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## Physical activity in Poland and the European Union

### Abstract

The primary purpose of the article is to present the level of sport participation in Poland and other European Union countries. Moreover, the article discusses the definitions of individual terms related to sport, determinants of physical activity and plans of increasing participation in sport in Poland and across the European Union. The article uses data provided by extensive public opinion polls as well as by abundant Polish and English literature on the subject. The results of the research show that in Poland, when compared to the European Union, a lower percentage of people are actively involved in sport. However, it can be noted that in recent years there has been a growing interest in physical activity in Poland.

**Keywords:** sport, physical activity, Poland, European Union

### Introduction

Modern technology makes it easier to move from place to place and allows a single person to do an increasing number of things on-line, without leaving his/her home. As a result of the changes taking place, a growing number of people is physically inactive, which makes one wonder what being active and physically fit means nowadays. To combat the increasing lack of physical activity and the resulting diseases, the World Health Organization (WHO) has set recommendations for a minimum and optimal level of physical activity (WHO, 2010). It is regrettable, however, that most people do not comply with these recommendations. Moreover, Poland in relation to the European Union is characterized by a low level of the sportiness of its inhabitants (European Commission, 2014; European Commission 2018). In five European Union (EU) countries, the percentage of citizens who play sports every week was at least twice higher. On the other hand, however, Poles are more physically active than residents of southern Europe.

European gym networks are increasingly willing to enter the Polish market because they see substantial development opportunities there (TNS Poland, 2015). It is worth remembering that healthy habits learned in childhood usually remain for life (Bailey *et al.*, 2013). Therefore, citizens should be provided with adequate conditions to be physically active. For example, that could be reached by building more bicycle paths and sport fields. Easy access to such places and proper promotion of a healthy

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lifestyle can significantly contribute to physical activity. The article aims at presenting the level of sport participation in Poland and other EU countries.

## **1. Definition of sport, physical activity, and a physically active person**

In the beginning, it is necessary to define some key terms such as ‘sport’, ‘physical activity’, and ‘a physically active person’. According to the definition used in the European Union, 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’ (Commission of the European Communities, 2007). The above definition shows that sport is a form of physical activity, but it is worth providing additional descriptions of these two terms. According to C.J. Caspersen, K.E. Powell and G.M. Christenson (1985), physical activity is any movement of the body made by skeletal muscles that lead to energy expenditure and is positively correlated with physical fitness. However, sport is a subset of physical exercises, and these have the characteristics of a planned, structured, repetitive body movement, which aims to improve or maintain physical fitness. Moreover, in sport, participants must comply with specific rules and requirements. According to another definition (Podziemski, Goldys, and Włoch, 2013), physical activity is any form of movement in which energy expenditure is higher than resting, and sport is an organized form of physical activity. In Poland, the Ministry of Sport and Tourism uses the UE definition of sport, while physical activity is characterized as ‘a broader concept than sport and covering not only competitive or recreational sports but also other activities, such as dancing or work in home and garden’ (Ministry of Sport and Tourism, 2015b). In connection with the fact that sport is a form of physical activity, in this article, terms such as sport and physical activity will define the same and will be used interchangeably. When undertaking the topic of sport, a person can also come across the term ‘recreation’. According to K. Kwilecki (2011), ‘this term also means sport for everyone as well as all socially accepted forms of physical activity of people, taking place in free time, undertaken voluntarily, selflessly and for pleasure, serving to renew and strengthen human strength’.

It is worth considering what being active and physically fit means today. For example, in the study on the participation of Poles in sport and physical recreation conducted by the Central Statistical Office (CSO, 2013) two levels of participation in sport were distinguished: regular – at least once per week and sporadic – at least once per month. According to the definition, a physically fit person is someone who can perform their daily duties with vigour and having the energy to fulfil unforeseen situations and enjoy relaxation (Caspersen, Powell, and Christenson, 1985). Although the above definition seems logical, it should be noted that it is difficult to measure such elements as vigour or energy. The aspects of physical fitness that can be measured are cardiopulmonary endurance, muscle strength, body composition, and flexibility. Moreover, most sports disciplines improve physical fitness, but a person can also be very physically active as a result of the specifics of their professional work, performing household duties or active transport (*e.g.*, the need to cycle to work).

As mentioned before, to combat the growing lack of physical activity and the resulting diseases, the WHO has set recommendations for a minimum and optimal level of physical activity. It is regrettable, however, that the majority of people do not comply with these recommendations (Warburton *et al.*, 2007). Physical activity recommended by the WHO for people aged 18 to 65 is at least 150 minutes of moderate-intensity exercise per week (WHO, 2010). Moderate intensity is not too strenuous effort when there is increased breathing and increased heart rate. The training can be divided into shorter periods, for example, 30 minutes for five days a week. However, one training unit must last for at least 10 minutes. Sports activities are treated as physical activity, but also walking, cycling, physical exertion at work, household duties as well as games and activities with the family. For additional health benefits, adults should extend their weekly exercise to 150 minutes at a moderate level or 300 minutes at an intensive level. Intense physical activity is a hard effort that forces a person to breathe heavily and increase person's heart rate. Older people aged 65 and over should be as active as people aged 18-65 if their health allows it. Besides, older people should pay more attention to exercises that improve coordination as they help prevent various types of accidents. It is worth adding that there are different types of physical activities, including aerobic and those that strengthen muscles and bones. It is believed that a person should do aerobic exercises most frequently, but the rest are also beneficial (WHO, 2010). Aerobic training is one during which the body keeps up with the supply of oxygen to the muscles. This type of training aims to stimulate circulation and mobilize the body to accelerate metabolism, but without overloading the muscles.

