

Physical activity and sport participation in the European Union

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Abstract

Although health benefits of physical activity are well established in the literature, nearly 30% of the global population is insufficiently active. Sports Club for Health (SCforH) initiatives that are aimed to promote health-enhancing physical activity require a deep understanding of the prevalence, time trends, and socio-demographic correlates of physical activity and sport participation in different countries. This chapter summarises recent evidence on the prevalence and time trends of physical activity, with a focus on the European Union. To inform Sports Club for Health initiatives, we also explored the contribution of sport to overall leisure time physical activity among different population age groups, as well as the prevalence and time trends of sports participation in the European Union.

1. Introduction

Although health benefits of physical activity are manifold and well known, global estimates indicate a large proportion of insufficiently active people, calling for increased efforts in promotion of active lifestyle (1). Promoting health-enhancing physical activity in the sports club setting has been the core mission of the Sports Club for Health (SCforH) movement since its inception in 2008 (2). To provide grounds for sports clubs and associations to implement SCforH initiatives, up-to-date information on global and European time trends and socio-demographic context of physical activity and sport participation is needed. This chapter thus explores the prevalence and time trends of physical activity, with a focus on the European Union. A special consideration is given to the contribution of sport to overall leisure time physical activity among different population age groups, as well as to prevalence and time trends of sports participation in the European Union.

2. Global prevalence of physical activity

In 2020, the World Health Organization (WHO) published the Guidelines on physical activity and sedentary behaviour (1). In summary, it is recommended that adults (18-64 years) do at least 150-300 minutes of moderate-intensity or at least 75-150 minutes of vigorous-intensity aerobic physical activity (or an equivalent combination of the two) weekly, with addition of strengthening activities for major muscle groups on at least 2 days a week. Older adults should follow the same recommendations with addition of physical activities aimed at improvement of functional balance and strength on at least three days a week. Children and youth (5-17 years old) should perform at least 60 minutes of moderate-to-vigorous physical activity each day, while bone and muscle strengthening activities should be performed at least three times per week (1).

Global status report on physical activity published in 2022 (3) reports that estimated 1.4 billion adults (27.5% of adults globally) do not meet the above stated recommended levels of physical activity. In addition to this large proportion of insufficiently active people, there are concerning differences in physical activity levels among different world regions/countries, sexes and age groups. Levels of physical activity are significantly higher in high-income (36.8%) than in low-income (16.2%) countries, and worldwide women tend to be less

physically active than men; the prevalence of insufficiently active women and men in 2016 was 31.7% and 23.4%, respectively (3, 4). People tend to become less physically active as they get older. In a report from 2017, the prevalence of insufficiently active persons aged 55 years and older in 16 European countries was 12.5%, with a higher percentage in southern countries (e.g. 29% in Portugal) than in northern European countries (e.g., 4.9% in Sweden) (5).

Reports on low physical activity level of the youngest population groups are particularly concerning. The report of the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey conducted in European countries and Canada indicates that in 2018 only 21% of 11-year-old girls and 27% of boys of the same age engaged in at least 60 minutes of moderate-to-vigorous physical activity per day (6). In the 13-year-olds, in the same year, the proportions were 15% and 23%, respectively, and for the 15-year-olds the results were even worse – only 11% of girls and 19% of boys achieved the recommended level of daily physical activity (6).

These findings are comparable with previous reports. In 2012, Hallal et al. (7) presented physical activity prevalence for 122 countries, representing two-thirds of the WHO Member States or 88.9% of the global population. Globally, 31.1% of people aged 15 years or more were insufficiently physically active (7). The proportion of inactive adults differed between WHO world regions: Southeast Asia was the region with the lowest percentage of inactive adults (17.0%), followed by Africa, where 27.5% of adults were inactive, Western Pacific (33.7%), Europe (34.8%), the Eastern Mediterranean (43.2%), while the Americas had the highest prevalence of insufficient physical activity (43.3%) (7). Overall, women tended to be less physically active than men (33.9% vs 27.9%, respectively). Also, the prevalence of insufficient physical activity tended to increase with age, and it was higher in high-income countries.

