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Sport and physical activity engagement in Romania

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Abstract: The purpose of the current paper is to reveal the sports and physical activity engagement of Romanians at the level of the eight development regions, data corroborated with EU average values in this field. The raw data for this research were retrieved from the Special Eurobarometer 472, which were further on processed in ArcGIS maps. The study results indicate that there is a very low frequency of exercising, namely 63% of Romanians never practise sports, while only 6% practise sports regularly. Per development region the most inactively engaged citizens are those from the South-East (75%) and Central region (71%), while the share of those who exercise regularly is the highest in the North-East (12%).

Keywords: sport, physical activity, engagement, frequency, involvement

Introduction

Physical activity is defined very broadly as being anything that makes people move their body, thus requiring energy expenditure (Hallmann and Giel, 2018). Physical activity includes leisure time, occupational, transport and domestic related activity. Organized sports participation on the other hand determines important psychosocial benefits including increased self-esteem, well-being and social skills (Vella et al., 2016). Physical education and sports has witnessed a high impact on people's positive development from early childhood through adolescence and adulthood, being a lifelong process (Devecioglu et al., 2012). The regular practice of sports and physical activity reduces the risk of cardiovascular diseases, develops

muscular strength and endurance (Dragoş et al., 2017, Marinău, 2016), reduces depression and anxiety and is positively correlated with a high academic achievement (Camliguney et al., 2012; Muñoz-Bullón et al., 2017). Some studies indicate that physical activity engagement triggers a certain type of personality with athletes (Buhaş and Stance, 2017)

Sports and physical education are a basic component of a human's enhanced quality of life (Kozma, 2014; Ilieş et al., 2014; Guo et al., 2018). Its formative value is appreciated and valued at a world scale, being included in most educational curricula, thus having a direct impact upon people's health, a child's development and growth and building social skills. It relies on a set of rules, forms of organization and development for the improvement of a biometric and physical potential of the individual (Dacica, 2015). Through sports a competitive character is formed since childhood, Olympianism having also its formative role. Studies indicate that children who participate in organized sports are physically more active than those who do not (Ridley et al., 2018). Physical education and sports should build more active citizens meanwhile making them more creative and adaptive (Dobrescu et al., 2013).

In order for sports and physical education to become an integrant part of a person's life, more actors are involved in a harmonious intertwining such as pupil, school and family relations (Buhaş, 2014; Ilieş et al., 2018; Marcu and Buhaş, 2014; Dacica, 2015). Currently, the physical activity and outdoor sports stands in high competition with a static activity such as computer gaming which draws the young generation away from practicing healthy outdoor sports. But a happy combination between sports and computers is eSports, the latter aiming to be taken into account for becoming a medal event in the 2022 Asian Games (Hallmann and Giel, 2018). It is a new innovative trend which comes to meet the needs of the current generations whose daily life is linked to computers, but still having a desire to be actively involved in sports, although virtually. "eSports illustrate one possibility to reach the youth and connect them to at least virtual sporting activities, which again might induce growing interest to practice sports themselves" (Hallmann and Giel, 2018:14).

Sports should preferably be carried outdoor as indoor sports exposes the body to pollutants, as the increase in respiratory ventilation per minute during exercise triggers a greater amount of air inhalation and therefore of pollutants present in the air. "During exercise, air tends to be inhaled through the mouth, rather than passing through the nasal particle-filtering apparatus. The increase in air flow velocity results in the transport of pollutants into the deepest part of the respiratory system, increasing the risk to human health" (Andrade and Dominski, 2018:578).

Playing outdoors sports is very significant for the well-being of an individual, namely more than 60 min/day as indicated by the study of Kobel et al., (2015). People's sportive behavior can be intrinsically motivated (i.e. because people are aware of the benefits of active practice on health), extrinsically motivated or amotivated, all part of the self-determination theory (Granero-Gallegos et al., 2014). Most motivators for doing sports and physical activity at the level of the EU refer to

improving health, keeping a weight control, as well as for relaxation and improving physical performance (Special Eurobarometer Report, 472).

