# STUDY ON CHILDREN' PERCEPTION OF URBAN SPORT

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Abstract. For a very long time it has been concretely proven, through studies and research, that physical activity is particularly important for the physical and mental health of children, and regular physical activity is associated with a low incidence of overweight and non-communicable diseases (cardiovascular diseases, diabetes and various types of cancer) and has positive effects on mental health, by reducing depression and anxiety. At the same time, it contributes to the social integration of children and young people, by offering informal contexts for practicing physical exercises, free from the rigors of performance standards encountered in formal contexts and with a high potential to motivate the participants' involvement in a systematic and continuous activity. Against the background of the urbanization process and the relationship of this process with the physical activism of the population, in this study, we aimed to identify the level of popularity of urban sports among secondary school children, what are the factors that influence children' perception of urban sports and, at the same time, whether these sports disciplines can be an alternative to the active leisure time of children of this age. 382 children from Secondary School no. 169 in Bucharest, aged between 9 and 15 years.

Keywords: sports facilities, urban sports, informal sports, children

#### Introduction

In recent years, there has been a significant increase in mortality and the incidence of diseases caused by the inactive style, so that more and more often public policies approach sport from the perspective of social benefit (Gilchrist & Wheaton, 2017). Thus, the theme of physical activism of urban dwellers is constantly present in urban development strategies, being also addressed by international institutions such as the World Health Organization (WHO), the International Association of Sport for All (TAFISA) or the International Association for Sport and Culture (ISCA). (Kostrzewska, 2017)

At different levels, there is an expansion of concerns about how sport contributes to wider social benefits, including improved health and well-being, life satisfaction, crime reduction, increased community cohesion and activism, environmental protection, contribution to the achievement of education, participation in the labour market, civic renewal, urban regeneration. At the individual level, it was emphasized that physical activity is closely related to obesity, cardiovascular metabolic diseases, the health of the osteo-articular system and other health indicators, and has positive effects on individual mental health and cognitive development. (Wang & Jiang, 2023)

In addition to the benefits related to physical and mental health, participation in leisure activities keeps adolescents away from antisocial behaviors (Duzenli, Bayramoglu, Ozbilen, 2010). Moreover, these activities have been proven to prevent teenagers from getting bored and

make them feel good. The emotional states following the practice of physical exercise are joy and happiness, freedom, euphoria, motivation, self-efficacy and well-being. (Säfvenbom, Strittmatter & Guro, 2023) Young people who feel happy and comfortable psychologically and socially can develop more positive attitudes and be more motivated towards their professional life. These aspects become even more important in the post-COVID-19 pandemic period, with children and young people recognizing the importance of friends and outdoor activities, as well as the need to "step away" from their devices and take time for their mental health. (Wilson, Cale & Casey, 2023) Against this background, the role of physical exercise in recreational activity and the essential contributions they have as a means of counteracting cognitive and emotional overload during school activities are reconfirmed. (Kostrzewska, 2017; Lin, Liu, Xiao & Luo, 2022)

#### Physical activities and public space

The social and spatial relationship between modern forms of physical activity and public space is also discussed. Public space is subject to the processes of design, creation, construction and revitalization. In order for physical activity to take place there willingly and safely, certain spatial and social conditions must be met to make it a friendly place for its users. Therefore, the arrangement of public space can, and indeed should, effectively support and disseminate the idea of sport for all. (L'Aoustet & Griffet, 2001) Not only does it have the functions of a general park, but it can also organically combine green space and sports, providing more fun sports activities and good opportunities for urban dwellers to exercise (Manrong & Zhang, 2023). The distinguishing feature of the great contemporary cities is the disappearance of local, neighborhood relations, and, consequently, the loneliness of the inhabitants. (Kostrzewska, 2017) The possibility of practicing a sport in the immediate vicinity of the house can be an answer to this problem. Physically active inhabitants are highly visible in urban public spaces as contemporary forms of physical activity become increasingly detached from the facilities of typical sport. (Kostrzewska, 2017)

The results of the research indicate that, from the point of view of the needs of the urban population, the most important efforts are to participate in "sport for all", not in professional sport. Thus, modern sport for all should put fun and pleasure above rivalry, because busy and overworked residents of big cities need physical and mental relaxation instead of the stress of competition. (Kostrzewska, 2017)

In the absence of a coach, interactions between participants are the dominant (and only) interpersonal interactions that take place in urban sports contexts. (Erickson & Côté, 2016) An even greater differentiation of interactions between partners in informal sports contexts compared to those in organized sports contexts is represented by the often mixed characteristics of age and ability present in informal sports activities.

