

# Differences between Urban and Rural Primary School Pupils in Participating in Kinesiology Activities and Spending Leisure Time

Srna Jenko Miholić, Marijana Hraski and Andreja Jurančić  
*Faculty of Teacher Education, University of Zagreb*

## Abstract

*The aim of the research was to find out how primary school pupils spend their leisure time and to what extent they deal with kinesiology activities in relation to their place of living. The study involved a total of 139 pupils attending the first four grades of primary school. The subjects were asked to complete an eight-item questionnaire. The data were analysed by descriptive statistics, and the chi-square test ( $\chi^2$ ) was used to test the difference between the students from a rural and an urban area. The results revealed a small difference in spending leisure time in relation to the place of residence, but also indicated a need for concern when it comes to the proportion of children who do not consider kinesiology activities as an attractive option for spending their leisure time.*

**Key words:** *boys; city; countryside; girls; lower grades of primary school.*

## Introduction

The contemporary life and work conditions may be considered different from those several decades ago. The development of technology, computer science, transport and communications has accelerated our everyday lives. Also, the world in which our children are growing up has changed. Consequently, increased pace of living, which characterizes contemporary life, has provided people with more free time, which is, however, less used for personal needs (Andrijašević, 2000).

Leisure time is one of the determinants of human development and it may be defined as the time that one has at one's disposal without any obligation, and as an

opportunity for human freedom and personal development. It is a basic prerequisite for a number of activities that strengthen the body and mind and also improve one's social life (Bašić, 1993).

Today, the ratio of school work time and leisure time is increasingly changing for children and the youth. Children are overloaded with extensive academic obligations and therefore it is even more important to provide them with quality content for the rest of the day. Leisure time should be a time for active rest, leisure, positive development, socialization, friendship and personality development. Leisure time content and activities are becoming quite important determinants in the education and upbringing of children. Each child should be able to select what he/she is interested in, but often it is necessary to give them some focus and introduce them with all the possibilities they have before them. In child's spare time, great importance should be paid to kinesiology activities, the basic human need for movement and maintenance of life. Three hours a week of Physical Education in primary education is not even remotely enough physical exercise, therefore teachers should introduce kinesiology activities into teaching whenever possible. In a daily struggle against passive and sedentary lifestyle, the young people should be constantly encouraged to go walking, hiking, biking, engage in sports games and a variety of other sports and recreational activities, in particular, those in which limbs, heart and lungs are actively involved (Andrijašević, 2000). The influence of society, parents, teachers and in particular kinesiology teachers has a great impact on children's selection of the content that could fill their free time. It is unacceptable to reduce kinesiology activities of a child only to the prescribed syllabus. Research conducted by Prskalo (2007) shows alarmingly low frequency of the responses which placed Physical Education in the first place according to its perceived relevance for the participants' future. It was also emphasized that there are rare human activities which can simultaneously affect a large number of human characteristics as well-designed physical exercise can. If we accept the obvious fact that the need for movement is a basic biotic need and that a child will willingly and fully engage in spontaneous game or some other form of movement activity, it can be concluded that there is no alternative to kinesiology activities from the standpoint of "productive" use of free time (Prskalo, 2005).

The need for establishing psychophysical balance and health is essential for a number of procedures where kinesiology science plays an important role. Badrić, Prskalo, and Kvesić (2011) indicate the importance of kinesiology activities in developing children's free time, and emphasize the need to establish *intervention programmes* in order to increase the amount of children's daily physical exercise, i.e. to make the application of kinesiology content a daily habit.

Badrić, Prskalo, and Šilić (2011) wrote about structural differences in leisure time between students in urban and rural areas using a sample of children from the fifth to eighth grade. The results showed that children have very little free time. After satisfying everyday life and school obligations, they only have 23% of the time left for the activities of personal interests and preferences. Watching TV is children's most

frequently chosen free time activity. Research has also shown that students who live in urban areas spend more time engaged in some kinesiology activities and play than the ones who live in rural areas.

Philosopher Milan Polić and his coauthor Rajka Polić (2009) emphasize the connection between sports and leisure time. From its first appearance, sports and leisure time have been in a complex relationship. They say: "sport as an amateur game and entertainment, on the one hand, was always tied with spare time, and on the other hand, as a professional exercise, it was tied with working hours, but also from the very beginning, sport as a spectacle was directed with leisure and idleness" (p. 266). Leisure time is one of the most important components in individuals' and groups' daily life in the modern society and an important indicator of the way they live their life and the quality of everyday life.