The lack of intrinsic or extrinsic motivation leads to the prevalence of childhood obesity. It is an increasing concern in Western Europe countries which seems to be attributable to a decrease in physical activity levels (Kobel et al., 2015). Kids' engagement in sports is correlated with more educated parents who trigger a more active behavior to their kids. Participation in sports is influenced by children's media consumption, active travel to school and having active parents (Kobel et al., 2015). "It is important to promote active sports engagement and an active lifestyle at an early stage in life as it later on it facilitates a carryover of healthy habits into adulthood" (Kobel et al., 2015: 238). Australia ranks among the first countries with the highest youth sports participation rates of 20-59% among the developed and developing country (Vella et al., 2016).

In order to increase sports participation in the 28 countries of the European Union a new EU Work Plan for Sport came into force in July 2017. It lays out the key topics which the member countries should prioritize until 2020 (Special Eurobarometer Report, 472): Integrity of sport will focus on good governance, safeguarding minors, fighting match-fixing, doping and corruption; The economic dimension focusing on innovation in sport, and the links between sport and the digital single market; Sport and society, focusing on social inclusion, coaches, media, environment, health, education and sport diplomacy.

According to a survey carried out in 2017 (Special Eurobarometer Report, 472) two in five Europeans (40%) exercise or play sports at least once a week, while 7% do so regularly, i.e. at least 5 times per week. Men are more physically engaged in sports than women. Another outcome revealed by the study shows that engagement in sports and physical activity is more prevalent in more educated people and those with a good financial status. Finland, Sweden and Denmark rank highest in the hierarchy while at the opposite end, Bulgaria, Greece and Portugal respondents (68%) are least likely to exercise or play sports, followed by Romania (63%) and Italy (62%).

In the case of Romania as the study analysis shows the frequency levels of doing sports are low given that 63% of Romanians never practice sports while barely 6% of Romanians practice sports regularly. Reported to the European Union average 46% of its citizens never practice sports.

Methodology

The data for the current research were retrieved from the Special Eurobarometer 472. The latest Eurobarometer on sport was carried out in the 28 EU Member States in December 2017 and 28,031 EU citizens from different social and demographic categories were interviewed, a survey carried out by the European Commission- Directorate General for Education, Youth, Sport and Culture.

From this broad analysis we selected the data referring to Romania (cf. Special Eurobarometer 472, 2017). Thus, according to the survey, a sample of 1095 respondents was considered, among which 570 women and 525 men. The age range was between 15-75 years old, proportionally coming from the eight development regions of Romania (table 1).

The current survey analyzed the frequency and levels of engagement in sport and other physical activity such as cycling, dancing, gardening; the time spent sitting on a usual day (at a desk, studying, watching TV); the motivators and barriers for sport participation as well as the opportunities for sport participation and supporting the community through sport participation (cf. Special Eurobarometer 472).

According to these items maps were drawn for the eight development regions of Romania in the ArcGIS program, by processing the raw data coming from the Special Eurobarometer 472, 2017 thus revealing the prevalence of each of the analyzed item.

Table 1. Socio-demographic breakdown
Source: Special Eurobarometer 472

	Gender		Age				Socio-professional category							
	Man	Woman	15-24	25-39	40-54	55+	Self-employed	Managers	Other white collars	Manual workers	House persons	Unemployed	Retired	Students
1	76	84	42	28	37	53	7	12	10	34	26	0	38	33
2	65	61	14	28	27	57	6	13	8	24	17	2	46	10
3	91	66	22	36	39	59	13	3	17	41	18	7	48	9
4	37	67	9	41	30	24	0	14	34	28	1	5	15	7
5	40	53	7	29	18	39	8	10	5	30	6	3	28	3
6	55	75	10	22	30	68	6	9	10	34	8	2	55	6
7	51	67	14	25	32	47	7	1	6	52	8	5	34	6
8	68	50	13	39	23	43	4	16	26	25	2	0	35	9
	483	523	131	248	236	390	51	78	116	268	86	24	299	83

Results and debates

In order to create an image of the Romanians' behavior regarding sports and physical activities, nationally and by development regions, the following defining indicators were analyzed: the frequency of sport and other physical activities engagement; time spent doing physical activity and sitting; motivators and barriers to sport participation; available support for sport participation in citizens' local area; supporting the community through sport activities.