### Physical activities in urban space

In urban areas, people have begun to reinterpret certain physical activities, such as cycling to work, skateboarding, or playing ball in the open spaces between buildings. (Bach, 1993) To engage in such informal activities, people temporarily occupy vacant areas of land or the spaces between buildings, areas that are mainly used for other activities. A review of several analyses carried out in several German cities showed, for example, that around 45% of all sports and

physical activities take place in natural environments and on the streets (Hagen Wäsche Beecroft et al., 2021).

Spontaneous participation is an important criterion, as these activities should not be conditioned by rules, regulations and pre-established forms of sports competition (Bach, 1993). While professional sports are increasingly demanding sports facilities, such as indoor arenas for football stadiums, indoor tennis or athletics fields, climbing facilities or golf courses, everyday informal sports activities are beginning to invade and reform urban spaces and facilities for common use. As a result, such spaces are temporarily redefined as sports facilities: bicycle paths, courtyards, open spaces, vacant lands, which can be used for informal or recreational sports activities. (Jeanes et al., 2018) This process of redefinition is specific to the way in which urban space responds to the need and recommendation for physical activism of the population, of different ages. (Bach, 1993; Brackmann et al., 2017)

With the exception of cyclists, in public spaces we most commonly encounter runners, roller skaters, skateboarders, as well as BMX and scooter cyclists (Kostrzewska, 2017). Street sports are becoming more and more popular, practiced both in non-dedicated public spaces and in specially designed areas. Street sports have a particular potential to remove the barriers that prevent many children and young people from being active, as sport can be organised informally, is free, takes place close to home, is creative, flexible and has few requirements in terms of facilities. They can be practiced in urban public spaces, on local playgrounds, in schools and parks - virtually anywhere. Some sports originate directly in the street, e.g. skateboarding, break dancing, etc., while others originate in classic sports but are adapted to the urban space, e.g. streetball, streetsoccer, etc.

The choice of a particular form of activity may depend on various factors, the most important of which are age, physical abilities, gender, as well as the place of residence and its proximity to sports and recreation facilities. (Deelen et al., 2018) While these factors may not be relevant to certain individuals or groups, they do have an impact on how public spaces and sports facilities are used. (Lan, 2020) Children and adolescents, for example, can do it in a completely different way and at a different time of day than adults or the elderly. Therefore, collective action for physical activity should be promoted from the perspective of ensuring equal access and participation of all categories of the population. (Wongsingha et al., 2023)

### Motivation for exercising

One of the main theories of motivational beliefs and actions is Eccles' theory of motivation based on expectations and values (Dawes, West & Simpkins, 2014). According to this theory, the estimation factors of participation in different types of activities are the beliefs of the respective people. Specifically, children and young people should be more likely to participate in sports activities if they appreciate the activity (e.g. this activity is useful to them, it benefits them) and consider that they are competent in that activity (e.g. they have the necessary skills to achieve success). Participating in a skill-based activity, such as sport, provides experiences (e.g. getting feedback from others) that can feed the personal reflection needed to develop and change one's own competence values and beliefs.

The person-environment fit perspective states that individuals thrive in contexts that match their developmental needs. This suggests that the specificity of informal contexts allows participants to set the pace and objectives of the activity in which they are involved. Less skilled/competitive children may be suitable for low-intensity, youth-led sports contexts. This person-environment fit should contribute to participatory and enjoyable experiences and, consequently, predict the development of their beliefs about exercising. (Safvenborn, Strittmatter & Guro, 2023)

## **Research methodology**

#### Aim

The purpose of the study was to identify the level of knowledge of urban sport by children aged between 9 and 15 years, with a view to including it as a concept and practice in physical education and sports activities at secondary school level.