Similar recommendations are presented in the 'Guide to Physical Activity' created by the United States Department of Health and Human Services (2008). However, slightly different suggestions were presented in Canada, where 60-minute daily exercise is recommended or, if intensity increases, 30 minutes of exercise four times a week (Warburton *et al.*, 2007). Based on a review of world literature, I. Janssen and A.G. LeBlanc (2010) created a set of recommendations for young people (aged 5-17). They suggest moderate daily effort, lasting from 60 minutes to several hours. It has to be noted that it is a much longer activity than that in the group of adults. Nevertheless, the authors claim that even in the case of a 30-minute daily exercise, some health benefits can be noted. Also, children and young people should be encouraged to participate in various forms of physical activity to support their natural development and sense of satisfaction. Finally, it must be adding that, according to some studies (Lechner and Sari, 2015), to achieve all benefits of sport, you should be even more physically active than recommended by WHO.

## **2. Physical activity in Poland and other European Union countries**

Different levels of physical activity are observed in EU countries, but it can be said that about 40% of EU inhabitants participate weekly in sport (European Commission, 2014; European Commission, 2018). Sport is most common among residents of northern Europe. The ten EU countries with the most physically active citizens are presented in Table 1. In turn, citizens of southern European countries are least

physically active. The highest percentage of people who never played sports in 2013 could be found in Bulgaria (78%), Malta (75%), Portugal (64%), Romania (60%) and Italy (60%), and the average for the whole European Union was 42% (European Commission, 2014). However, in 2017 the following countries had the greatest proportion of citizens who never played sports: Bulgaria, Greece and Portugal (all 68%). Moreover, the proportion of those who never exercise or play sports has increased in EU from 42% (in 2013) to 46% (in 2017), and this is a continuation of a gradual trend has been observed since 2009 (European Commission, 2018).

The study of the physical activity of EU residents is detailed when it comes to distinguishing levels of physical activity. According to this survey, 5% of Poles practise sports five times a week, 23% from one to four times a week, 15% three times a month, and 56% do not practise sports at all (European Commission, 2018). The proportion of Poles who never exercise or play sports increased by 4 percentage points in the time period 2013-2017. To sum up, 28% of Polish citizens play sports at least once a week. Comparing this result with the countries presented in Table 1, it can be stated that in Poland physical activity is not a common way of spending time. In five EU countries the percentage of citizens that practise sports every week is at least twofold higher when compared with Poland. However, Poles are more physically active than residents of southern Europe. Therefore, it is worth comparing Poland with its neighbouring countries. Compared to them, the results are still not good because in Poland 56% of citizens never play sports, and in Lithuania, the percentage reaches 51%, in Slovakia 49%, in the Czech Republic 41%, and in Germany 38%. Also, analysing the percentage of people practising a sport every week, it should be noted that in Poland it is low (28%) compared to bordering countries, since in Slovakia it is 28%, in the Czech Republic 32%, in Lithuania 33%, and in Germany 48%. What is good about Poland is the fact that the percentage of people who practise sports at least once a week remained at the same level in the years 2013-2017. In the bordering countries it decreased.

**Table 1.** European Union countries with the highest percentage of citizens declaring a weekly physical activity

No.	Country	Percentage of physically active
1	Finland	69
2	Sweden	67
3	Denmark	63
4	Holland	57
5	Luxemburg	56
6	Ireland	53
7	Slovenia	51
8	Belgium	49
9	Germany	48
10	Great Britain	47

Source: based on (European Commission, 2018).

Poles' physical activity can also be assessed on the basis of a few other studies. The first of these is the research conducted by CSO and entitled 'Participation of Poles in sport and physical recreation' (CSO, 2013). According to the study, 45.9% of Polish citizens participated in sports activities in 2012. Compared to 2008, this percentage

increased by over eight percentage points (from 37.5%). In 2013, the topic of physical activity of Poles was also examined by CBOS (2013). According to his report, 66% of Poles practised sports in the year preceding the survey, 40% are physically active regularly, and 26% sporadically.

It is also worth presenting what motivates Poles to be physically active. In the CSO survey (CSO, 2013), Poles most often mentioned the feeling of pleasure and treating sport as a form of entertainment as their motivation to be physically active. Other reasons include maintaining a fit body and physical condition. Only every tenth person in Poland claimed that they play sports to improve their health, with women more often than men (respectively 12.3% and 7.4%). Different results were obtained in the CBOS study (2013), where sport was most often practised to improve health – as indicated by 70% of respondents. A sense of pleasure was ranked second (61%) and was followed by stress relief (47%). In contrast, in the Eurobarometer (2014, 2018), when asked about the motivation for playing sports, as many as 59% (and 51% in 2017) of Poles answered that it was health improvement. Next, there were the progress of fitness and improvement of physical performance. It is worth noting that in the Eurobarometer (2018), Poles much less frequently than the rest of Europeans indicated that they play sports for relaxation (38% in the EU compared to 21% in Poland). For Poles, the reasons for both spending time with friends (19% in the EU and 10% in Poland) and neutralizing the effects of aging (14% in the EU and 6% in Poland) were also less important. It has to be added that in comparison with the 2013 survey, citizens of the EU in 2017 were less likely to say they engage in sport or physical activity in order to improve their health (-8pp), but are more likely to mention improved fitness (+7pp) and improved physical performance (+4pp) (European Commission, 2018). Interestingly, there are also different reasons for practising individual sports. For health reasons, Poles run, swim, cycle and do gymnastic sessions. The reason for going to the gym is health and beauty improvement, while for pleasure, people choose dance, football, volleyball, and strength sports (CBOS, 2013). By far the most common obstacle to practise sports both in Poland and in the European Union is the lack of time. When compared with the EU average (40%), the Germans (30%) and Finns (29%), Poles more often (46%) declare that they do not have time for sport (European Commission, 2018).