The answers to the question "How often do you exercise or play sports?" reveal that 63% of Romanians never practice sports, while only 6% practice sports regularly. Relative to the EU, percentage differences are quite distanced for those who do not practice sports, in Europe this percentage is 46%, compared to 63% in Romania. The analysis of the frequency of practicing sport at the level of development regions in Romania indicates some oscillations that derive from the physico-geographic particularities specific to each development region. Thus, in terms of the percentage of those who never exercise or play sports, the highest

values were recorded in the South-East (75%) and Central part (71%), unlike the South regions (47%) and South-West (57%), while the share of those who exercise regularly was higher in the North-East (12%) and South-East (8%) regions compared to the South-West (0%) and West (4%) regions (Fig. 1).

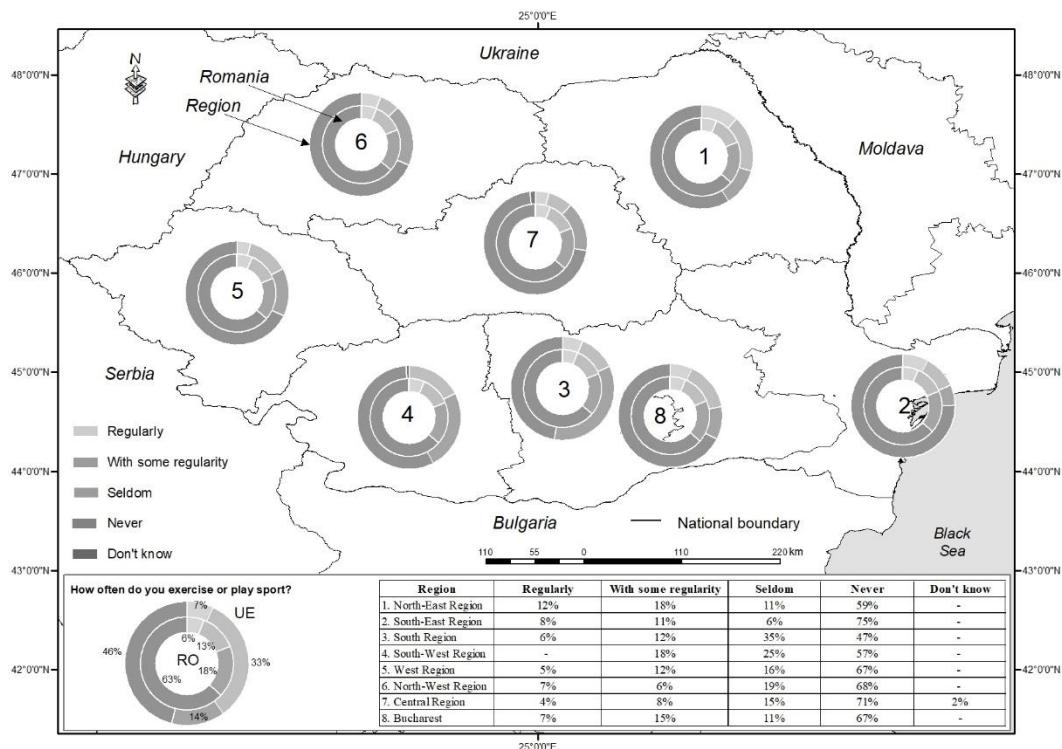


Figure 1. Frequency of exercise or playing sport

Source: Data processed based on Special Eurobarometer 472, 2017