Under the influence of the environment and society, pupils are becoming less interested in any form of physical activity which has, combined with an improper diet, become the main cause of obesity. After starting school children become more sedentary due to the commencement of new obligations which greatly alter their way of life. Decreased students' movement and a sedentary lifestyle cause weakening of the organism, which is also reflected in the reduction of general biological strength. Leisure time could be one of the factors of a different approach to the education system where a child, a student, and a young person become active factors in their own development. According to Rosić (2005), students' free time has several pedagogical dimensions: (1) it is a form of students' activities with a clear objective; (2) it includes different activity forms; (3) it is based on possibilities of natural and social environment; (4) it can be arranged according to individual, group and collective interests of the students; (5) all used contents, forms, tools and methods should contribute to the formatting and development of a healthy personality. Further, Šimunović (2008) states several classifications of free time: (1) activities that serve as ordinary break; (2) recreation activities with active rest, healthy recreation and entertainment as the main objectives; and (3) activities designed to develop personality. Šimunović (2008) further adds that good planning of everyday life results in better creativity, brings more free time and provides opportunities for an individual to take actions that extend into the area of our interests.

Based on all of the abovementioned reasons, the aim of this research was to explore how primary school students spend their leisure time in relation to whether they live in the rural or urban area, and whether there are differences between them.

## **Methods**

For the purpose of this research a survey about leisure time and kinesiology activities was conducted in two rural and two urban schools in the north-western Croatia. The convenience sample of respondents consisted of 139 students who were attending the first four grades of primary school. There were 60 primary school students from a rural area (39 boys and 21 girls), and 79 primary school students from an urban

area (38 boys and 41 girls). A questionnaire method was used with the questionnaire consisting of eight items related to leisure time activities. For each of the questions multiple choice answers were offered and each student could choose one answer or could specify his/her attitudes related to the question. The teachers helped the first graders in completing the questionnaire, while the second, third and fourth grade students completed the questionnaire independently.

The questions were:

1. How do you usually spend your free time?
2. What extra-curricular activity do you attend?
3. Do you do sports in your free time?
4. Which sports activities do you do in your free time?
5. Why do you do sports in your free time?
6. How often do you do sports activities in your free time?
7. Do you think sport is important?
8. Do you want to continue to play sports in the future?

The data were analysed by the basic descriptive statistics. The relative frequencies of the data for categorical variables collected by the questionnaire were observed.

Chi-square test ( $\chi^2$ ) was used to compare the data, and to test the differences between the children from the urban and rural area in their response rates to individual claims.

Statistical analysis was conducted with Statistics PC software - version 12, licensed for the Faculty of Teacher Education, University of Zagreb.

## Results and Discussion

Based on the collected data, the following results were obtained and presented in the form of the relative frequencies of data expressed as percentages. For each question the value of the chi-square test was given.

**The first question** was: How do you usually spend your free time? The answers were: (1) watching television; (2) reading a book; (3) surfing the Internet; (4) playing sports; (5) playing video games; and (6) something else.

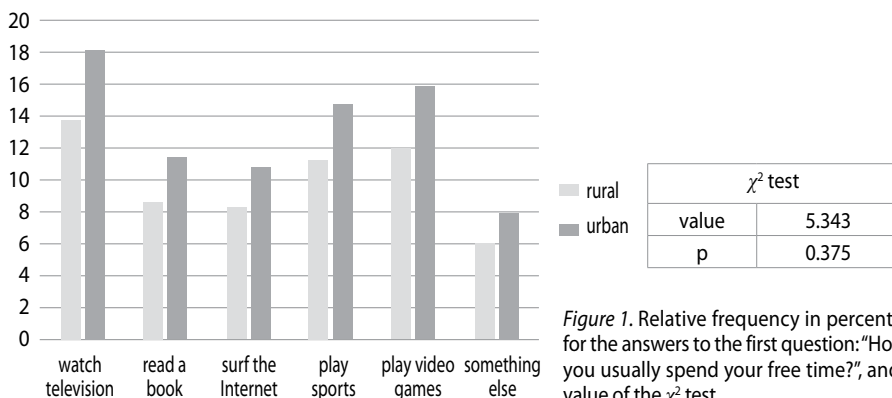


Figure 1. Relative frequency in percentages for the answers to the first question: "How do you usually spend your free time?", and the value of the  $\chi^2$  test

In this question, the children were supposed to give priority to the activity which they usually do in their free time. The data calculated using the chi-square test showed no statistically significant difference between primary school children in the rural and urban area ( $\chi^2=5.34$ ,  $p=0.37$ ). Observing the data from the kinesiology aspect, it may be noticed that there is a relatively small percentage of children playing sports, or those who chose any kinesiology activity as their first choice during their free time. In addition, when observing the difference by gender in the rural and urban area, it may be noticed that boys favoured kinesiology activities more than girls. Also, in both urban and rural area, when it comes to their leisure time, girls reported watching television more frequently than any other activity. Using the chi-square 2x2 test the results also showed no statistically significant difference in the individual responses to the first item.