The 2013/2014 Health Behaviour in School-aged Children (HBSC) survey, comprising a sample of almost 220,000 children and adolescents from 42 countries in Europe and North America, showed that 25% of 11-year-olds were sufficiently physically active (8). Boys tended to be more physically active than girls (30% vs 21%, respectively). The proportion of sufficiently active young people declined with age, with 20% of sufficiently active 13-year-olds, and only 16% of sufficiently active 15-year-olds. In both age groups the percentage of physically active boys remained higher than the percentage of physically active girls (25% vs 15% in 13-year-olds, and 21% vs 11% in 15-year-olds) (8).

3. Time trends in physical activity

In 2012, Ng & Popkin described time trends in physical activity in the United States, the United Kingdom, Brazil, China, and India, showing a worldwide downward trend in four physical activity domains—occupational, domestic, transport-related, and leisure (9).

In 1965, the average physical activity level of adults in the United States was 235 MET hours/week, with a major contribution of occupational physical activity. There was a slight increase in total physical activity between 1987 and 1995, again with the highest contribution of occupational physical activity. In 2009, total physical activity was 160 MET hours/week. The predicted total physical activity levels for 2020 and 2030 were around 142 and 126 MET hours/week, respectively. It was expected that, by 2030, the levels of occupational, domestic, and transport physical activity will decline, leisure-time physical activity will somewhat increase, while sedentary behaviours will continually increase to around 42 hours/week in the United States (9).

In 1961, the average physical activity level of adults in the United Kingdom was 216 MET hours/week, where the majority was done in the occupational domain. By 2005, total physical activity decreased by 20%, that is, to 173 MET hours/week. It was predicted that total physical activity in 2020 and 2030 will be 153 and 140 MET hours/week, respectively, with slight increases in transport and leisure-time physical activity, and continuous declines in occupational and domestic physical activity. Sedentary leisure time was predicted to increase to >51 hours/week by 2030 (9).

Average physical activity level in Brazil was 229 MET hours/week in 2002, and 214 MET hours/week in 2008. The predicted values for 2020 and 2030 were 180 and 151 MET hours/week, respectively, with the largest absolute decline in the occupational domain, the largest relative decline in the domestic domain, and an expected rise in leisure-time physical activity. The expected rise in sedentary time was from 24 hours/week to 29 (in 2020) and 33 hours/week (in 2030) (9).

In 1991, the average physical activity level in China was 399 MET hours/week, where most of it was done in the occupational domain. In 2009, total physical activity was 213 MET hours/week, mainly due to decrease in occupational, domestic, and transport physical activity. The predicted total physical activity level in 2020 and 2030 was 200 and 188 MET hours/week, respectively. Decrease in occupational and domestic physical activity was expected, with a rather stable transport physical activity and a slight increase in leisure-time physical activity. Sedentary behaviour was expected to increase from 20 hours/week (in 2009) to 23 and 25 hours/week (in 2020 and 2030, respectively) (9).

In India, a decrease, particularly in occupational physical activity, was expected by 2030. Sedentary time was projected to increase from 18.6 to 20 hours/week (in 2000 and 2030, respectively) (9).

In 2018, a pooled analysis of 358 population-based studies with a total sample of 1.9 million participants from 168 countries reported 2001-2016 worldwide trends in insufficient physical activity (4). In 2016, there were 27.5% of insufficiently active adults, which was an insignificant decrease from the prevalence reported in 2001 (28.5%). Throughout the 2001-2016 period, the prevalence of insufficient physical activity was higher among women, compared with men (31.5% vs 25.5% in 2001; 31.7% vs 23.4% in 2016). The prevalence of physical inactivity increased in high-income (western) countries between 2001 and 2016 (30.9% in 2001 vs 36.8% in 2016), as well as in Latin America and Caribbean (33.4% in 2001 vs 39.1% in 2016), while east and southeast Asia reported a decrease in inactivity in the same period (25.7% in 2001 vs 17.3% in 2016) (4).