From the analysis of the frequency of respondents' engagement in other physical activities such as cycling from one place to another, dancing and gardening, it comes out that the share of those who regularly take part in it is of 24% compared to those who have not or only rarely (76%) engaged in physical activity (Fig. 2). By correlating these values to those of the EU, the share is higher for those engaged in various physical activities in the EU (44%), compared to only 24% in Romania. The analysis of the frequency of the Romanians' engagement in other physical activities such as cycling from one place to another, dancing, gardening, etc., at the level of the development region, highlights the existence of a similar trend similar to that specific in Romania, defined by a series of value oscillations, for each individual typological category. Thus, the development region with the lowest level of the citizens' engagement in other physical activity was Bucharest and South-West (74% and 60%, respectively, never performed other physical activities) while higher values were recorded in the North-East and South East region (14% and 13% of respondents practise regularly other physical activities) (Fig. 2).

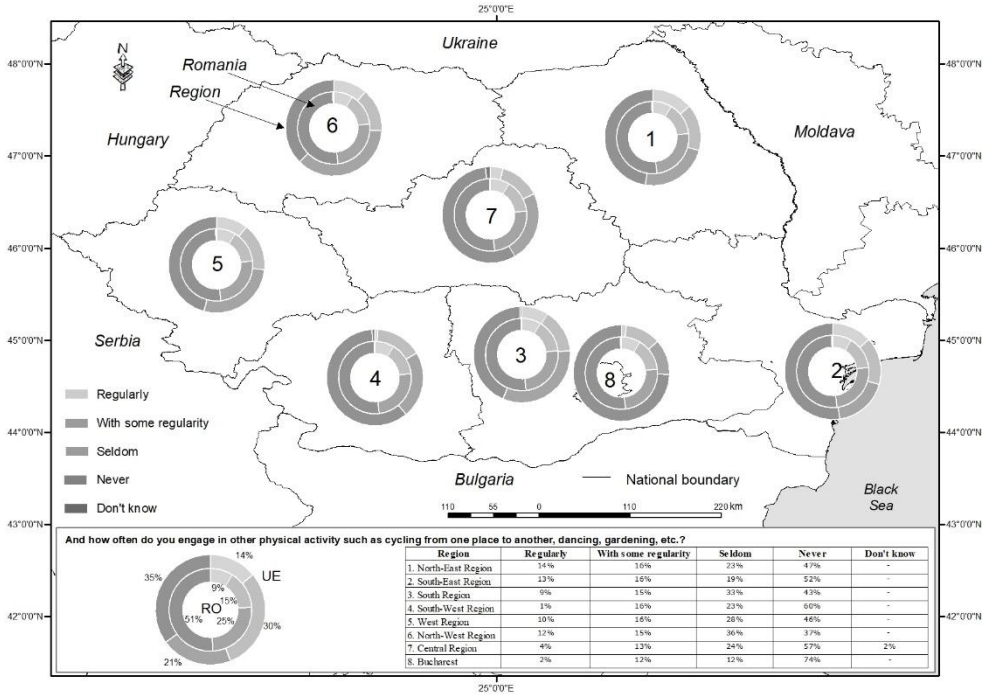


Figure 2. Engaging in other physical activities such as cycling, dancing, gardening
Source: Data processed based on Special Eurobarometer 472, 2017