**The second question** was: What extra-curricular activity do you attend? The answers were: (1) literary group; (2) art group; (3) choir; (4) sports; (5) something else.

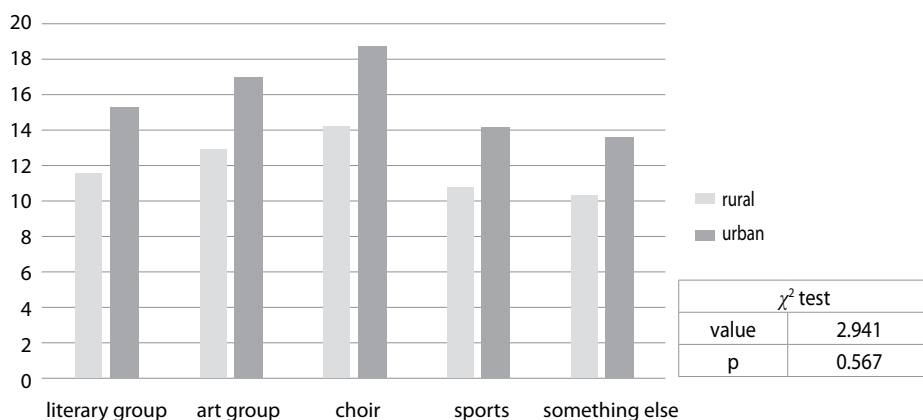


Figure 2. Relative frequency in percentages for the answers to the second question: "What extra-curricular activity do you attend?", and the value of the  $\chi^2$  test

Extra-curricular activities are defined as a form of school planned activities, which are programmed, organized and implemented, and in which students participate independently, optionally and voluntarily (National Pedagogical Standards, 2008). The chi-square test showed that there was no statistically significant difference between the urban and rural area for this question ( $\chi^2=2.94$ ,  $p=0.56$ ). No differences were found within the individual responses using the chi-square 2x2 test. In fact, in this category, due to the primary school syllabus there is no difference between these two groups, indicating that children in both living environments have a similar and uniform choice of extra-curricular activities. In the category of "something else" a slightly larger selection of various activities was found in urban areas, which may explain a greater frequency in that category.

**The third question** was: Do you do sports in your free time? The answers were: (1) yes and (2) no.

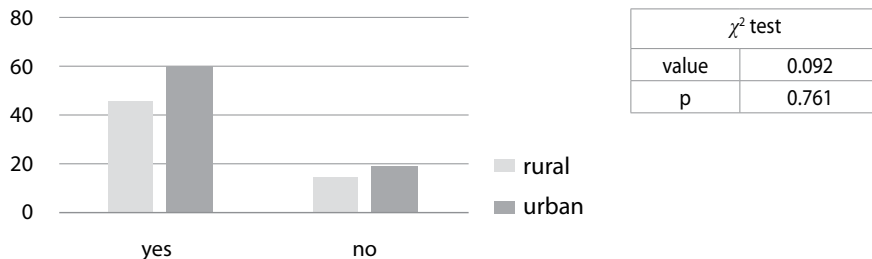


Figure 3. Relative frequency in percentages for the answers to the third question: "Do you do sports in your free time?", and the value of the  $\chi^2$  test

In this question it was not important to learn the primary choices for leisure activities, it was rather based on kinesiology activities as a choice without priority in free time. The obtained results were similar in both rural and urban areas so no statistically significant difference was found between them ( $\chi^2 = 0.09$ ;  $p = 0.76$ ). As expected, the majority of children gave affirmative answer to the question about their engagement in any kinesiology activity in their leisure time, but a reason for concern is the fact that as many as 25% of the children in the rural and 23% of the children in the urban area do not choose any kinesiology activity in their leisure time. In this way their physical activity is reduced to only obligatory Physical Education lessons within the framework of the official primary education syllabus.

**The fourth question** was: Which sports activities do you do in your free time? The answers were: (1) football; (2) swimming; (3) dance; (4) combat sports; (5) something else.

