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The Measurement of Albanian Children's Physical Activity during Their Leisure Time and Physical Education Class

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Abstract

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Regular leisure time P.A plays a significant role in increasing children's overall P.A, regardless of whether this takes place at sports clubs or with family, friends. P.E at school provides skills, knowledge and experiences based on which it is possible to adopt a physically active lifestyle. The aim of this study is to present the level of involvement of children in P.A over the last 7 days in school and their leisure time. The method used in this study is "Physical Activity Questionnaire for Children (PAQ-C)", by Crocker, Bailey, Faulkner, Kowalski, & McGrath, (1997), made up 9 questions. The sample of the study includes 463 children aged 9-14 (235 Male and 228 Female). The statistical data processing was performed by SPSS statistical program, version 20. Cronbach's Alpha .851 was used to assess the reliability of the instrument. The results show that football and athletics sports are among the most favoured by children in their leisure time. 57% of children claim that they are always intensely involved in the P.E class and 38.4% of them claim that after lesson they prefer to stay sitting talking or doing homework. In extracurricular activities, 40.2% of children claim that they are not included ever, and 25.5% of them state that they are included 2-3 times a week. During the weekends, they are involved in P.A 2-3 times (59.6%). The discussion and conclusion of the study prove that the subjects are more engaged to get involved in P.A at school than during their leisure time.

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Keywords: Sports clubs; extracurricular activities; leisure time; Physical Education.

1. Introduction

Regular leisure time P.A plays a significant role in increasing children's overall P.A, regardless of whether this takes place at sports clubs or with family, friends. P.E at school provides skills, knowledge and experiences based on which it is possible to adopt a physically active lifestyle.

Because of its physiological and psychological health benefits, regular physical activity among children should not be promoted only as a demand to provide an active lifestyle. They should exercise



and be continuously motivated to participate in P.E and in different types of P.A during leisure time. (President's Council on Physical Fitness and Sports, 2000)

Regular physical activity (P.E & P.A) versus inactivity provides a healthy lifestyle to children affecting positively not only their health condition, reducing risk of several chronic diseases such as cardio-vascular disease, hypertension or diabetes and obesity. (Resource Guide, 2005)

There are studies showing that all those, even children, who participate in regular physical activity, so "each day", will improve their memory, concentration, communication, problem-solving and leadership abilities. Furthermore, these improvements may have positive impact on their learning process in other subject areas. (Resource Guide, 2005)

Regular exercises (P.E & P.A) improve interpersonal behaviour becoming more socialized, and improve self-esteem and the willingness to deal with daily life's challenges. Numerous benefits of regular P.A and being active, such as physiological, psychological and social aspects, should always draw our attention to promote and motivate our youngest members of society due to P.A in order to develop a healthy new generation. (Resource Guide, 2005)

Moreover, the latest studies have shown a link between physical activities integrated into classes, the amount of physical activity and aerobic fitness, on the one hand, and school grades and standardized test results of individual subjects, on the other. Participation in training as a member of sports and exercise clubs has been linked to good performance at school. Furthermore, it should be noted that studies that involved increasing the time spent in physical education classes and breaks, and, correspondingly, decreasing the amount of time spent in academic classes did not show any deterioration in pupils' academic learning outcomes. (Syväoja et al., 2012)

According to National Association for Sport & Physical Exercise (NASPE), it is recommended for elementary school students to have at least 20 minutes of recess each day. (Active Living Research, 2012) Recess is defined as "outside of class time", when children can participate in physical and social activities according to their choices.

It is necessary to provide recess during the school day because, according to the NASPE, short physical activity breaks during recess have been shown to enhance cognitive performance and improve learning. As well, the implementation process of "recess" is determined as an effective and efficient way to increase physical activity and improve academic performance among children. (Active Living Research, 2012)

Participation of children in P.A during leisure time is known to be affected by different factors. Leisure-time physical activity level may partly be determined on the basis of personal traits, needs and interests, and partly on external factors, such as environment and availability. (Aaltonen, Kujala, & Kaprio, 2014)

Much less is known about children's voluntary engagement in P.A than in P.E, and there is a paucity of data on how recess and other leisure time periods at school contribute to children's overall P.A. Leisure time at school is important for reasons other than P.A, such as allowing for children to socialize and have a break from the classroom, and recent position statements have recommended that recess periods should total at least 20 or 30 minutes per day.