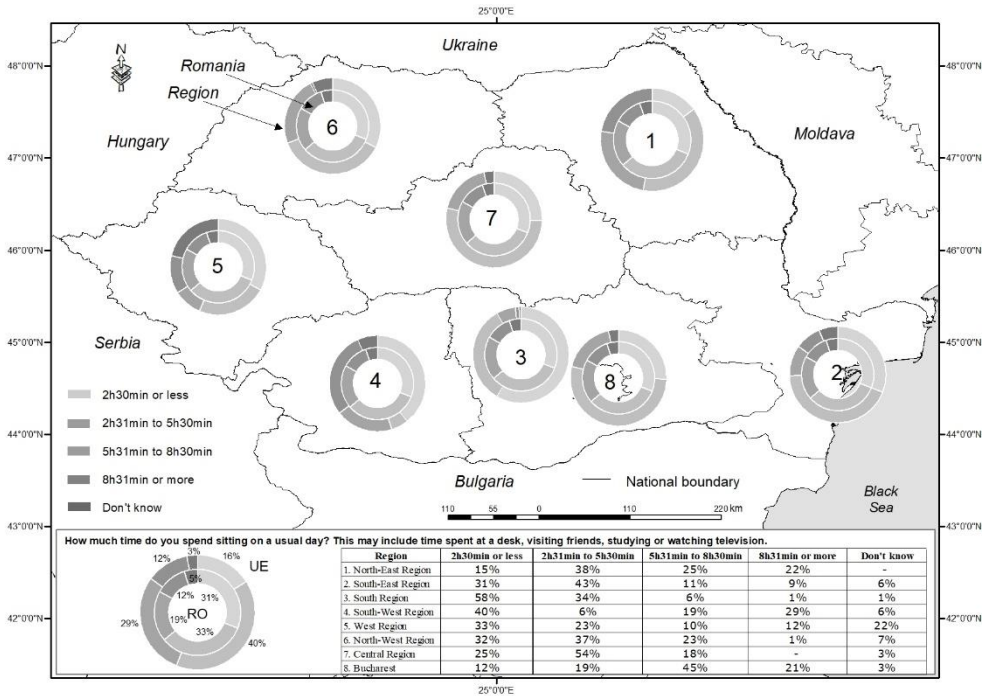


Figure 3. Time spent doing physical activity and sitting (at a desk, studying and watching TV)
Source: Data processed based on Special Eurobarometer 472, 2017

Time is a precious resource in the daily management of human activities, and the way we spend it has also implications in the decision to carry out some physical and sporting activities. Consultation of the target group on how they spend time (at a desk, visiting friends, studying or watching television) revealed the following typological categories: 2h30min or less - 31%; 2h31min to 5h30min - 33%; 5h31min to 8h30min - 19%; 8h31min or more - 12%; Do not know - 5%. By reporting the percentage values obtained at the level of Romania to those specific to the European Union, there are lower values for Romania in terms of time spent at the desk, visiting friends, studying or watching television. The tracking of this indicator at the level of development region reveals the existence of major differences, so the highest values (8h31min or more) were recorded in the South-West (29%) and North-East regions (22%), while the lowest values were recorded in the Central (0%), South (1%) and North-West (1%) regions (Fig. 3).

Some of the factors generating motivation in the direction of sport and physical activity are the following: to improve health (15%), to relax (14%), to improve weight (9%), to improve fitness (8%), other (54%). In the category "Other" enters: to be with friends; to make new acquaintances; to meet people from other cultures; to improve physical performance; to improve your self-esteem; to develop new skills; for the spirit of competition; to better integrate into society; to improve the physical appearance; to counteract the effects of aging; to have fun; do not know. From the analysis of the motivational factors regarding the practice of sport and physical activities in Europe, Romania and in the development regions of Romania, it is revealed that there is a prevalence of the following factors: to improve health, to improve fitness (Fig. 4).

The population was surveyed about which are the barriers that the respondents have indicated as hindering them to exercise, such as: you do not have the time, there is no suitable or accessible sports infrastructure close to where you live; you have a disability or illness; you lack motivation or are not interested; other. In the category "Other" it enters: it is too expensive; you do not like competitive activities; there is no suitable or accessible sports infrastructure close to where you live; you have a disability or illness; you do not have friends to do sports with; you feel discriminated against/by other participants; you lack motivation or are not interested; you are afraid of the risk of injuries; you are already doing sports regularly; do not know. A relatively similar situation, with some oscillations, we find it both at the level of Europe and at the level of each development region in Romania (Fig. 5). At the level of Romania most respondents replied that the most important barriers are the lack of available time (50%), followed by the lack of motivation (18%) and no accessible infrastructure (13%).