Only a small proportion of people in Poland meet the WHO recommendations on physical activity. In 2012, it was only 26% of Poles (Biernat and Piątkowska, 2012). Most often, WHO recommendations were met by people from households whose income exceeded PLN 6,000 per person (43.2%). However, high income is not always associated with physical activity. An example would be people in positions enjoying high social prestige, *i.e.*, directors and CEOs, of which only 29.8% meet WHO recommendations. There are also studies whose results are even more pessimistic. In 2015 a study was carried out showing that only 15.5% of Polish citizens meet the WHO recommendations (Ministry of Sport and Tourism, 2015a). It is true that also taking into account the type of physical activity (for instance, cycling and walking) this is a higher percentage – 18%, but it is still not a satisfactory number. In 2018, yet another study indicated that 21.8% of Poles meet the standards for the level of physical activity recommended by the WHO, and a little more – 30.6%, when taking into account regular cycling activities (Kantar Public, 2018). The problem is also that

according to another research, 'in Poland in 2002-2005 (...) only 11% of girls and 17% of boys at the age of 18 reached the recommended level of activity' (Ponczek and Olszowy, 2012). One of the reasons for low physical activity is the spread of a sedentary lifestyle. The median for Poland in 2012 was 1,440 minutes a week, *i.e.*, 24 hours (Biernat and Piątkowska, 2012). Optimistic, however, is that it was a shorter time compared to other European countries.

The percentage of physically active people may be even lower than that indicated by the research results. The reason may be the manipulation of the respondents to present themselves in the eyes of the interviewer better. In one study (Troiano *et al.*, 2008), an accelerometer (*i.e.*, a device measuring the intensity of movements to determine the compliance of respondents' answers with reality) was used. Study participants were carrying this device with them, and the results showed that actual physical activity was usually lower than indicated by oral declarations. Therefore, data created based on the self-description of the respondents should be treated very cautiously.

There are many forms of physical activity; Poles most often point to cycling and swimming (CBOS, 2013; CSO, 2013; Podziemski, Gołdys, and Włoch, 2013). Next, they favour running, playing football, volleyball, and gymnastics (fitness, aerobics). In turn, in Europe the most popular are walking, cycling, running, and swimming (Lange, 2017). It is worth adding that gender is a factor that influences sport preferences. Men, more often than women, choose team sports, especially football. Also, they prefer gym and martial arts. In turn, women prefer gymnastics, fitness, and yoga. (TNS Poland, 2015). Besides, the age factor influences the choice of physical activity. Young people most often decide on team sports, and thirty-year-olds on sports that require specific financial outlays, such as swimming or doing gymnastics. Older people (*i.e.*, those aged 60+) prefer walking and safe forms of activity that allow them to maintain physical fitness, for example, nordic walking and gymnastics. Also wealth is one of the factors that affects the choice the type of sport. Wealthy people tend to practise golf or racket sports (tennis and squash) (Gołdys, Podziemski, and Włoch, 2012).

Moreover, team sports usually require the presence of a significant number of people, which is why they are often practised in clubs. The number of sports clubs has been on increase in Poland. From 1960 to 2010, the number of clubs in Poland increased fourfold and reached 6,901. At the same time, the number of players doubled, and in 2010 amounted to over 490,000 people (CSO, 2011). It is not surprising that most people in clubs play football, as much as 47% of all players. Volleyball comes second – 4.9%, followed by karate – 3.6%. When considering the number of clubs, it is worth mentioning the sports infrastructure. In 2010, in Poland there were 2,238 stadiums (of which 64% were football stadiums), 5,478 large playing fields (99.2% for football), 5,130 small playing fields (for basketball, handball, volleyball), 461 large multi-purpose halls (minimum dimensions 42 × 22 m), 433 non-school indoor swimming pools, 221 school indoor swimming pools, 165 ice rinks, and 17 ski jumps (CSO, 2011).

One way to be physically active is to ride a bike to the workplace or college. About one million Poles decide to use this form of transport (TNS Poland, 2015). There are slightly more men among people commuting by bicycle, people with higher

education, and those who assess their financial situation as good. In Poland, 26% of people assess their financial situation as good, and in the group of bikers the percentage is 42%. It is worth considering what motivates most of them to choose this means of transport. It turns out that most often it is a feeling of pleasure gained while cycling and care for the health and physical condition. The decision to ride a bicycle is not influenced by possessing a car, because in the group of cyclists a car is possessed by the same percentage of people as in the rest of society. Some people equate cycling to morning coffee, an injection of energy; they think it is an excellent alternative to the gym. Cyclists cover an average distance of seven kilometres to get to their work (TNS Polan, 2015). Attention should also be paid to the economic aspect, related to the lack of expenses for bus tickets or fuel. People who do not decide to ride a bike indicate adverse weather conditions as the main obstacle. For comparison, biking is the most common in Denmark – 43% of Dutch get on a bicycle every day, 28% several times a week, 16% several times in a month or less often and only 13% never do it (Cherry, 2014).