4. Prevalence and time trends of physical activity in the European Union

The data on prevalence and time trends of physical activity in the European Union are presented based on results of the Eurobarometer surveys conducted in 2002, 2005, 2009, 2013, 2017, and 2022.

In 2002 (10), 57.4% of adult respondents (15 years and older) did not engage in vigorous physical activity in the previous 7 days, 15.4% reported engaging in moderate physical activity on a daily basis, while 11.3% reported engaging in moderate physical activity on 2 days in the previous week. According to age groups, most people aged 65 years and older performed no vigorous activity, while this percentage was rather high also in the youngest surveyed group – 43.1% of the 15-25-year-olds performed no vigorous physical activity. For the moderate physical activity, 55.9% of the 65+-year-olds performed none, while among the 15-25-year-olds there was one third of inactive participants (33.1% not performing moderate-intensity physical activity in the previous week). Women tended to be less active than men (65.0% of women vs 49.1% of men reported performing no vigorous physical activity in the previous week, while 43.2% of women vs 38.1% of men reported no engagement in moderate physical activity) (10).

In comparison to 2002, in 2005 the number of participants who reported no vigorous physical activity has significantly decreased (11). Men tended to spend more time in vigorous physical activity than women (on average 124.4 vs 61.1 minutes, respectively). The average number of days in which European Union citizens engaged in moderate physical activity in 2005 was 2.4, with no significant differences compared to 2002. The average weekly duration of moderate physical activity was 94.5 minutes, again men (106.2 minutes) tended to be more physically active than women (83.6 minutes) (11).

In 2009, 27% of respondents reported they engaged in physical activity at least 5 times per week, while 65% engaged in activities at least once a week (12). Fourteen percent of participants reported they were inactive, while 20% were seldom active. Men again tended to be more active than women. Physical activity tended to decrease with age, although this was not the case for the people who exercised regularly (12).

In 2013, 28.6% were inactive (13), while as many as 59.1% of the respondents were highly active. The mean physical activity level was 2151 MET-min/week. Vigorous exercise contributed to this with 891 MET-min/week, moderate exercise (without walking) with 559 MET-min/week (95%CI: 540–578), while walking contributed with 690 MET-min/week. Males again tended to be more physically active than women, and the level of physical activity tended to decline with age (14).

In 2017, 58% of participants reported not doing any vigorous physical activity, which is an increase of 4 percentage points compared to 2013. Forty-seven did not perform any moderate physical activity, which represents a 3 percentage points increase since 2013 (15). Sixty-three percent of respondents spent an hour or less in moderate physical activity, while 34% of respondents spent more than an hour engaged in such activities weekly. When inquired about physical activities other than sport or exercise, 13% of women and 15% of men responded they engaged in such activities regularly, while 40% of women and 31% of men never engaged in such activities. The age decline in engagement in activities other than sport and exercise was also found; 25% of 15-24-year-olds reported never engaging in such activities in comparison to 45% of 55 years old and older participants (15).

The most recent Eurobarometer data, from 2022, (16) indicate that 36% of Europeans engage with some regularity in physical activity for recreational/non-sport purposes, 14%

are active regularly, while 31% still never participate in such physical activity. Country-wise, the highest percentages of respondents who did physical activity with some regularity were found in Finland (54%), Austria (48%), Estonia, and Sweden (both 47%). The countries with the highest proportion of respondents who never engaged in physical activity were the southern European countries, among which Portugal (72%), Greece (53%), Romania (52%), Italy (46%), and Spain (45%) had the highest prevalence. The countries with the highest proportion of respondents who are regular physically active were the Netherlands (43%), Denmark (32%), and Sweden (31%). Women again tended to be less physically active than men (35% vs 28% reported they never engage in any physical activity). In regard to age, in the youngest population group (15-24-year-olds), 44% engaged in physical activity with some regularity. In the 25-39-year-olds the prevalence was 38%, in 40-54-year-olds it was 36%, and among people aged 55 years and older it was 31% (16).