Consultation of the population about the opportunities of practicing sport and physical activities in Romania led to the following typological categories: total agree (46%); total disagree (43%); do not know (12%). The situation at European level on this issue is as follows: total Agree (39%); total disagree (49%); do not know (12%). From the presented data we can see the prevalence of opportunities at the EU level, compared to those existing at the level of Romania. The analysis of the opportunities at the level of the development regions reveals a relatively similar trend, with some percentage differentiations from one region to another (Fig. 6). Most opportunities and support for practicing sport and physical activities are offered by the Bucharest and West regions, while at the opposite end are the Central and South-East regions.

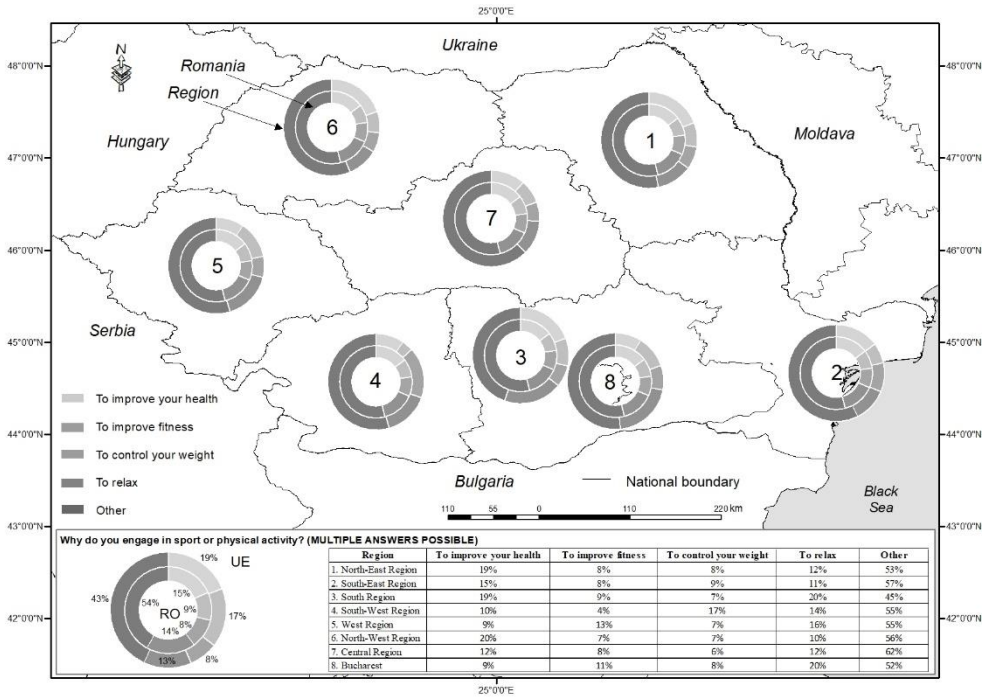


Figure 4. Motivators to sport participation
Source: Data processed based on Special Eurobarometer 472, 2017