In Poland a popular trend is building the outdoor gyms that allow people of all ages to lead a healthy and physically active lifestyle. This kind of physical activity opportunity is desired because it is available to the public and is free of charge. Outdoor gyms allow the development of frequently visited public places, *e.g.*, playgrounds, parks, sports facilities, hotels, recreation centres, or senior homes (Paczyńska-Jędrycka and Eider, 2015).

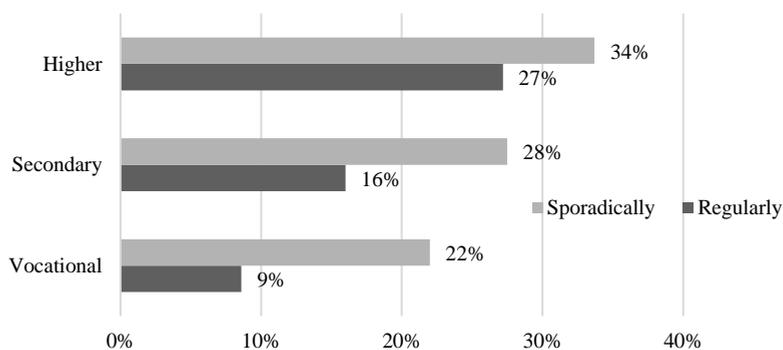
In Poland, young people are required to participate in physical education classes (PE) in schools. The number of compulsory PE hours varies depending on class and school (from 3 to 4 hours a week). It should be added that Poland is one of the leaders in Europe in terms of the number of PE hours. Unfortunately, exemptions from this subject are also common in Poland. According to the Supreme Audit Office (SAO, 2013), the older the children, the more exemptions: 17% of primary school students, 24% of junior high school students and 38% of high school students do not participate in PE lessons. The most common reasons for exemptions are lack of outfit – 33.1%, release from parents – 22.1% and sick leave – 17.7%. Also, PE lessons also do not have a good reputation among students, because as many as 20% of them think that they do not fulfil their essential function, *i.e.*, they do not contribute to improving physical fitness. Also, according to the SAO report, schools are not appropriately prepared to conduct PE lessons. Gyms and equipment are notably lacking. Moreover, 20% of schools do not have the conditions to provide students with an adequate level of safety during PE.

### **3. Determinants of playing sports**

The level of physical activity of a person is influenced by several different factors (Podziemski, Gołdys, and Włoch, 2013). The most important are the attitude and motivation of the person, which are associated with his/her socio-economic position, lifestyle, and education. Sporting is also determined by individual factors (financial and time) and the infrastructure (proximity to sports facilities). Another factor is

support for physical activity, *i.e.*, proper promotion of sports activities which can take place at work and in the local environment.

One of the factors determining physical activity is the level of education (Humphreys and Ruseski, 2006; CSO, 2013; Podziemski, Gołdys, and Włoch, 2013). This fact can be explained also by greater awareness of the importance of physical exercise for health among people with higher education. Educated people are usually not involved in the physical effort at work. On the other hand, for less educated people work is often associated with significant physical exertion, so they do not feel any need to practise sports in their free time (Kwilecki, 2011). Moreover, students are an extremely athletic group because as many as 83% of them play sports at least once a week (European Commission, 2014). Figure 1 presents the participation in sports of Polish society by level of education.



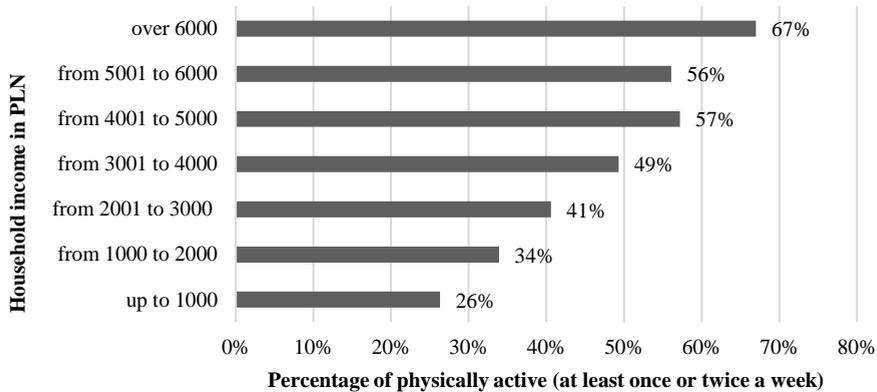
**Figure 1.** Level of education and participation in sports in Poland

Source: based on (CSO, 2013).

In the CSO research, regular participation meant practising at least once a week, and sporadic at least once a month (CSO, 2013). Looking at Figure 1, it is easy to note that as education increases, the percentage of people participating in sports also increases. Interestingly, more physical activity among people with higher education does not apply to all sports. When it comes to football, it is most popular among people with lower education (Strawiński, 2010).