Also, the European Union Physical Activity Focal Points Network, established in 2014 by WHO and the European Commission, conducted two surveys on physical activity in the European Union member states, performed in 2015 and 2018 (17). Data on physical activity prevalence in adults varied across countries (11.2%-80.4%). However, this wide prevalence range should be considered with caution, because data for different countries were obtained by different instruments and calculated using different thresholds (17).

5. Contribution of sport to overall leisure time physical activity

In a study performed in 2012 and 2013 in Germany, physical activity of 396 children and adolescents aged 6-17 years was measured using accelerometry during school weeks (18). On average, the proportion of moderate-to-vigorous physical activity during organised youth sport was below 30%. However, the likelihood to attain the recommended 60 minutes of moderate-to-vigorous physical activity daily was significantly higher among children and youth who engaged in organised sport at least 2 days per week, or at least 120 minutes per week (18).

An accelerometer-based study conducted among 7-12-year-old children ($n = 492$) (19) found that 52.5% of the participants engaged in organised sport at least once weekly and that they spent on average 23.3 minutes in moderate-to-vigorous physical activity during their sports training. Boys tended to be more physically active than girls. On the days in which children participated in sports, they engaged in 24.9 minutes more of moderate-to-vigorous physical activity compared to days when they did no organised sports. This indicates that organised sport significantly contributes to overall physical activity levels and increases the odds of attaining the recommended level of physical activity (19).

The data from the International Children's Accelerometry Database (ICAD) project collected among 3871 participants aged 11.3 ± 1.2 years (mean \pm standard deviation) showed that organised sport, together with other physical activity in active transport and physical education was positively associated with time spent in moderate-to-vigorous physical activity and that organised sport and active transport contributed to time spent in moderate-to-vigorous physical activity more than physical education (20).

In a study conducted among 358 adolescents (mean age: 15.3 years) from Melbourne, Australia, 50% of participants participated in sports on average 3.4 times per week, which resulted in additional 7 min/day of moderate-to-vigorous physical activity, in comparison

with the adolescents who did not participate in sports (21). Also, if adolescents participated in more than one sport, each additional one contributed to an average increase of around 5 minutes per day of moderate-to-vigorous physical activity. These results indicate a modest impact of sports on daily physical activity of adolescents (21).

The 2010 Exercise, Recreation and Sport Survey (ERASS) conducted in a national sample of 21,602 15+ year old Australians, explored the contribution of sport to overall health-enhancing physical activity performed in leisure time (22). Results showed that engaging in club sports contributed significantly to leisure-time physical activity. Eighty-two percent of interviewees reported engaging in leisure-time physical activity in a one-year period prior to the survey. The majority (71%) of these activities were non-organised, and out of the remaining organised activities, 18% were based in sports clubs. Fifty-two percent of reported sport activities were classified as health-enhancing activities, of which 33% were sport-club based (22).

6. Prevalence and time trends of sports participation in the European Union

The detailed prevalence and time trends of sports participation in European Union are presented based on results of the Eurobarometer surveys.

In 2004, 38% of European Union citizens reported engaging in sport at least once a week. This represented an increase of three percentage points compared to 2003.

In 2004, the most active in sports were the citizens of Scandinavian countries, with 75% of citizens of Finland and 72% of citizens of Sweden reporting playing sport at least once a week. The percentage of people regularly participating in sport was above the European Union average in Malta (42%), Cyprus (43%), and Slovenia (43%). Below average number of people participating in sports was found in Southern Europe (22% in Portugal) and some of the new member states (20% in Hungary and 24% in Slovakia) (23).

The analysis by socio-demographic characteristics showed that in 2004:

- men tended to be more active than women (41% and 35% reported playing sport at least once a week, respectively);
- sports participation (at least once weekly) tended to decline with age, as 60% of the 15-24 year-olds, 41% of the 25-39 year-olds, 34% of the 40-54 year-olds, and 28% ≥55 year-olds participated in sports this frequently;
- there was a positive relationship between regular weekly participation in sports and the level of education, with 20% of participants who finished their formal education at ≤15 years of age, 32% of participants who finished their education at 16-19 years of age, and 50% of participants who finished their education at the age of ≥20 years participating in sports (23).