Meanwhile, a few intervention studies have indicated that strategies such as restructuring playgrounds by using colourful markings and providing game equipment may be useful in increasing children's P.A during recess. (McKenzie et al., 2010)

According to National Centre for Chronic Disease Prevention and Health Promotion Division of Adolescent and School Health (August 2009), there are other ways how school can promote Physical Activity for Youth:

- School must have policies that provide time for organized physical activity and free play.
- School must utilize every possible opportunity (school website or different school events) to inform parents, community about the benefits of physical activity.
- Based on the fact that school staff and school leadership are models for students, school must encourage staff to be active in order that children to follow their example.
- Another and very important problem is the encouragement of families and local groups to be involved in school-based physical activities and events.
- Schools should require daily physical education for elementary schools, at least 150 minutes per week, and 225 minutes per week for secondary schools.
- Schools should incorporate at least 20 minutes of recess per day in addition to physical education classes.
- Physical Activity Break Ideas: Take a walk outside as part of a science class or ask students to name and act out action words from a story through physical activity.

Based on the fact that active children may lead to active adolescents and adults (President's Council on Physical Fitness and Sports, 2000), we investigated about the real situation: "how much Albanian children (9-14 years old) are interested or really participate in P.E or P.A?"

2. Materials and methods

The sample of the study includes 463 children aged 9-14 (235 Male and 228 Female), at "Pjetër Budi", "Sabaudin Gabrani" and "Jeronim De Rada" Elementary Schools in Tirana.

The method used in this study is "Physical Activity Questionnaire for Children (PAQ-C)", by Crocker, Bailey, Faulkner, Kowalski, & McGrath (1997), made up 9 questions. Likert scale questions contain five alternatives (1 - No to 5-7 times or more and None to Very often) and other alternatives (1 - I do not do PE to 5 - Always, etc.).

The statistical data processing was performed by SPSS statistical program, version 20. Cronbach's Alpha 0.851 was used to assess the reliability of the instrument. In completing the questionnaire, it was maintained entirely pupils' anonymity.

3. Results

The most favourite sports are football (m = 2.51) and athletics (m = 2.06), but also volleyball (m = 1.68), basketball (m = 1.94) and dance (m = 1.83) are preferred by the children. (Table 1)

Table 1. Average frequency of various sports practiced by children in their leisure time

	Jumping rope	Traditional game	Volleyball	Basketball	Handball	Football	Cycling	Aerobic	Skating	Dance	Athletics	Chess
Valid	463	463	463	463	463	463	462	463	463	463	463	463
Missing	0	0	0	0	0	0	1	0	0	0	0	0
Mean	1.58	1.48	1.68	1.94	1.41	2.51	1.69	1.52	1.47	1.83	2.06	1.82
Std. Deviation	.981	.989	1.069	1.201	.866	1.614	1.176	.995	.906	1.259	1.323	1.255

Subjects report that during the week they do not perform any sport as sport discipline, but in the form of physical activity, they are involved 1-2 times during the week practicing sports. From the results obtained, we note that children are involved only 3-4 times during the week playing basketball (16.6%). (Fig. 1)

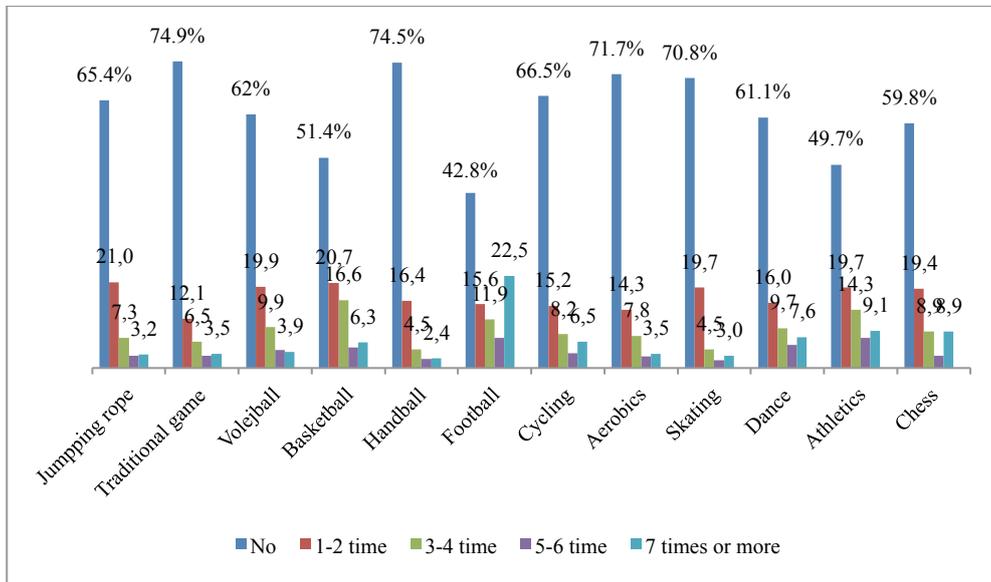


Fig. 1. Frequency of sports courses in the form of PA attended by children during their leisure time in the previous week