Another factor that affects the level of participation in sports activities is the amount of income. The most significant percentage of people play sports in the group with the highest income, and the lower the income, the lower the level of physical activity. Such factors as occupation, income, education, and the environment in which people live affect the choice of leisure activities. Lack of nearby sports facilities, transport, or sufficient funds may prevent participation in physical recreation. Wealthy people have the means to participate in expensive sports and feel greater social pressure to be physically active. According to K. Kwilecki (2011), 'along with the increase in socio-professional status and authority, the desire to improve health and own attractiveness increases. It is essential to permanently enter the selected form

of physical activity into the daily schedule. There may be a need to impress others, such as exclusive trips or costly hobbies'. The relationship between physical activity and income is shown in Figure 2.



**Figure 2.** Household income and participation in sport in Poland

Source: based on (Podziemski, Gołdys, and Włoch 2013).

An interesting relationship can be observed when considering differences in participation in sport in Poland's individual provinces. Namely, sport is more often practised in the west (Podziemski, Gołdys, and Włoch, 2013). The most physically active people live in the *dolnośląskie* province (51.3% of physically active people), the *wielkopolskie* province (51%) and the *lubuskie* province (50%). Whereas people who are least involved in sports live in the *podkarpackie* (32.4%), *lubelskie* (32.1%) and *podlaskie* (31.6%) provinces. Economic issues can somewhat explain the differences noted in the level of sportiness because greater poverty in a given province means lower physical activity (Podziemski, Gołdys, and Włoch, 2013). It is also worth adding that the larger the city a person lives in, the more likely he or she will be physically active.

As people grow older, they become less and less physically active. However, this does not apply to participation in disciplines that allow a person to stay fit, such as jogging and gymnastics (Strawiński, 2010). Golf is also an exception because it is more popular among older people. It is also worth noting that in Poland men play sports more often than women (48.8% - men, 43.3% - women) (CSO, 2013). Also it has been observed in many other countries (Troiano *et al.*, 2008; Kavetsos, 2011; European Commission, 2014; European Commission 2018). Besides, the decrease in physical activity while aging is more notable among men than among women. After the age of fifty, ladies are the same or even more physically active than men. In conclusion, it can be said that the results of many studies are consistent on the point that sport is the domain of young, well-educated, wealthy people and residents of large cities.

There are several other factors that affect a person's level of physical activity. Research shows that physical activity decreases after increasing family

responsibilities (usually after childbirth) (Farrell and Shields, 2002). In some studies, factors increasing physical activity were being separated and being divorced (Lechner, 2009). Singles are more likely to play sports than married people. Also, physically demanding work and frequent staying after work are factors that are not conducive to sports (Schneider and Becker, 2005).

#### **4. Plans to increase participation in sport in Poland and throughout the European Union**

The EU representatives agree on the positive social role of sport (Godlewski 2011). Sport contributes to the primary objectives of the EU, including prosperity and solidarity (European Commission 2007). The European Commission encourages member states to support sport and physical activity through various policy initiatives. The goal is to promote participation in sport and physical education because these are the essential elements of high-quality education and a way to make schools more attractive. Recognizing that a smaller percentage of women are physically active compared to men, EU policymakers are striving to ensure equal access for all. From the EU representatives' point of view, the key is that sport helps integrate societies and leads to economic cohesion. Also, sport can be particularly useful in integrating immigrants because it allows them to penetrate and get closer to the local community. Because of the advantages of sport mentioned above, the member states of the EU should: 1) guarantee equal access to sport for all; 2) facilitate activities involving a strong link between sport and sectors related to the issue of social inclusion; 3) promote participation in sport among persons from disadvantaged groups; 4) promote intercultural dialogue, include people from different cultural backgrounds to society through sports (European Council, 2010).

The main goal of a Polish government program called 'Strategy for the development of sport in Poland until 2015' was an active and efficient society (Ministry of Sport and Tourism, 2007). The strategy assumed actions aimed at improving the physical fitness of young people, reducing the number of people with obesity, improving health indicators in society, reducing pathological phenomena (including aggression among adolescents), developing an awareness of the positives of a physically active lifestyle and promoting physical activity in society. In the next program of the Ministry of Sport and Tourism (2015b) named 'Sport Development Program 2020', the following specific objectives were listed: 1) providing conditions and offers for universal physical activity at every stage of life; 2) using sport to build social capital; 3) improving organizational and legal conditions for the development of sport and increasing the availability of qualified human resources; 4) using the potential of sport at a competitive level to promote physical activity and promote Poland on the international stage. According to the Ministry of Sport and Tourism (2015b), 'Promoting pro-health physical activity reduces costs allocated to health care and social insurance, and also has a positive impact on employees, including reducing absenteeism or increasing efficiency and creativity. In addition, the sport has an educational role, especially among school children and adolescents'.

Considering the number of exemptions from PE lessons and the fact that in Poland the percentage of obese children is increasing fastest in Europe, the Ministry of Sport and Tourism has launched the following campaigns promoting PE lessons: 'Physical education with class', 'Sport – a habit for life', 'Stop exemptions from physical education'. The major goal of these programmes is to prevent exemptions from PE lessons and to create the image of the sport as something natural, accompanying people in everyday life. Also, the Ministry of Sport and Tourism wants to provide workshops to support teachers. It should be remembered that PE lessons are the only form of organized physical activity for most children and adolescents. Therefore, avoiding participation in them significantly reduces the likelihood of compliance with WHO health recommendations (Woynarowska, Mazur, and Oblacińska, 2015). It is worth noting that problems related to PE lessons are not only a Polish problem as similar phenomena can also be observed in other countries. According to the report on the state of physical education in the world, PE lessons are limited in many countries (di Cola, 2006). Usually, the problem is too low financial outlays and inadequate selection of personnel.