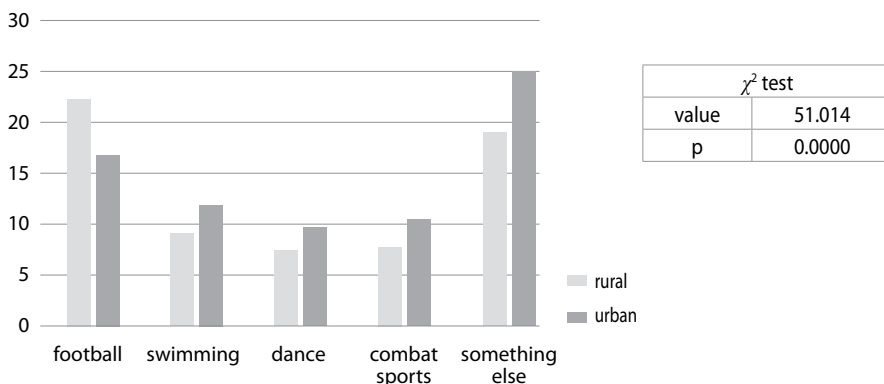


Figure 4. Relative frequency in percentages for the answers to the fourth question: "Which sports activities do you do in your free time?", and the value of the  $\chi^2$  test

The results of the chi-square test confirmed the existence of statistically significant differences with regard to the selection of sports activities that children engaged in during their free time ( $\chi^2 = 51.01$ ;  $p = 0.00$ ). It is important to notice that these are not

exclusively the activities organized by sports clubs, but also free formation of groups of children in their spare time. The chi-square 2x2 test also showed statistically significant differences within the individual responses to the fourth question. The difference was found for football as an activity preferred by children in the rural area ( $\chi^2 = 42.80$ ;  $p = 0.00$ ). Swimming is borderline statistically significant ( $\chi^2 = 3.77$ ;  $p = 0.051$ ) in favour of the children in the urban area where such facilities are more accessible. In the category of “something else” the children in the urban area also listed skiing, tennis, athletics, water polo, hockey, etc. The reason for such a variety of answers is because these sports are more available in the urban areas, as opposed to rural areas where such activities are not easily accessible for children. Therefore, statistically significant difference ( $\chi^2 = 22.88$ ;  $p = 0.00$ ) was also determined for this answer. The possible explanation for these differences may be in the free grouping of children in the rural area, while the children in the urban area are more prone to join activities organized by sports organizations.

**The fifth question** was: Why do you do sports in your free time? The answers were: (1) because I want to be good at sports ; (2) because it is good for health; (3) for fun; (4) to hang out with friends.

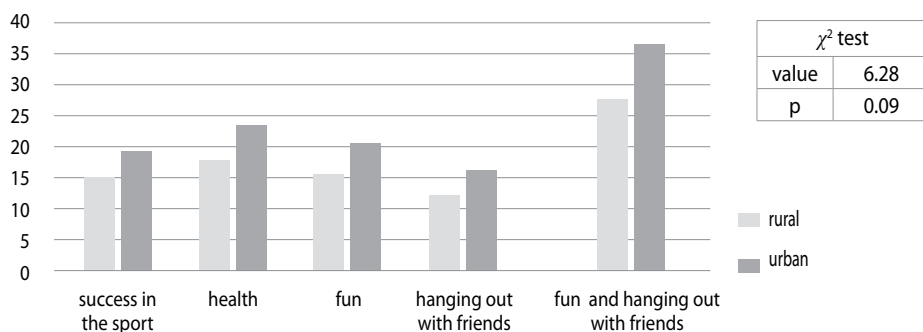


Figure 5. Relative frequency in percentages for the answers to the fourth question: “Which sports activities do you do in your free time?”, and the value of the  $\chi^2$  test

We wanted to learn more about children’s motives to engage in kinesiology activities. Among the five offered answers no statistically significant differences were found between those who live in the rural and urban area ( $\chi^2 = 6.28$ ,  $p = 0.09$ ), but since categories fun and socializing are most often synonymous for children, they had problems deciding which answer was true for them. Therefore, it would be more appropriate to analyse these two categories as a unique item. In this case, this “new” category was selected by 26% of the children from the rural area and 38% of the children from the urban area ( $\chi^2 = 0.75$ ;  $p = 0.68$ ). Consequently, the chi-square 2x2 test results showed statistically significant differences within individual responses to the fifth variable “fun and socializing” ( $\chi^2 = 4.27$ ;  $p = 0.03$ ) in favour of the children from the urban area. Also, from this data it is evident that entertainment and socializing are certainly the strongest motivation for primary school children to engage in kinesiology activities.