In the learning process during physical education class, 57% of the subjects claim that they are always involved in P.A, 23.8% of them quite often, and 12.1% sometimes. (Fig. 2)

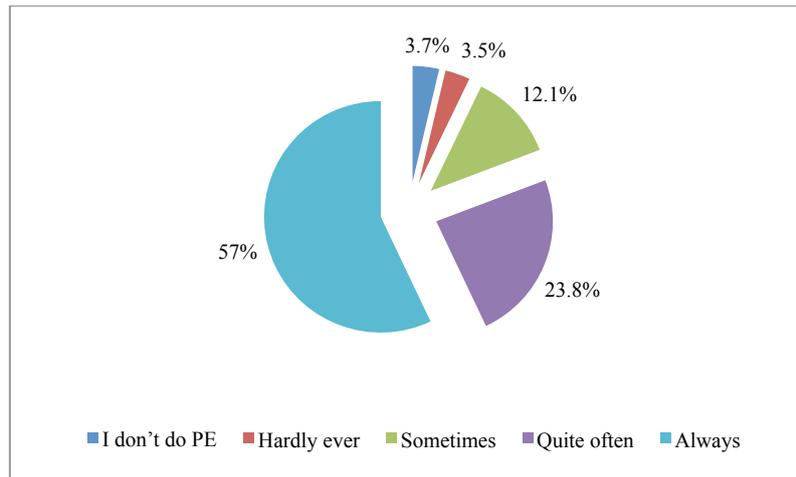


Fig. 2. In the last 7 days, during your physical education classes, how often were you very active (playing hard, running, jumping, throwing)?

After the learning process, 38.4% of children claim that they sat down (talking, reading, doing schoolwork). In an equal percentage (16.2%), children ran or played a little bit and only 12.7% of them stood around/ walked around. (Fig. 3)

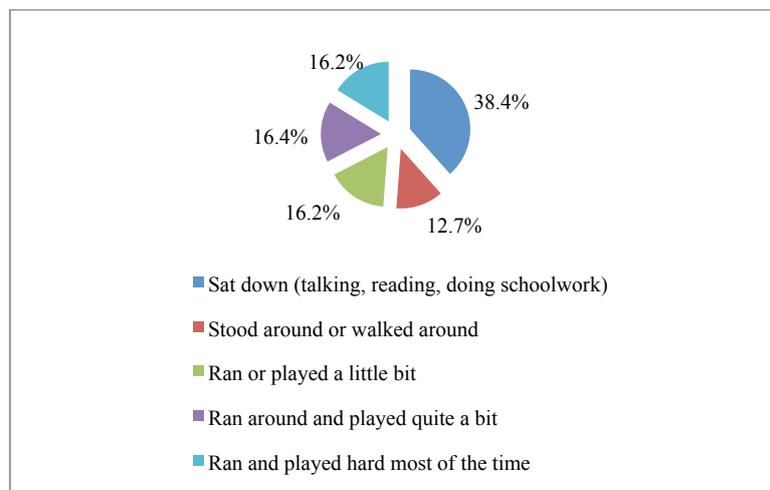


Fig. 3. In the last 7 days, what did you do most of the time at recess?

In the educational institution, during lunch (besides eating lunch), 55.9% of the subjects claim that they stood around/ walked around, 23.8% of them sat down (talking, reading, doing schoolwork), and 8.6% ran or played a little bit. (Fig. 4)