In 2013 a resolution of the Council of Ministers named 'The strategy for the development of human capital 2020' was approved (Ministry of Labor and Politics and Social Policy, 2013). The document focuses on the phenomenon of reducing the level of physical activity among young people. A too low level of physical activity can cause permanent deterioration of youth's fitness. Therefore, the Council of Ministers undertakes to take systemic actions to improve the quality of PE classes and conditions for practising sports both at schools and universities. In addition, to counteract the relatively low level of physical activity in Polish society, the government plans to facilitate citizens' access to sports facilities. Even though in the years 2006-2011 more than 5,000 sports facilities were created and several billion PLN were allocated for public sports infrastructure, open access to such facilities is still insufficient.

One of the ways to popularize sport in society is to organize significant sports events. Watching outstanding athletes during games can lead the audience to be more physically active (Khan *et al.*, 2012). Citizens should also be provided with proper conditions to be physically active, for example, by building bicycle paths and sport fields. Easier access to such places and appropriate promotion of a healthy lifestyle can significantly contribute to undertaking physical activity. A study of children and adolescents showed that the longer the distance to the training place, the less likely they are to attend (Steinmayr, Felfe, and Lechner, 2011). Therefore, it should be remembered that investments in sports facilities are essential because their availability affects the level of participation in sport. Currently, there is still a lack of adequate sports facilities in Poland, because 48% of Poles agree are of the opinion that local authorities do not do enough for residents to provide them with favourable conditions for physical activity (European Commission, 2014). It is also worth noting that the construction of sports facilities is not enough, because their location is important, which should ensure easy access and integration with other services (Skinner, Zakus and Cowell, 2008). When planning the location of sports facilities, consideration should be given to aspects such as safety, convenient access for pedestrians, cyclists, and people using public transport. Z. Waśkowski (2011) says that 'creating conditions

for sports and physical recreation meets the growing interest in a healthy lifestyle and care for physical condition'. In conclusion, the real idea of sport is to create for man the best conditions for development – development to full humanity (Czechowski, 2014).

## Summary

Different levels of physical activity are observed in EU countries, but it can be said that about 40% of residents of the European Union weekly participate in sports. Sports are most common among the inhabitants of northern Europe. The most physically active are citizens of Finland (69% of them play sports at least once a week), Sweden (67%) and Denmark (63%). In turn, the least sporting countries are those of southern Europe. The highest percentage of people who never play sports can be found in Bulgaria, Greece and Portugal (in all of them the percentage reaches 68%). On average, across the European Union 46% of people do not engage in sport at all (European Commission, 2018). Poland, when compared to other European Union countries, presents itself as a country where participation in sport is not very popular. It is worth noting that the percentage of people practising sports in Poland is the lowest if compared to Poland's neighbouring countries. In Poland 28% of people do sports every week, and for comparison in Slovakia the percentage is 28%, in the Czech Republic 32%, in Lithuania 32%, and in Germany 48%. It is worth mentioning that in Poland as much as 56% of citizens never practise sports. For comparison, the percentage of respondents that never exercise or play sports in Lithuania is 51%, in Slovakia 49%, in the Czech Republic 41%, and in Germany 38% (European Commission, 2018). It is easy to notice that Polish citizens still have a lot to do to catch up with their neighbours and the European average in terms of physical activity.

In Poland only a small proportion of people meet the WHO recommendations on physical activity. In 2012 it was only 26% of Poles (Biernat and Piątkowska, 2012), and as shown by the study from 2015 it was even less – 15.5% (Ministry of Sport and Tourism, 2015a). It is alarming that in Poland only slightly over 10% of boys and girls reach the recommended level of physical activity (Poncdek and Olszowy, 2012). In connection with the above, actions aimed at improving physical fitness of young people and developing an awareness of the positive effects of an physically active lifestyle are the most needed. All actions ensuring sufficient conditions for people to be physically active, for example, the construction of bicycle paths and sports fields, should be much supported. Easier access to such places and appropriate promotion of healthy lifestyles can significantly contribute to increasing physical activity of Polish society. If every inactive Pole started practising sports, this would bring benefits in the form of about 250,000 fewer obese and overweight people, 14.6% fewer cases of cardiovascular disease – about 11,000 fewer heart attacks (throughout the year on a national scale), a 6% lower mortality rate (which means 25,000 fewer deaths per year), and a decrease of PLN 3 billion in costs related to employee absenteeism (Baran, Lis and Magda, 2016). Other authors have calculated that the Polish economy loses as much as about PLN 7 billion a year due to the low physical activity of Poles (Kutwa and Rafał, 2019).