In the same year, when asked about the place where they most often participate in sport, the interviewees reported the following: 6% at school/university (the same as in 2003); 11% in a sports centre (-3 percentage points compared to 2003); 15% in a fitness centre (-3 percentage points compared to 2003); 16% in a club (-4 percentage points compared to 2003); 51% elsewhere/spontaneous (+9 percentage points compared to 2003) (23). Spontaneous non-organised sports activity was most prevalent in the new member states, such as Malta (69%), Poland (62%), and Slovenia (63%). A slight preference for fitness centres was observed in the southern European Union countries (Greece [34%], Italy [28%], and Portugal [27%]),

while clubs were preferred in the northern parts of European Union (the Netherlands [34%], Denmark [28%], and Germany [25%]) (23).

The 2005 survey included 29 countries—25 European Union member states, two acceding countries (Bulgaria and Romania), two candidate countries (Croatia and Türkiye)—and the Turkish Cypriot Community (11). In European Union member states 36% of interviewees reported engaging in no physical activity, while only 15% of participants spent a lot of time in physical activity in terms of recreation, sport, and leisure in the last 7 days.

A higher percentage of citizens in the northern countries reported engaging in a lot of physical activity for sport, recreation, and leisure (Luxembourg [26%], Finland [24%], Germany [24%]), as opposed to the ones in the Southern countries (Bulgaria [3%], Italy [4%], Greece [5%]). The highest percentage of people not engaging in any physical activity was recorded in Croatia (59%), Portugal, and Türkiye (both 54%) (11).

In 2009, the Eurobarometer survey was conducted in 27 European Union member states (12). A majority of interviewed citizens (60%) reported either never or rarely playing sport. Forty percent took part in sports more than once a week, out of which 9% participated in sports 5 or more times per week.

The highest participation in sports once a week or more was found in the northern European Union countries (Sweden [72%], Finland [72%], and Denmark [64%]), while the lowest number of citizens regularly engaging in sports activities was found in Bulgaria (3%), Greece (3%), and Italy (3%). The highest percentage of citizens who reported never participating in sport or doing so less than once a month was recorded in Bulgaria (82%), Greece (79%), Hungary (71%), Romania (69%), Italy (67%), Poland (66%), and Latvia (65%).

The analysis by socio-demographic characteristics showed that in 2010:

- men tended to be more active than women (43% vs 37% reported playing sport at least once a week, while 49% vs 57% reported never playing sport or doing so less than once per month);
- sports participation (at least once per week) declined with age, with 61% of the 15-24 year-olds, 44% of the 25-39 year-olds, 40% of the 40-54 year-olds, 33% of the 55-69 year-olds, 22% for the 70+ year-olds participating in sports this frequently;
- the percentage of people who never participate in sports declined with the higher level of education, with 64% of survey participants who finished their formal education at ≤15 years of age, 39% of participants who finished their education at 16-19 years of age, and 24% of participants who finished their education at the age of ≥20 years never participating in sports (12).

In terms of the place where they most often participate in sports activities, 48% of participants engaged in sports in informal settings, such as parks, or other outdoor settings, or in daily transport (31%). Other reported places in which people played sports included fitness centres (11%), clubs (11%), sports centres (8%), work (8%), and school or university (4%). Park or outdoor settings were most popular in Slovenia (83% of respondents), Finland (76%), and Estonia (67%), while they were least popular in Greece (27%), Malta (28%), and Romania (29%). Fitness centres were most popular in Sweden (31% of respondents), Cyprus (22%), and Denmark (20%), and least popular in France (2%) and Hungary (2%). Sports clubs were most popular in the Netherlands (25%) and Germany (19%), and least popular in Greece (2%), Bulgaria (3%), Hungary (3%), Italy (3%), Romania (3%), and Spain (3%). Sports centres were most popular in Italy (15%), Finland (13%) and Sweden (12%), while they were least popular in Bulgaria (3%) and Romania (3%).