### Research questions

- 1. What is the level of popularity of urban sports among secondary school children?
- 2. What are the factors that influence children' perception of urban sport?
- 3. Can urban sports be an alternative to the active leisure of pupils of this age?

### Target group

This study involved 382 pupils from the third – eighth grades, from the Secondary School no. 169 in Bucharest, as well as 187 (49%) girls and 195 boys (51%). Their age distribution is shown in fig.1.: about 28% of pupils aged 9-10 years, 33% of pupils aged 11-12 years, 30% of pupils aged 13-14 years, and 9% of pupils aged 15 years know urban sports.

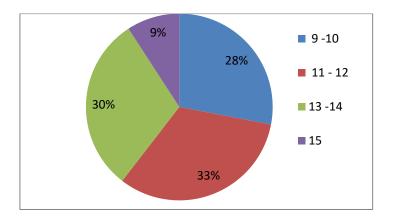


Fig. 1. Age of pupils

## Research methods

In this study, the survey method was used, based on a questionnaire. Within the questionnaire, 12 questions were formulated, closed and open, which targeted the following variables: knowledge of urban sports (1 closed question, with the option to tick off different

urban sports: streetball (3x3 basketball), skateboarding, parkour, roller skates, cycling/BMX, ultimate frisbee, kayaking/canoeing/rowing, stand-up paddle, wakeboarding), the perception of the usefulness of these sports disciplines (3), the motivation for practicing them (5), the level of practice of urban sports (3). The answers to the closed questions were rated on a Likert scale (1 - 5).

The statistical methods used for the analysis of the responses were: frequency of responses, correlation coefficient, with the help of the SPSS statistics program version 23.0

# Research results

In the first stage of the research, the correlation coefficient between the 382 validated answers and the age of the respondents was calculated. From Figure 2, it can be seen that 61% of pupils know urban sports (46% Agree and 15% Totally agree).

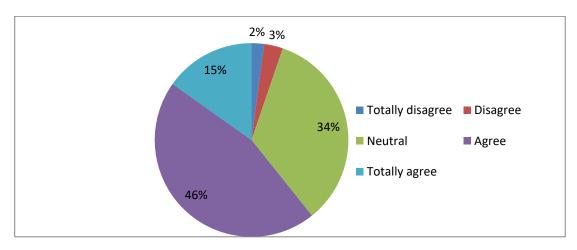


Fig. 2. The level of knowledge regarding urban sports

Only 14.66% of pupils aged 9-10 years, 19.9% of pupils aged 11-12 years, 20.16% of pupils aged 13-14 years, and 6.02% of pupils aged 15 years know urban sports. The older they get, the better-known urban sports are known by them. (Table 1)

Vari	ables						
age is:	Years	Totally disagree %	Disagree %	Neutral %	Agree %	Totally agree %	Total %
	9 - 10	0.26	1.31	11.78	10.21	4.45	28.01
Your	11 - 12	0.26	1.05	11.26	15.18	4.71	32.46
Y	13 - 14	0.52	0.79	8.90	15.18	4.97	30.37
	15	1.05	0.00	2.09	4.97	1.05	9.16
Total		2.09	3.14	34.03	45.55	15.18	100

Table 1. Age category versus level of knowledge of urban sports

From Table 2, it can be seen that about 28.8% of girls and 31.94% of boys have knowledge about urban sports, so boys are more inclined to practice an urban sport. We may also observe that a high percentage 34.03% of pupils know very few regarding urban sports and 5.24% don't know anything about them.