## References

- Bailey, R. *et al.* (2013) 'Physical activity: an underestimated investment in human capital?', *Journal of Physical Activity & Health*, 10, pp. 289–308. doi: 10.1123/JPAH.10.3.289.
- Baran, J., Lis, M. and Magda, I. (2016) *Ocena korzyści społecznych inwestycji w sport w odniesieniu do ponoszonych kosztów*. Available at: <https://www.msit.gov.pl/download.php?s=1&id=11914>.
- Biernat, E. and Piątkowska, M. (2012) *Rekreacyjna aktywność fizyczna Polaków na tle Europy*. Available at: [https://s3-eu-west-1.amazonaws.com/fs.siteor.com/m-sport/files/badania\\_ianalzy/rekreacyjna\\_af\\_Polakow\\_na\\_tle.pdf?1438776005](https://s3-eu-west-1.amazonaws.com/fs.siteor.com/m-sport/files/badania_ianalzy/rekreacyjna_af_Polakow_na_tle.pdf?1438776005).
- Caspersen, C. J., Powell, K. E. and Christenson, G. M. (1985) 'Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research', *Public health reports*, 100(2), pp. 126–31. doi: 10.2307/20056429.
- CBOS (2013) *Aktywność fizyczna Polaków*. Available at: [http://www.cbos.pl/SPISKOM.POL/2013/K\\_129\\_13.PDF](http://www.cbos.pl/SPISKOM.POL/2013/K_129_13.PDF).
- Central Statistical Office (2011) *Kultura fizyczna w Polsce w latach 2008-2010*. Available at: [https://stat.gov.pl/cps/rde/xbcr/gus/kts\\_kultura\\_fizyczna\\_w\\_polsce\\_2008-2010.pdf](https://stat.gov.pl/cps/rde/xbcr/gus/kts_kultura_fizyczna_w_polsce_2008-2010.pdf).
- Central Statistical Office (2013) *Uczestnictwo Polaków w sporcie i rekreacji ruchowej w 2012 r.* Available at: [https://stat.gov.pl/cps/rde/xbcr/gus/KTS\\_uczestnictwo\\_polakow\\_w\\_sporcie\\_2012.pdf](https://stat.gov.pl/cps/rde/xbcr/gus/KTS_uczestnictwo_polakow_w_sporcie_2012.pdf).
- Cherry, A. (2014) *Cycling levels in European countries*. Available at: <https://www.cyclinguk.org/article/campaigns-guide/cycling-levels-in-european-countries>.
- Council of the European Union (2010) *Konkluzje Rady z dnia 18 listopada 2010 r. w sprawie roli sportu jako źródła i podstawy aktywnego włączenia społecznego*. Available at: <https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:326:0005:0008:PL:PDF>.
- di Cola, G. (2006) *Beyond the Scoreboard*. Edited by G. di Cola. Geneva: International Labour Office.
- Commission of the European Communities (2007) *White Paper on Sport*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52007DC0391&from=EN>.
- Czechowski, J. (2014) 'Sport szansą społecznego rozwoju człowieka', *Społeczeństwo i Ekonomia*, 1(1), pp. 7–19.
- European Commission (2014) *Sport and physical activity, Special Eurobarometer 412*. doi: 10.2766/73002.
- European Commission (2018) *Sport and physical activity*. Available at: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwic0qrgkoz1AhWxmIsKHU9eA8QQFjAAegQIBBAC&url=https%3A%2F%2Fec.europa.eu%2Fcommfrontoffice%2Fpublicopinion%2Findex.cfm%2FResultDoc%2Fdownload%2FDocumentKy%2F82432&usq=AOvVaw3U1xuZQoGY>.
- Farrell, L. and Shields, M. A. (2002) 'Investigating the economic and demographic determinants of sporting participation in England', *Journal of the Royal*

- Statistical Society. Series A: Statistics in Society*, 165(2), pp. 335–348. doi: 10.1111/1467-985X.00626.
- Gołdys, A., Podziemski, M. and Włoch, R. (2012) *Sport i rekreacja: ogólnopolskie badanie Polaków*. Available at: <https://www.msit.gov.pl/download.php?s=1&id=11932>.
- Humphreys, B. R. and Ruseski, J. E. (2006) ‘Economic determinants of participation in physical activity and sport’, *International Association of Sports Economists*, 4410(06–13), pp. 1–25. Available at: [http://college.holycross.edu/RePEc/spe/HumphreysRuseski\\_Participation.pdf](http://college.holycross.edu/RePEc/spe/HumphreysRuseski_Participation.pdf).
- Janssen, I. and Leblanc, A. G. (2010) ‘Systematic review of the health benefits of physical activity and fitness in school-aged children and youth.’, *The international journal of behavioral nutrition and physical activity*, 7, p. 40. doi: 10.1186/1479-5868-7-40.
- Kantar Public (2018) *Poziom aktywności fizycznej Polaków 2018*. Available at: <msit.gov.pl/download/1/15795/BadaniepoziomuaktywnoscifizycznejspoleczestwaAnalizawynikow2018v5.pdf>.
- Kavetsos, G. (2011) ‘The impact of physical activity on employment’, *Journal of Socio-Economics*. Elsevier Inc., 40(6), pp. 775–779. doi: 10.1016/j.socec.2011.08.011.
- Khan, K. M. *et al.* (2012) ‘Sport and exercise as contributors to the health of nations’, *The Lancet*. Elsevier Ltd, 380(9836), pp. 59–64. doi: 10.1016/S0140-6736(12)60865-4.
- Kutwa, K. and Rafał, M. (2019) *Polski rynek sportu*. Polski Instytut Ekonomiczny. Available at: [http://pie.net.pl/wp-content/uploads/2019/08/Raport\\_PIE-Sport-gospodarka.pdf](http://pie.net.pl/wp-content/uploads/2019/08/Raport_PIE-Sport-gospodarka.pdf).
- Kwilecki, K. (2011) *Rozważania o czasie wolnym*. Katowice: Górnośląska Wyższa Szkoła Handlowa.
- Lange, D. (2017) *Sports in Europe - Statistics & Facts*. Available at: <https://www.statista.com/topics/3737/sports-in-europe/>.
- Lechner, M. (2009) ‘Long-run labour market and health effects of individual sports activities’, *Journal of Health Economics*, 28(4), pp. 839–854. doi: 10.1016/j.jhealeco.2009.05.003.
- Lechner, M. and Sari, N. (2015) ‘Labor market effects of sports and exercise: Evidence from Canadian panel data’, *Labour Economics*, 35, pp. 1–15. doi: 10.1016/j.labeco.2015.04.001.
- Ministry of Labor and Politics and Social Policy (2013) *Strategia Rozwoju Kapitału Ludzkiego 2020*. Available at: [www.mpips.gov.pl/praca/strategie-i-dokumenty-programowe/strategia-rozwoju-kapitalu-ludzkiego-srkl---projekt-z-31072012-r/](http://www.mpips.gov.pl/praca/strategie-i-dokumenty-programowe/strategia-rozwoju-kapitalu-ludzkiego-srkl---projekt-z-31072012-r/).
- Ministry of Sport and Tourism (2007) *Strategia Rozwoju Sportu w Polsce do roku 2015*. Available at: [http://d1dmfej9n5lgmh.cloudfront.net/msport/files/Loga\\_i\\_pliki/strategia\\_rozwoju\\_sportu\\_do\\_roku\\_2015.pdf?1334718697](http://d1dmfej9n5lgmh.cloudfront.net/msport/files/Loga_i_pliki/strategia_rozwoju_sportu_do_roku_2015.pdf?1334718697).
- Ministry of Sport and Tourism (2015a) *Badanie poiomu aktywności fizycznej społeczeństwa w 2015 r.* Available at: <https://www.gov.pl/documents/292437/436728/Analiza+wyników+-+2015+r..pdf/ed6f73f1-efd7-06ed-4308-d6b6714ee068>.