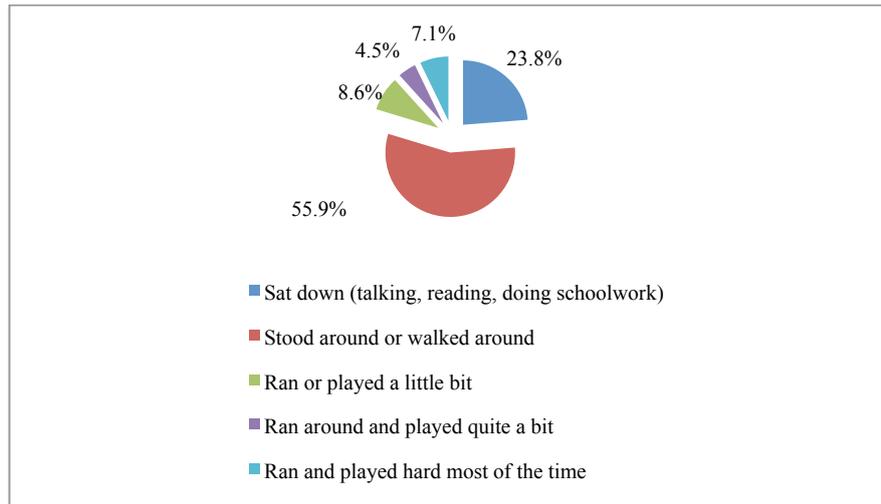


Fig. 4. In the last 7 days, what did you normally do at lunch (besides eating lunch)?

The obtained data show that, during the previous week, 40.2% of children were not involved in extracurricular activities, 25.5% of them were involved 2 or 3 times, and 16.6% of them were involved 1 time. (Fig. 5)

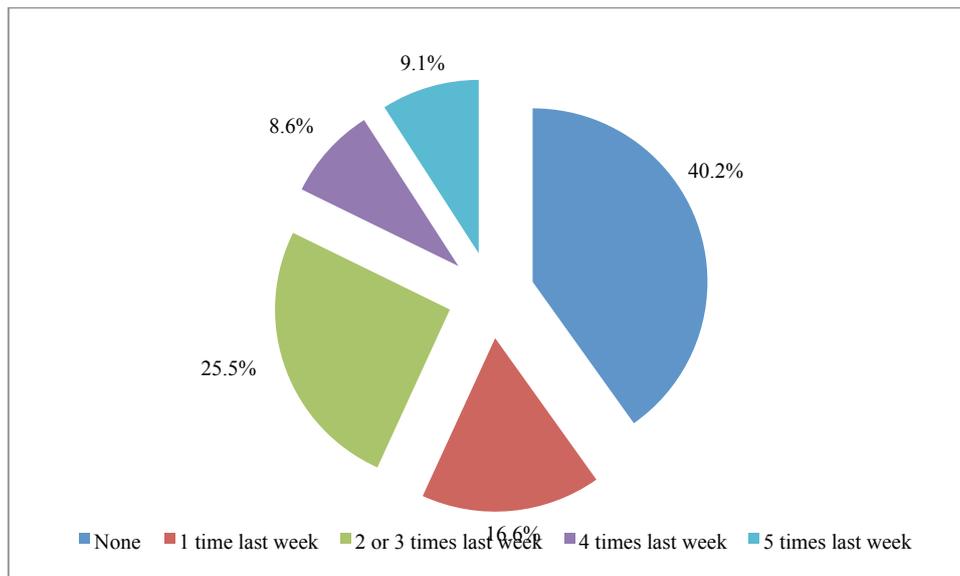


Fig. 5. During the week, how many times you are involved in extracurricular activities?

The subjects of the study claim that, during weekends, 59.6% are were involved 2-3 times in physical activity, 31.3% of them were involved 1 time, and only 9.1% were not involved at all. (Fig. 6)

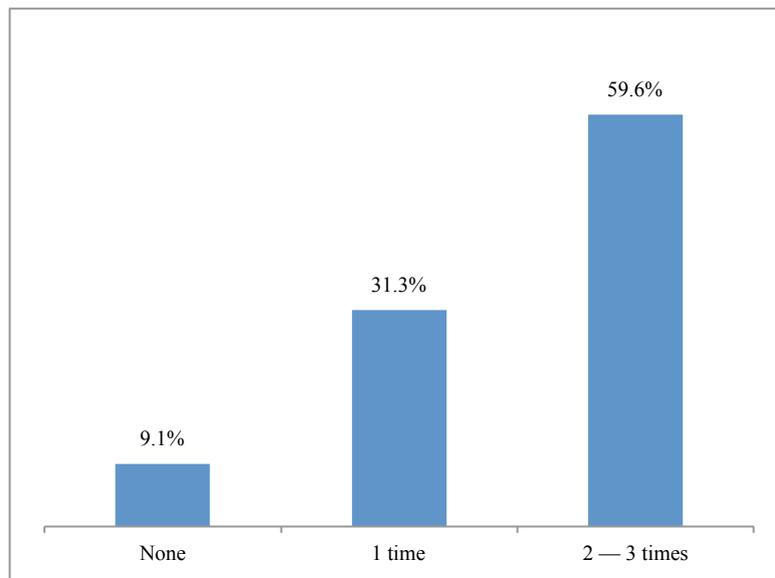


Fig. 6. During weekends, how many times do you get involved in physical activity?