-					0	1				
			Do you know the urban sports?							
	Gender	Totally disagree %	Disagree %	Neutral %	Agree %	Totally agree %	Total %			
Your gender is	Feminine	0.52	2.36	17.28	23.04	5.76	48.95			
gender is	Masculine	1.57	0.79	16.75	22.51	9.42	51.05			
	Total	2.09	3.14	34.03	45.55	15.18	100.00			

Table 2. Gender versus level of knowledge of urban sports

From Table 3, it can be seen that about 4.45% of pupils aged 9-10 years, 4.71% of pupils aged 11-12 years, 4.19% of pupils aged 13-14 years, practice urban sports. Only 13.87% of pupils frequently practice urban sports, 45.29% sometimes, 25.39% rarely and 15.45% never. It is observed that many of the pupils (more than 45%) would like to practice frequently and more about 25% would like to practice all the time.

Va	ariables		Do y	ou practice these	sports?		
	Years	Never %	Rare %	Sometimes %	Often %	Always %	Total %
e is	9 - 10	4.97	8.38	10.21	3.66	0.79	28.01
r age	11 – 12 4.19		7.59	15.97	3.66	1.05	32.46
Your	13 – 14	4.45	6.54	15.18	2.62	1.57	30.37
ŕ	15	1.83	2.88	3.93	0.00	0.52	9.16
	Total	15.45	25.39	45.29	9.95	3.93	100.00

Table 3. Age category versus practicing urban sports

From Table 4, it is observed that about 18.32% of pupils aged 9-10, about 21.47% of pupils aged 11-12, about 22.35% of pupils aged 13-14, and 6.54% of pupils aged 15 would like to practice urban sports. The older they get, the greater the desire to practice these sports

Va	ariables	Wou	ld you like/ enj	oy to practice	e these sport	s?	
is:	Years	Totally disagree %	Disagree %	Neutral %	Agree %	Totally agree %	Total %
age .	9 - 10	0.26	1.31	8.12	10.47	7.85	28.01
Your	11 - 12	0.00	0.00	10.99	15.18	6.28	32.46
	13 - 14	0.00	0.00	8.12	16.49	5.76	30.37

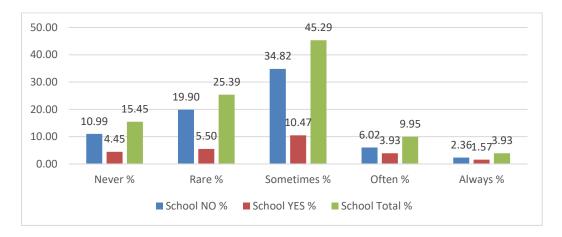
Table 4. Age category versus desire for urban sports

	15	0.00	0.00	2.62	4.45	2.09	9.16	
,	Total	0.26	1.31	29.84	46.60	21.99	100.00	

As for where they would like to practice these urban sports, it is observed that pupils prefer specially designed areas. From table 5 it can be seen that 74% of pupils do not consider school as an appropriate environment for practicing urban sports, probably because they associate them with fun. However, 26% of pupils believe that urban sports can also be successfully practiced in school.

School Park Dedicated areas Close to home area Do you practice NO YES Total NO YES Total NO YES Total NO YES Total them? % % % % % % % % % % % % 10.99 4.45 11.52 3.93 15.45 8.38 15.45 Never % 15.45 7.07 14.14 1.31 15.45 Rare % 19.90 5.50 25.39 17.28 8.12 25.39 13.35 12.04 25.39 19.90 5.50 25.39 Sometimes 34.82 10.47 45.29 15.97 45.29 45.29 29.32 17.28 28.01 36.65 8.64 45.29 % Often % 6.02 3.93 9.95 6.02 3.93 9.95 4.45 5.50 9.95 7.07 2.88 9.95 Always % 2.36 1.57 3.93 2.09 1.83 3.93 0.79 3.14 3.93 2.88 1.05 3.93 Total % 74.08 25.92 100.00 66.23 33.77 100.00 42.93 57.07 100.00 80.63 19.37 100.00

Table 5. Where would you like to practice them?



### Fig.3. Practicing urban sports in schools

From Table 5, it is observed that 66% of pupils do not consider the park as a suitable environment for practicing urban sports. However, 34% of pupils believe that urban sports can also be successfully practiced in the park.