**The sixth question** was: How often do you do sports activities in your free time? The answers were: (1) every day; (2) 2-3 times per week; (3) sometimes.

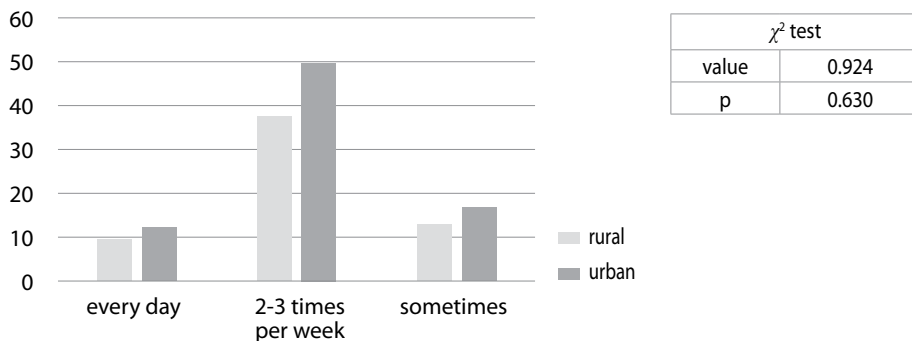


Figure 6. Relative frequency in percentages for the answers to the sixth question: “How often do you do sports activities in your free time?”, and the value of the  $\chi^2$  test

By further analysis of children’s involvement in kinesiology activities we wanted to find out how much time in total they spend in kinesiology activities during one week. Again, no statistically significant differences were found ( $\chi^2 = 0.92$ ,  $p = 0.63$ ). It was confirmed that 15% of the children from both living environments are not at all or are rarely engaged in any kinesiology activities (the answer “sometimes” in Figure 6).

**The seventh question** was: Do you think sport is important? The answers were: (1) yes; (2) no.

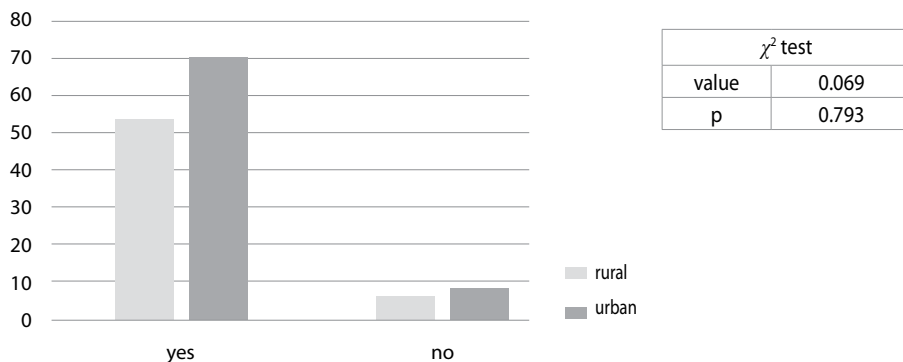


Figure 7. Relative frequency in percentages for the answers to the seventh question: “Do you think sport is important?”, and the value of the  $\chi^2$  test

This question aimed to explore the understanding of children in primary education about the importance of involvement in kinesiology activities. No statistically significant differences among children from rural and urban living environments ( $\chi^2 = 0.06$ ,  $P = 0.79$ ) were found for this question, as well. The majority of children understand the importance of being involved in kinesiology activities. It is interesting that the children who are not engaged in any kinesiology activity still recognize its



importance. On the other hand, there is still a small number of children who do not realize the importance of engaging in kinesiology activities and most of them are first graders.

**The eighth question** was: Do you want to continue to play sports in the future? The answers were: (1) yes; (2) no.

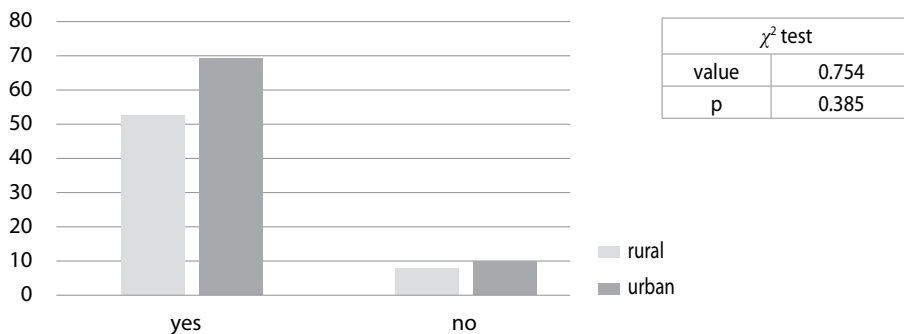


Figure 8. Relative frequency in percentages for the answers to the eighth question: "Do you want to continue to play sports in the future?", and the value of the  $\chi^2$  test