Children had to respond to the question regarding the type and frequency of performing P.A during their leisure time. Thus, 32.8% of them stated that they did sometimes (1-2 times last week) physical things in their free time, 26.3% of them claimed that they did often (3-4 times last week) physical things in their free time, and 18.6% said that they did very often (7 or more times last week) physical things in their free time. (Fig. 7)

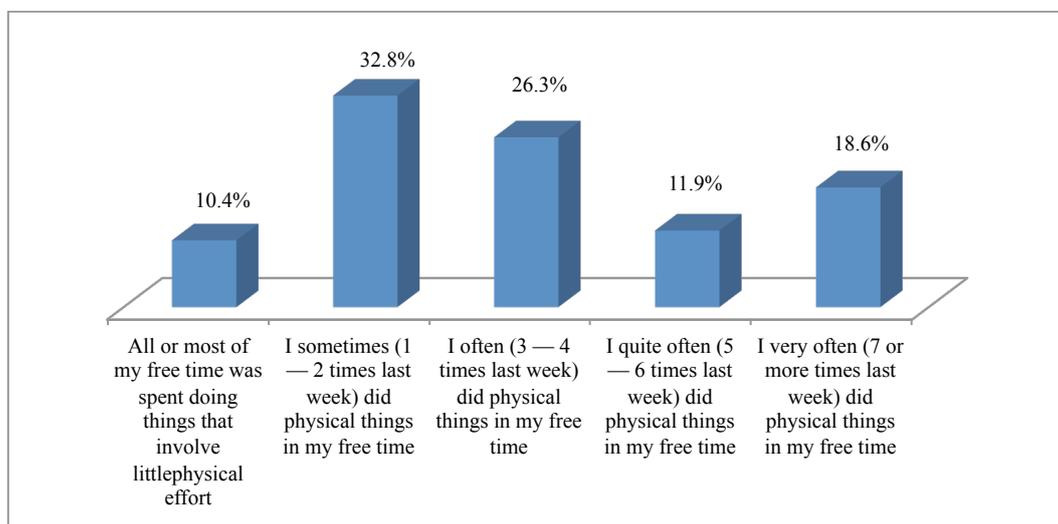


Fig. 7. Which one of the following describes you best for the last 7 days? Read all five statements before deciding on the response that describes you.

From the data obtained, it is noticed that the subjects are involved in physical activity like playing sports or entertaining through various games on Saturday (45.1%) and Sunday (38%). On the other days of the week, the children's participation in P.A is at low rates. (Fig. 8)

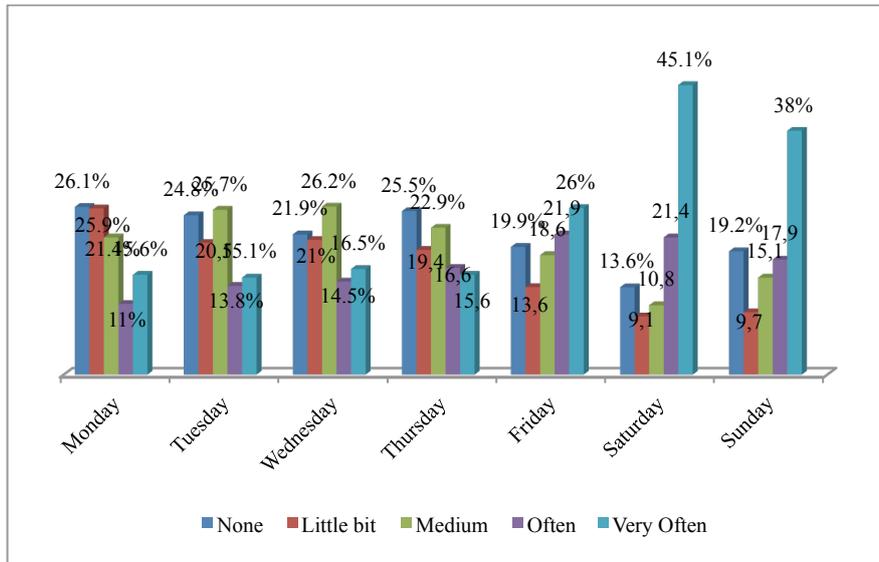


Fig. 8. Mark how often you did physical activity (like playing sports, games, doing dance, or any other physical activity) for each day of the last week