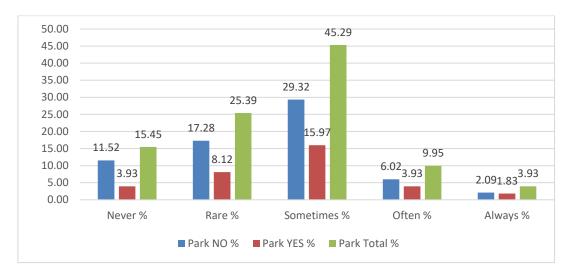


Fig.4. Practicing urban sports in park

It is also observed that 43% of pupils would not practice urban sports in specially designed spaces. However, 57% of pupils believe that urban sports can be successfully practiced in specially designed spaces.

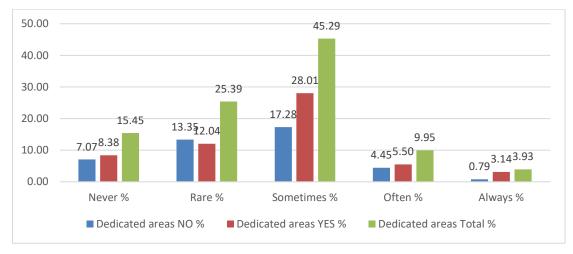


Fig. 5. Practicing urban sports in specially designed areas

From Table 5, it is observed that 81% of pupils would not practice urban sports in locations close to home. However, for 19% of pupils, they believe that urban sports can be successfully practiced in spaces close to home.

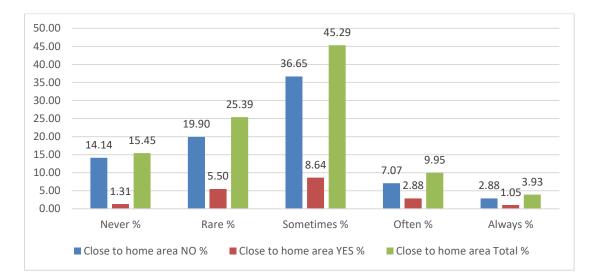


Fig.6. Practicing urban sports in locations close to home

### A. Age versus sport associated with physical discomfort

Va	ariables	Phys	fort.				
is:	Years	Totally disagree %	sagree %		Agree %	Totally agree %	Total %
age	9-10	15.45	5.45 9.16		0.79	0.26	28.01
Your	11 - 12	15.45	9.69	5.24	2.09	0.00	32.46
Å	13 - 14	12.30	11.52	5.76	0.79	0.00	30.37
	15	3.40	4.71	0.52	0.52	0.00	9.16
Total		46.60	35.08	13.87	4.19	0.26	100.00

Table 6. Age category versus Physical discomfort

From the figure 7, 4.45% of pupils consider physical activity to be a physical discomfort, and 81.68% of them disagree with this statement. Younger pupils (9-12 years old), whose nervous system is not very well developed, get tired faster. They represent 1.05% (9-10 years old) plus 2.09% (11-12 years old) meaning 3.14%. It can be observed that the younger the age, the more physical education represents a physical discomfort for students. it can be explained by the fact that at a younger age, pupils find it more difficult to accept a rule imposed by the teacher and this makes them dislike and annoyed, because they want to live by their own rules.

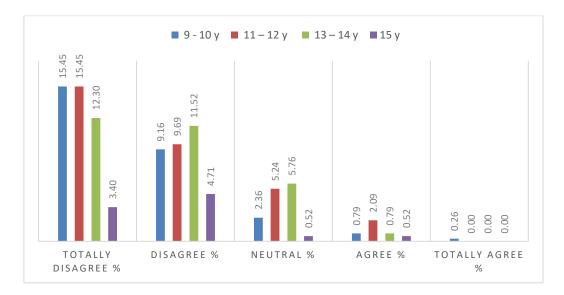


Fig.7. Physical discomfort

# **B.** Motivation for playing sports

From table 7, 8, 9 and Fig.8. it can be seen that many pupils (45.55%) practice sports because they want to be with friends, and 83% of pupils say they like to learn new sports activities. 92% of pupils consider sport an important and very important activity. About 8.38% of pupils aged 9-10, 14.14% of pupils aged 11-12, 18.06% of pupils aged 13-14 and 4.97% of pupils aged 15, practice sports activities because they like to be with friends (Table 7).