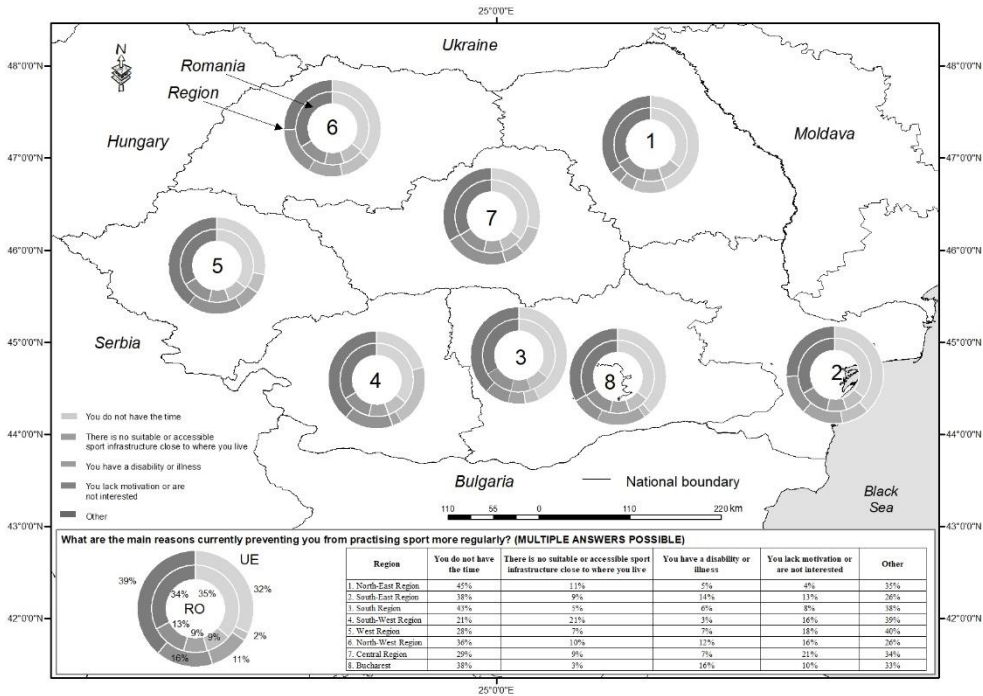


Figure 5. Barriers to sport participation
Source: Data processed based on Special Eurobarometer 472, 2017

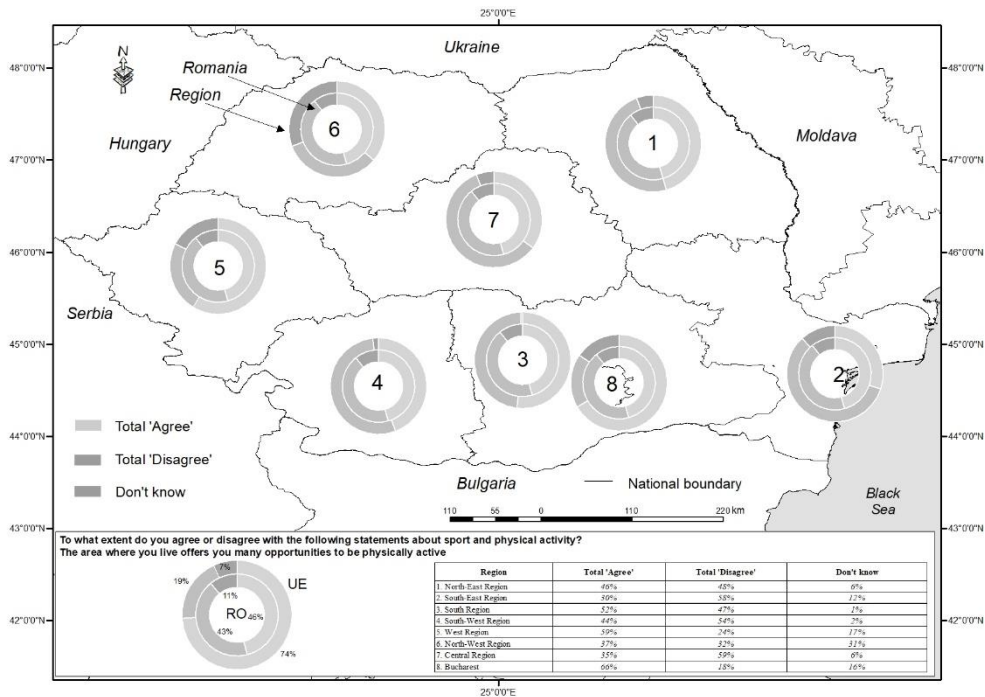


Figure 6. Opportunities for practicing sport in citizens' local area
Source: Data processed based on Special Eurobarometer 472, 2017