The subjects claim that they have no reason to physical inactivity (51.2%), but 32% claim that they are not involved in physical activity because of school duties, 9.9% for reasons of private courses (computer, foreign languages, etc.), and 6.9% for health reasons. (Fig. 9)

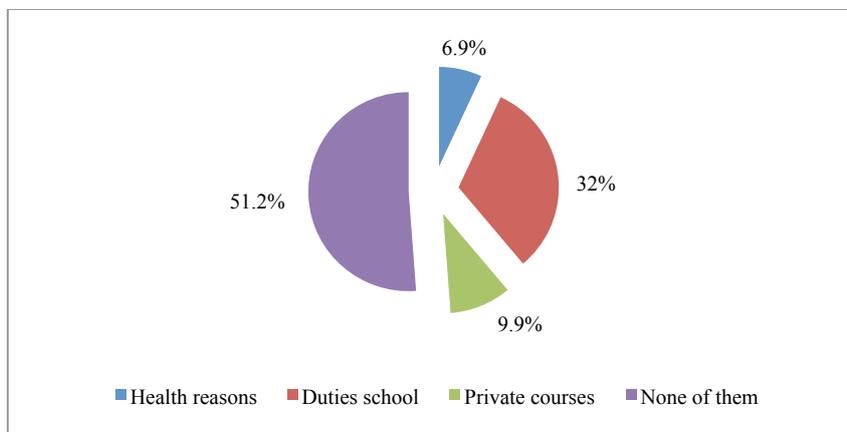


Fig. 9. What was the reason that hindered you to be involved in physical activity last week?

4. Discussions and conclusions

The most common sports in some European countries are football and other team sports such as basketball, handball, volleyball, etc. These team sports are shown to be the most commonly selected even by our school age children (9-14 years old) participating in our study. In addition, children involved in our study reported to be interested even in other sports like athletics and dance, underlining their attractive aspects.

“The involvement in P.A”, from National Physical Activity Plan published in 2014, is defined as an important component of an active and healthy lifestyle for every age group, emphasizing its psychosocial effects especially on children’s later life.

If we analyse our results, that 40.2% of children were not involved in P.A, 25.5% of them were involved 2 or 3 times, and 16.6% of them were involved 1 time during the previous week, we can underline the lack of children’s motivation to be part of P.A. This should draw the attention of Albanian physical education teachers to be more active as regards the children’s motivation, in order to increase their physical activity level.

Playing games with friends during leisure time is very attractive for children. They are free to move as they want or they think to resolve the enormous variety of game situations without formal structure from adults. (National Physical Activity Plan, 2014)

But different to this, our study shows that the Albanian children are more active during physical education class than their leisure time, pretending that their school duties inhibit them to be involved in P.A even during their leisure time. In addition, this study shows that children are more active on Saturday than Sunday.

Regarding positive effects of regular school recess improving the opportunity to increase active play and physical activity among school age children, revealed by National Physical Activity Plan published in 2014, our study has shown that most of Albanian children are more likely to be inactive, they preferring to talk, read or do schoolwork.

Based on the fact that only 16.4% of participants in our study prefer to run around or play quite a bit, there is the probability to improve children’s physical activity level during recess time by promoting the importance of physical activity in children’s lives.

Furthermore, our results have shown that, besides lunch time, Albanian children are more active preferring to walk around.

In conclusion, physical education class is not the only source to improve children’s involvement in P.A, as there are other ways to promote physical activity in youth, such as active transport to and from school, classroom’s physical activity breaks, recess, and before- and after-school programs focused on active moves, for keeping children away from TV, video games, etc.

Institute of Medicine of the National Academies recommends (2013) increasing the involvement of school age children in P.A:

- Organizing different non-competitive activities by sport clubs, sports federations or sports institutions, within or outside the curriculum.
- Gathering the children in leisure centres, day camps or meeting places for young people.
- Focusing always on encouraging young people to get involved, whatever their ability, in games they prefer.

We suggest that parents should be more active in children’s motivation to take part in different P.A to secure their healthy later life and to encourage them through summer camps.

Acknowledgments

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