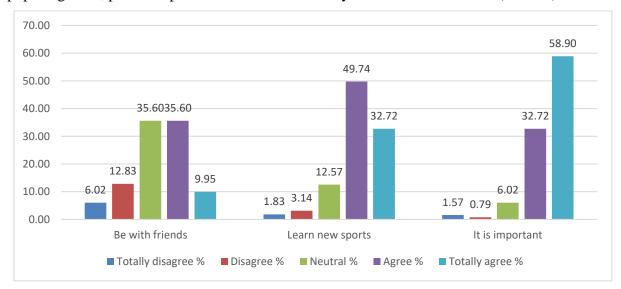


Fig.8 . Motivation for pupils to practice sports

Va	ariables	I participate in sports activities because I like to be with friends.							
ır age is:	Years	Years Totally disagree %		Neutral %	Agree % Totally agree % Total				
You	9-10	2.88	4.71	12.04	5.76	2.62	28.01		

	11 - 12	1.57	4.19	12.57	10.99	3.14	32.46
	13 - 14	1.05	3.14	8.12	14.92	3.14	30.37
	15	0.52	0.79	2.88	3.93	1.05	9.16
,	Total	6.02	12.83	35.60	35.60	9.95	9.95

From Table 8 it is observed that many pupils (82.46%) say they like to learn new sports activities. About 24.87% of pupils aged 9-10, 25.39% of pupils aged 11-12, 24.87% of pupils aged 13-14 and 7.33% of pupils aged 15, practice sports activities because they like to be with friends (Table 8).

V	ariables	I play sports and I like to learn new sports activities.							
is:	Years	Totally disagree %	Disagree %	Neutral %	Agree %	Totally agree %	Total %		
age i	9-10	1.05	0.26	1.83	12.30	12.57	28.01		
Your	11 - 12	0.26	1.31	5.50	15.45	9.95	32.46		
Y	13 - 14	0.00	1.57	3.93	16.49	8.38	30.37		
	15	0.52	0.00	1.31	5.50	1.83	9.16		
Total		1.83	3.14	12.57	49.74	32.72	100.00		

Table 8. Motivation – to learn new sports

From Table 9 it can be seen that the majority of pupils, regardless of age (91.62%) consider the practice of sports important. About 25.13% of pupils aged 9-10 years, 29.58% of pupils aged 11-12 years, 28.27% of pupils aged 13-14 years and 8.84% of pupils aged 15 years practice sports activities because it considers them important.

Va	riables	How important is practicing a sport?								
is:	Years	Totally disagree %	Disagree %	Neutral %	Agree %	Totally agree %	Total %			
age	9 - 10	0.79	0.52	1.57	7.07	18.06	28.01			
Your	11 - 12	0.52	0.00	2.36	12.30	17.28	32.46			
Y	13 - 14	0.00	0.26	1.83	9.95	18.32	30.37			
	15	0.26	0.00	0.26	3.40	5.24	9.16			
r	Total		0.79	6.02	32.72	58.90	100.00			

Table 9. The importance of practicing sports

From Table 10. it can be seen that most pupils, regardless of age (86%) practice sports often or even every day, 9% sometimes, 5% rarely. About 25.65% of pupils aged 9-10 years, 27.23% of pupils aged 11-12 years, 25.39% of pupils aged 13-14 years and 7.33% of pupils aged 15 years, practice sports activities often or even every day.