- Ministry of Sport and Tourism (2015b) *Program rozwoju sportu do roku 2020*. Available at: <https://msit.gov.pl/download/1/8657/ProgramRozwojuSportudo roku202084e6.pdf>.
- Supreme Audit Office (2013) *Wychowanie fizyczne i sport w szkołach publicznych i niepublicznych*. Available at: <https://www.nik.gov.pl/plik/id,5651,vp,7325.pdf>.
- Paczyńska-Jędrycka, M. and Eider, P. (2015) ‘„Sport dla wszystkich” w promocji zdrowia (na przykładzie siłowni na świeżym powietrzu)’, *Marketing i Rynek*, (11), pp. 269–274.
- Podziemski, M., Gołdys, A. and Włoch, R. (2013) *Sport i Rekreacja: Ogólnopolskie Badanie Polaków*. Available at: <https://www.msit.gov.pl/download.php?s=1&id=11932>.
- Ponczek, D. and Olszowy, I. (2012) ‘Ocena stylu życia młodzieży i świadomości jego wpływu na zdrowie’, *Hygeia Public Health*, 47(2), pp. 174–182.
- Schneider, S. and Becker, S. (2005) ‘Prevalence of Physical Activity among the Working Population and Correlation with Work-Related Factors: Results from the First German National Health Survey’, *Journal of Occupational Health*, 47(5), pp. 414–423. doi: 10.1539/joh.47.414.
- Skinner, J., Zakus, D. H. and Cowell, J. (2008) ‘Development through Sport: Building Social Capital in Disadvantaged Communities’, *Sport Management Review*, 11(3), pp. 253–275.
- Steinmayr, A., Felfe, C. and Lechner, M. (2011) ‘The closer the sportier? Children’s sports activity and their distance to sports facilities’, *European Review of Aging and Physical Activity*, 8(2), pp. 67–82. doi: 10.1007/s11556-011-0090-0.
- Strawiński, P. (2010) ‘Economic determinants of sport participation in Poland’, *Rivista Di Diritto Ed Economia Dello Sport Issn*, 6(3), pp. 518–537.
- TNS Poland (2015) *Aktywność sportowa Polaków*. Available at: [krakow.pl/zalacznik/244305](http://krakow.pl/zalacznik/244305).
- Troiano, R. P. et al. (2008) ‘Physical activity in the United States measured by accelerometer’, *Med Sci Sports Exerc*, 40(1), pp. 181–188. doi: 10.1249/mss.0b013e31815a51b3.
- U.S. Department of Health and Human Services (2008) *2008 Physical activity guidelines for Americans*. Available at: <https://health.gov/paguidelines/2008/pdf/paguide.pdf>.
- Warburton, D. E. R. et al. (2007) ‘Evidence-informed physical activity guidelines for Canadian adults.’, *Canadian journal of public health. Revue canadienne de sant? publique*, 98 Suppl 2, pp. 16–68. doi: 10.1139/H07-123.
- Waśkowski, Z. (2011) ‘Integracyjna rola sportu we współczesnym świecie’, *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, (689), pp. 23–32.
- WHO (2010) *Global recommendations on physical activity for health*. Available at: [http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979_eng.pdf).
- Woynarowska, B., Mazur, J. and Oblacińska, A. (2015) ‘Uczestnictwo uczniów w lekcjach wychowania fizycznego w szkołach w Polsce’, *Hygeia Public Health*, (50), pp. 183–190.