainly associated with the UEFA Euro 2012, Poland experienced a decline in the investment intensity until 2016. Simultaneously, it must be emphasized that in the years 2017-2018, the investment intensity increased, which translated into a higher share of this expenditure in the GDP. Unfortunately, despite the reported increase, the IOS/GDP ratio in these years was at the level of merely 0.2%. Therefore, in view of both the current *status quo* and the potential increasing needs, a substantial gap is still identifiable; bridging this gap becomes one of the fundamental development objectives. The EU guidelines concerning physical activity clearly indicate that citizens should be provided not only easy but also affordable access to recreation and sport infrastructure (EU Physical Activity Guidelines, 2008). Nevertheless, Poland does not fully meet these requirements, which is confirmed by the analysis of the scale of capital expenditure presented in this paper and by the findings of other studies on how Poles evaluate the efforts of Polish authorities in the area of recreation and sports (e.g. Kruszyńska & Poczta, 2019).

Finally, it is worth to refer more broadly to the significance of investment in the area of sport infrastructure, which will even more strongly emphasize the importance and necessity of intensifying the activities discussed herein. It should be remembered that sport is also a sector of the economy. It is estimated that in 2018, this industry generated in Poland an added value of PLN 9.63 billion, of which PLN 4.42 billion (46%) was generated directly. The indirect effect amounted to PLN 2.68 billion (28%), and the induced effect to PLN 2.53 billion (26%). The multiplier effect, referring to the impact of one zloty generated by the sport industry on the generation of added value across the economy as a whole, was at the level of 2.2 (every one zloty in the sport industry resulted in an increase of the added value in the economy by PLN 1.2). In 2018, the sport sector created in a direct, indirect and induced manner 109 thousand workplaces (69.3 thousand directly, 18.5 thousand indirectly, and 21.2 thousand as an induced effect), generating a total remuneration of about PLN 3 billion (Polish Economic Institute, 2019).

Conclusions

Poland is not only a negative example of the level of physical activity among Europeans, but it also exemplifies the deterioration of this level. There is no denying that it is necessary to take various actions and initiatives, aimed at changing this situation. What is particularly important, among other actions, is creating the right physical conditions for the development of recreation and sports. It is necessary to intensify investment in sport infrastructure. However, studies indicate that despite a significant increase in investment outlays in 2018, their share in the GDP of Poland remains relatively low. It is worth noting that the value of funds coming from the Physical Culture Development Fund in the total investment outlays on sport, amusement and recreation activities increases; but it must be also emphasized that their share in the total amount of the committed expenditure is scarce. The presented analysis leads to a conclusion that the basic conditions for the desired increase in the physical activity of Poles and, consequently, a general improvement of public health are: adequate, continuous and general education as well as ensuring sport infrastructure in the right quantity and

quality through the construction of new facilities, the modernization of existing ones and upgrading their equipment. This aspect cannot be overemphasized, neither in the current situation nor with respect to a responsible design of the conditions for a sustainable development in the future.

Conflicts of interest – The authors declare no conflict of interest.

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