The last question referred to the children's vision for the future, i.e. its objective was to ascertain if there is any desire in them to deal with any kind of kinesiology activities in the future. According to the results of the  $\chi^2$ -test, there are no statistically significant differences between children from the rural and urban area ( $\chi^2 = 0.75$ ,  $p = 0.38$ ). There is still a number of those who do not want to embrace any kinesiology activities as an integral part of their lives in terms of their choice for the future. The percentage of such children, in relation to the percentage of those previously mentioned in the third question where 15% reported not choosing any kinesiology activities in their free time, was reduced to 9% of the children in the rural and 8% of the children in the urban area. Obviously, some of those who are not interested in kinesiology activities are ready to accept its importance at a declarative level.

## Conclusion

The results of this study, whose aim was to explore whether there are differences in the way children growing up in a rural or an urban area spend their free time, indicate a need for concern. Only a small percentage of pupils chose kinesiology activities as the primary choice for their leisure time. In the rural area that percentage was only 10% while in the urban environment the percentage was somewhat higher - 16%, which however is not a statistically significant difference.

During school time, students are interested in kinesiology activities which they are offered as well as in other extra-curricular activities available to them through the school programme. However, as many as 15% of children in both rural and urban areas do not choose any kinesiology activity during their leisure time at home and in this way they reduce their kinesiology activities to only obligatory Physical Education lessons.

The only statistically significant difference in relation to where the children are growing up, was noticed in the choice of the type of kinesiology activities. The key to these differences is in the free formation of children's groups in the rural area, while the children in the urban area are more prone to joining activities offered by sports organizations.

Within the scope of motivation for engaging in kinesiology activities, there is no difference between those who live in the rural and urban area, and it is clear that fun and socializing are certainly the strongest motivation for primary school children's involvement in kinesiology activities.

We recommend this kind of research to teachers who are directly involved in working with children, to gain insight into the manner in which children spend their free time. The teachers, kinesiology professionals, parents and society have the responsibility to encourage children to get involved in a range of kinesiology activities and point their importance in order to help children develop high-quality lifelong habits and to ensure a healthy and strong society whose members can overcome everyday challenges placed before them in these contemporary times.

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**Srna Jenko Miholić**

Faculty of Teacher Education, University of Zagreb  
Savska cesta 77, 10 000 Zagreb, Croatia  
srna.jenko@ufzg.hr

**Marijana Hraski**

Faculty of Teacher Education, University of Zagreb  
Savska cesta 77, 10 000 Zagreb, Croatia  
marijana.hraski@ufzg.hr

**Andreja Juranić**

Faculty of Teacher Education, University of Zagreb  
Savska cesta 77, 10 000 Zagreb, Croatia  
andreja.juranic@gmail.com

# Urbano-ruralne razlike u bavljenju kineziološkim aktivnostima i provođenju slobodnog vremena učenika primarnog obrazovanja

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## **Sažetak**

Cilj rada bio je otkriti kako učenici primarnog obrazovanja provode svoje slobodno vrijeme i u kojoj se mjeri tada bave kineziološkim aktivnostima u odnosu na mjesto odrastanja, odnosno žive li u ruralnom ili urbanom području. Istraživanje je provedeno na ukupno 139 učenika nižih razreda osnovne škole. Ispitanici su bili podvrgnuti anketnom upitniku koji se sastojao od osam čestica. Dobiveni podaci obrađeni su metodama deskriptivne statistike, a za testiranje razlika između učenika u odnosu na mjesto življenja koristio se hi-kvadrat test ( $\chi^2$ ). Dobiveni rezultati pokazali su vrlo malo razlika u načinu provođenja slobodnog vremena u odnosu na mjesto odrastanja djece, ali i neke zabrinjavajuće pokazatelje kada je riječ o udjelu djece koja kineziološke aktivnosti ne smatraju privlačnim izborom za provođenje slobodnog vremena.

**Ključne riječi:** dječaci; djevojčice; grad; niži razredi osnovne škole; selo.