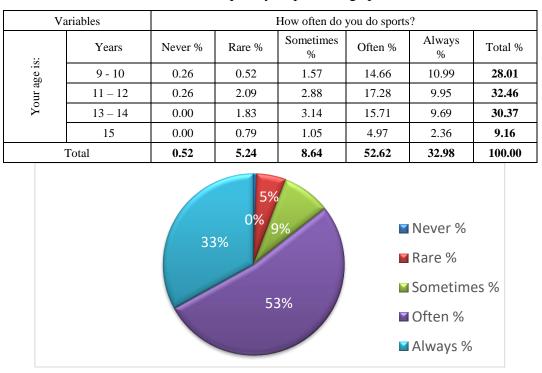


Table 10. Frequency of practicing sports

Fig. 9. The frequency of doing sport

Table 11 shows an **average positive correlation** between ExFiz and Frequency, so pupils who say they practice physical exercise often practice it more frequently.

A **small positive correlation** is observed between Knowledge and Practice, Practice and Preference, Preference and Interest, Preference and Sport, ExFiz and Interest, ExFiz and Sport, Interest and Sport, Interest and Importance, Interest and Frequency, Sport and Interest, Sport and Importance. In other words, pupils who have knowledge about sports also practice them, or want to practice them, giving them a great interest, considering them important. The greater the interest and importance given to them, the more frequently they practice them.

A **small negative correlation** is observed between Exfiz and Discomfort, Interest and Discomfort, Discomfort and Sport, Discomfort and Frequency. We can conclude that pupils who associate physical exercise with physical discomfort have a lower interest and practice it with a lower frequency.

	Knowledge	Practice	Preference	ExFiz	Interest	Discomfort	Friends	Sport	Importance	Frequency
Knowledge	1.00									
Practice	0.41	1.00								

Table 11. Correlations between variables

Preference	0.27	0.41	1.00							
ExFiz	0.10	0.26	0.16	1.00						
Interest	0.18	0.23	0.34	0.47	1.00					
Discomfort	-0.14	-0.10	-0.14	-0.30	-0.48	1.00				
Friends	0.10	-0.02	0.05	-0.10	0.00	0.13	1.00			
Sport	0.19	0.28	0.31	0.36	0.47	-0.32	-0.03	1.00		
Importance	0.15	0.13	0.19	0.28	0.32	-0.27	-0.04	0.41	1.00	
Frequency	0.09	0.19	0.15	0.58	0.38	-0.34	-0.10	0.37	0.25	1.00

#### CONCLUSIONS

Physical activity is a necessary component of a healthy lifestyle and should be practiced by absolutely the entire population, regardless of age, with no limit. It meets the current requirements of urban values to optimize the lives of inhabitants and conforms to the development trend "A better city, a better life". Urban leisure sports represent, and at the same time respond to the instinctive needs of urban dwellers to cope with "urban diseases".

As a result of the study, these contemporary urban sports are known by the majority of the students interviewed, it was also found their desire to practice them more frequently regardless of age, but we can say that the older the age, the greater the desire. Given their demand and their awareness of the importance of practicing sport, perhaps it would be good to consider, in addition to the creation of different spaces for practicing, the introduction of urban sports categories in the school curriculum, so that children's access to what they want and feel happy to do is much closer to them.

As recommendations, it was found that for primary school students (3rd and 4th grades) their biggest motivation to do sport is new sport activities. No wonder, because they are at the age where they want to discover and experience as many things as possible and that's why it's more important for them to be mentally stimulated in this way. It should therefore be taken into account that, in physical education lessons, teachers should aim to achieve the proposed objectives and the development of motor skills by using games, competitions or races that are as new and varied as possible, not allowing monotony to set in by repeating too frequently the games already learned, while encouraging integration, mutual help and stimulation. On the other hand, middle school students want to play sports, motivating meeting with friends. In the physical education lesson, the approach should be slightly different, and when team or pair

work is proposed, there should be a teacher-controlled independence, with the pupil's freedom to choose or state their preferences, without forgetting the need for inclusion.

Urban development planning and municipal sports policy should, in the future, create a concept and recognise these informal sports facilities as a new measure in parallel with the traditional facilities created or sporting events.

In conclusion, there is a growing need to create these facilities regarding specially arranged spaces because we can see the great desire of young people to practice more and more frequently these relatively new urban sports that have taken on a worldwide scale, some of them being included in the Olympic Games, precisely to be in the agreement of young people and encourage the practice of these modern sports.

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