In terms of socio-demographic analysis, men reported higher preference for sports clubs participation than women (13% and 8%, respectively). Young people (15-24 years old) preferred fitness centres (17%), clubs (18%), and sports centres (13%), while parks and other outdoor spaces were preferred settings for sports activities in older age groups.

Sixty-seven percent of European Union citizens were not members of any sports or fitness clubs. Nine percent were members of health or fitness clubs, while 12% were members of sports clubs. The countries with the highest percentage of members of sports or fitness clubs were Germany (61%), Austria (57%), the Netherlands and Sweden (49% for both), and Denmark (47%). The countries with the lowest percentage of sports club members were Hungary (8%), Greece and Lithuania (12%), Poland (13%), and Estonia (15%) (12).

The 2013 Eurobarometer survey was conducted among adults from 28 European Union member states (13). The majority of interviewees (59%) reported they never or seldom exercise or do sports. Out of 41% of those who exercised or played sport at least once a week, 8% did so five or more times a week. The percentage of citizens who exercised or engaged in sport at least once a week was highest in Sweden (70%), Denmark (68%), and Finland (66%). The proportion of citizens who never exercise or engage in sport was highest in Bulgaria (78%), Malta (75%), Portugal (64%), Romania (60%), and Italy (60%).

Similarly as in the previous surveys, the analysis by socio-demographic characteristics showed that:

- men tended to be more active than women (45% vs 37% reported exercising or playing sport at least once a week, while 37% vs 47% reported never exercising or playing sport);
- exercise or sports participation (at least once a week) declined with age, with 64% of the 15-24 year-olds, 46% of the 25-39 year-olds, 39% of the 40-54 year-olds, 30% of the 55+ year-olds participating in sports or exercise this frequently;
- the percentage of people who never participate in exercise or sports declined with the higher level of education, where 68% of survey participants who finished their formal education at ≤15 years of age, 45% of participants who finished their education at 16-19 years of age, 27% of participants who finished their education at the age of ≥20 years participated in sports or exercise (13).

Most interviewees engaged in sports, exercise, and other physical activity in informal settings, such as parks and other outdoor places (40%), at home (36%), or in transport (25%). Other reported settings were health or fitness centres (15%), sports clubs (13%), sports centres (8%), at work (13%), and at school or university (5%). Country-wise, the highest percentages of citizens active in outdoor settings was found in Finland (72%), Slovenia (60%), Sweden (55%), Austria (54%), Spain (51%), and Denmark (50%), while the lowest percentages were found in Hungary (16%) and Romania (19%).

The countries in which citizens were most active in health or fitness centres were Sweden (40%), Finland (27%), Denmark (26%), Cyprus (22%), and the United Kingdom (21%). The citizens most active in sports clubs were found in Denmark (22%), the Netherlands (23%), and Germany (21%), while sport centres were popular in Italy (19%). The lowest percentages of activity in health or fitness centres were found in Lithuania (2%), France (5%), Latvia, Hungary, Slovenia, and Romania (6% each). Sport centres were least popular in Romania (2%), Hungary, Lithuania, and Portugal (3% each). Sports clubs were least popular in Romania (3%), Bulgaria, Hungary, Poland, and Cyprus (5% each). In terms of socio-demographic analysis, men tended to report higher preference for sports clubs than women (16% vs 10%). Young people preferred health and fitness centres (22% of 15-24 year-olds vs 9% of 55+ year-olds). A

high percentage (28%) of 15-24 year-old men preferred sports clubs. Parks and other outdoor spaces were preferred in older age groups. Seventy-four percent of European Union citizens were not members of any clubs. Eleven percent were members of health or fitness centres, while 12% were members of sports clubs. The countries with the highest percentage of members of sports clubs were the Netherlands (27%), Denmark (25%), and Germany (24%). The highest percentage of members of health or fitness centres was found in Sweden (33%) and Denmark (25%). The countries with the lowest number of sports club members were Romania (1%), Bulgaria (2%) and Poland (3%), while Lithuania, Bulgaria, and Latvia had the lowest percentage of members of health or fitness centres (1%, 2% and 3%, respectively) (13).