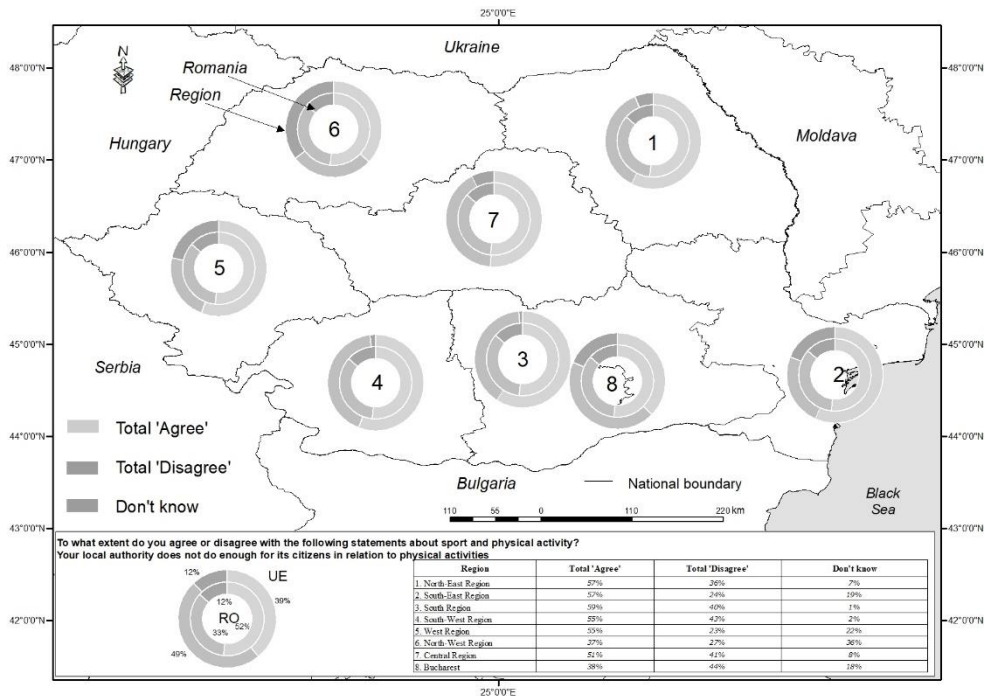


Figure 7. Supporting the community through sport activities
Source: Data processed based on Special Eurobarometer 472, 2017

Consultation of the public about the involvement of public authorities in supporting sports and physical activities in Romania has led to the following typological categories: total agree (52%); total disagree (33%); do not know (12). The situation at European level on this issue is as follows: total agree (39%); total disagree (49%); do not know (12). The perception of the involvement of public authorities in supporting sport and physical activities at EU level is similar to that of the opportunities offered by the space they live in. In Romania there is an increase in public confidence in the involvement of public authorities in support of sport and physical activities (52% total agreement). Analysis of this indicator at the level of development regions shows a relatively similar evolution, with some percentage differentiations from one region to another (Fig. 7). South, North-East and South-East public authorities enjoy the highest confidence, while at the opposite end there are the Bucharest and South-West regions (Fig. 1).

Conclusions

Against the backdrop of global mutations and as a result of the human society becoming more static, the issue of sport and physical activity is becoming very important. According to the study on *Sport and physical activity engagement in Romania*, the static character of the population was found, i.e. 76% of the interviewees in the 8 development regions of Romania stated that they did not engage at all or rarely got involved in physical and sports activities, while only 24% regularly got engaged in sports.

The high share of respondents who do not practice sport and physical activity, both at the European Union level and at the level of Romania has its explanations in: lack of time; lack of motivation needed to exercise; the existence of a large number of barriers to sport and physical activity; the lack of opportunities for the space they live in and lack of engagement of local public authorities.

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