Special Eurobarometer 472 survey (15) was conducted among adults from 28 European Union member states ($n = 28,031$) in 2017 (15). Again, a high percentage of Europeans (46%) reported they never play sport or exercise, 14% did it seldom, while 40% engaged in sports or exercise with some regularity. Only 7% of Europeans engaged in sports or exercise regularly. These results indicate a long-term decrease in sports and exercise participation, since the percentage of Europeans who did not engage in sports or exercise increased from 39% in 2009 to 46% in 2017. In 11 European countries, more than 50% of survey participants did not play sports or engage in physical activity, including Bulgaria, Greece, and Portugal (all 68%), Romania (63%), Italy (62%), Latvia, Malta, Poland, and Croatia (all 56%), Hungary (53%), and Lithuania (51%). The percentage of respondents who never engaged in sports or exercise was the lowest in Finland (13%), Sweden (15%), Denmark (20%), and Slovenia (24%). A large increase in the proportion of people not taking part in sports and exercise has been recorded since 2013 in the following countries: Croatia (+27 percentage points), Latvia (+17 percentage points), Austria (+13 percentage points), and Estonia (+12 percentage points). Six countries recorded a decrease in the number of respondents who never engage in sports or exercise, including Malta (-19 percentage points), Bulgaria (-10 percentage points), Cyprus (-8 percentage points), Finland, Luxembourg, and Belgium (all -2 percentage points).

The analysis by socio-demographic groups showed that in 2017:

- men tended to be more active than women (44% vs 36% reported exercising or playing sport with at least some regularity, while 40% vs 52% reported never exercising or playing sport);
- sports and exercise participation tended to decrease with age, with 62% of the 15-24 year-olds, 46% of the 25-39 year-olds, 39% of the 40-54 year-olds, and 30% of the 55+ year-olds playing sports or exercising with at least some regularity;
- the percentage of people who never participated in exercise or sports was higher in people with a lower formal level of education, where 73% of survey participants who finished their formal education at ≤ 15 years of age, 52% of participants who finished their education at 16-19 years of age, and 31% of participants who finished their education at the age of ≥ 20 years (15) never participated in sports and exercise.

The settings in which most interviewees engaged in sports or other physical activity included: parks and other outdoor places (40%), home (32%), transport (23%), health or fitness centres (15%), sports clubs (13%), workplace (13%), sport centres (12%), and school or university (5%). Park or outdoors was the most popular setting to engage in sport or exercise in 17 countries (67% of respondents in Finland, 54% in Austria, 53% in Spain, 35% in Italy, and 34% in the United Kingdom). Engaging in sport or physical activity in a health or fitness centre was the most common in Sweden (44%), while sports clubs were the most popular setting in the Netherlands (24%) and Germany (21%). Sport centres were most popular in Italy (27%). The lowest

percentages of activity in health or fitness centres were reported in Lithuania (3%), France (5%), Latvia, and Slovenia (6% both). Sport centres were again least popular in Romania (3%), Bulgaria (4%), Greece, Lithuania, and Portugal (5% each). Sports clubs were least popular in Romania (4%), Bulgaria, Greece, Croatia, Slovakia, Hungary, and Cyprus (5% each).

In terms of socio-demographic characteristics, men were more likely to engage in sports or physical activity in sports clubs, compared with women (15% vs 11%). Women were more likely to engage in these activities at home (35% vs 29%) and in transport (25% vs 20%). Young people preferred health and fitness centres (22% of 15-24 year-olds vs 10% of 55+ year-olds). A high percentage of 15-24 year-old men preferred sports clubs (26%) and sport centres (22%). Parks and other outdoor spaces were preferred in older age groups (30% among 15-24-year-olds vs 38-43% in older age groups). Thirty percent of respondents were members of a club in which they play sport or are physically active, with 12% being members of a sports club and 11% being members of a health or fitness centre. The countries with the highest percentage of members of sports clubs were the Netherlands (27%), Denmark (23%), and Luxembourg (18%). The highest proportion of members of health or fitness centres was reported in Sweden (41%) and Denmark (24%). The countries with the lowest percentage of sports club members were Latvia (5%), Lithuania (7%), and Malta (9%), while the lowest number of members of health or fitness centres was found in Romania (5%), Bulgaria (5%), and Croatia (6%) (15).

The latest Eurobarometer survey (16) that was conducted in 2022 revealed that 45% of respondents never played sports or exercised, while 17% did it seldom. Six percent of Europeans played sports or exercised regularly, while 32% engaged in such activities with some regularity. An analysis by countries confirmed previous finding of higher sport and exercise participation in northern European countries. The countries in which respondents were most likely to engage in sports and exercise were Finland (71%), Luxembourg (63%), the Netherlands (60%), Denmark, and Sweden (both 59%). The highest percentages of respondents who never play sports or exercise were found in Portugal (73%), Greece (68%), and Poland (65%). The highest percentages of participants who take part in sports or exercise regularly were found in Finland (18%), Ireland, and Luxembourg (both 13%).

Men tended to engage in sports or exercise with some regularity more than women (35% vs 30%). Forty percent of men and 49% of women reported that they never engage in sports or exercise. In the youngest age group (15-24 years), 54% of participants played sports or engaged in exercise. This percentage was lower in older age groups; 42% in 25-39-year-olds, 32% in 40-54-year-olds, and 21% in people aged 55 years and older.

In 2022, nearly half of respondents (47%; +7 percentage points since 2017) engaged in physical activity or sports in outdoor settings. Thirty-seven percent exercised at home and 24% were active in transport. Thirteen percent (-2 percentage points) played sports or engaged in other physical activity at a health or fitness centre, 12% (-1 percentage points) did so at a sports club, and 11% (-2 percentage points) at work. Eight percent (-4 percentage points) were active at a sports centre, while 4% (-1 percentage points) were active at school or university.

The proportion of respondents who play sports or engage in exercise has increased in 20 European Union countries. The percentage of people engaging in sports or exercise in a health or fitness centre has decreased in 14 countries (the largest decrease was recorded in Sweden, 3 percentage points). Also, playing sports or exercising in a sports club has become less popular in 15 countries; for example, in Malta (8%, which is a decrease of -9 percentage points). A higher percentage of women than men chose to exercise at home (40% vs 35%), while men were more active in sports clubs than women (14% vs 9%). Young people

(15-24-year-olds) tended to exercise or play sports more than those aged 55 years and older in the following settings: at a health or fitness centre (20% vs 8%), at a sports club (19% vs 9%), and at a sports centre (13% vs 5%). The 55+-year-olds were more likely than the youngest respondent group to play sports or be physically active in outdoor settings, such as parks (50% vs 41%) and at home (43% vs 28%) (16). It should be noted that the results of the 2022 survey have most likely been affected by the COVID-19 pandemic.

7. Conclusion

Successful implementation of the SCforH guidelines must be based on a sound understanding of the prevalence and time trends of physical activity and sports participation. It is estimated that nearly 30% of adults globally do not meet the physical activity recommendations. Residents of high-income countries, men, and younger people tend to be more physically active than residents of low-income countries, women, and older people. A global decrease in physical activity level in children and adolescents is particularly concerning. High prevalence of insufficient physical activity has also been documented in the European Union in a series of Eurobarometer surveys, including the most recent data collected in 2022. Studies generally show that participation in sports activities increases the odds of attaining the recommended level of physical activity, especially among children and youth. Recently, there was an increase in the percentage of people who play sports or engage in exercise in 20 European Union countries, which is an encouraging finding. Finally, of special importance for the SCforH initiatives is a decrease in exercising or playing sports in the sports club setting that was found in 15 European Union countries, and an increase of engagement in such activities in outdoor settings, which was likely a consequence of the COVID-19 pandemic.

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