

Kinesiological Activities and Leisure Time of Young School-Age Pupils in 2007 and 2012

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Abstract

The paper presents a research conducted in 2007 and then again in 2012 on a sample of 628 male and female primary school pupils from the first to fourth grade (ages 7-10). The obtained results showed a low frequency of the responses that ranked Physical Education (PE) as the most significant subject for the pupils' future life: 13% in 2007 and 18% in 2012. Preference for the subject was reduced significantly from 37% in 2007 to 27% in 2012. Spending free time in 2012 in a typically static activity was significantly more common (44%) than doing any kinesiological activity (25%) as opposed to 2007 when the percentage for static activities was 27% and for doing kinesiological activities it was 17%. Since the contemporary society is characterized by obesity and different health related disorders, with the problem increasingly becoming widespread among the young, the situation is consequently even more serious. Leisure time of children and the youth increasingly implies activities that require little or no muscular effort. Gender was confirmed as an important factor in the preference for the subject but not in the estimate of its importance according to the results obtained in 2012. Thereby, there still seems to be a significantly smaller number of pupils joining extra-curricular kinesiological activities at school than those joining out-of-school kinesiological activities. It is a further indication of the unwillingness of schools to satisfy their pupils' needs. However, the consequences of the contemporary lifestyle can be substantially compensated through kinesiological programmes. It is therefore necessary to accept the fact that one of the basic educational objectives of a school is to help pupils develop a habit of physical exercise, which should subsequently become the basis of a positive lifelong habit of engaging in physical exercise on a daily basis.

Key words: *dynamics; kinesiological activities; pupils; primary education; leisure time*

Introduction

Obesity and different health related disorders have become one of the predominant characteristics of the contemporary society, especially so among the young, thus making the problem even more serious. The reasons for this condition are increasingly sought in the imbalanced nutrition and insufficient energy consumption. Sedentary lifestyle is transferred from school and reflects on children's daily tasks but also on their leisure time. Leisure time is greatly spent doing activities that require hardly any muscular effort (Prskalo, 2007), thus ceasing to be a matter of leisure, pastime, entertainment and relaxation (Dumazedier, 1967), and increasingly becoming a kinesiological problem. Consequently, in the theoretical sense, there is a need for the establishment of a branch of Kinesiology that could be called Kinesiology of Leisure Time, similarly to Pedagogy of Leisure Time which exists within the system of pedagogical disciplines (Previšić, 2000), while in the empirical sense, there is a need for further research into leisure time activities and its dynamics. Contemporary lifestyle runs parallel with the new technological discoveries and achievements. Clearly, this lifestyle has both positive and negative consequences on children. Such changes are particularly reflected on health, already at an early age. As one of the main preoccupations of the educational system is to prepare and train children for the contemporary life, it also increases the responsibility of the school and requires optimal reaction (Prskalo et al., 2010). The issue of the survival of a man in the living conditions which impose reduced movement is one of the fundamental issues in the life of the contemporary man; therefore the concern for the child's leisure time has become the basis for creating the habit that will accompany all individuals through life. Creating a habit of making good use of leisure time which would be devoted to exercise and movement has become, from the kinesiological point of view, a primary educational objective. There is a special emphasis on the positive attitude towards physical exercise, without which a healthy human life today and even more so in the future is simply inconceivable. Keeping all this in mind, especially the fact that 35.8% of the population in Croatia is physically inactive (Mišigoj - Duraković et al., 2005), the necessity for creating a habit of making good use of free time in a socially acceptable, but also useful way has to be emphasized. Numerous studies have confirmed positive effect of aerobic activity on the reduction of triglyceride levels in the serum as well as its positive effect on human health (Mišigoj Duraković and Duraković, 2012). There has been an upward trend in the number of overweight children already from the second grade (Tomac et al., 2012). Systematic, scientifically founded exercise can significantly affect a whole range of features and capabilities. Provided the fact that the need for movement is a basic biotic need and that a child is voluntary and entirely dedicated to spontaneous game or some other form of movement activity is accepted, it can be concluded that in terms of "useful" leisure time kinesiological activities have no alternative (Prskalo, 2005). Participating in physical activity brings very important health benefits to children and young people. Because

of disuse and failure to follow the recommendations for daily physical activity in leisure time, it is becoming an important public health problem. Inadequate lifestyle of children and young people contributes to obesity which has become one of the biggest contemporary health issues. Failure to participate in daily physical activities of moderate to high intensity is associated with poorer development of motor skills in children and adolescents (Badrić, 2011). Any change of state requires a diagnosis, and this paper is a contribution to the diagnosis of young school-age pupils' attitudes towards kinesiological activities comparing the results obtained in 2007 (Prskalo, 2007) and 2012 in order to determine the change in attitudes towards kinesiological activities and their importance in children's everyday activities.

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Aim

The aim of the research was to determine the basic attitudes towards the school subject Physical Education in relation to its assumed importance in the future life of a child, preferences for the subject, preferences for the content of leisure time, the actual content of leisure time and pupils' participation in extra-curricular and out-of-school kinesiological activities in 2007 and 2012.

Hypotheses

H1 Attitudes towards Physical Education (PE) among young school-age male and female pupils will depend on gender and age differences, and both in 2007 and in 2012 most pupils will choose PE as the most preferred and the subject that they believe will have the greatest impact on their future lives.

H2 Attitudes towards kinesiological activities during leisure time will depend on gender and age differences, and both in 2007 and 2012 the highest number of pupils will show preference for and will engage in kinesiological activities during their leisure time.

H3 Importance which the pupils ascribe to Physical Education will be higher in 2012 compared to 2007.

H4 Preference for Physical Education will be higher in 2012 compared to 2007.

H5 Preference for kinesiological activities during leisure time will be higher in 2012 compared to 2007.

H6 Implementation of kinesiological activities during leisure time will increase in 2012 compared to 2007.

H7 Participation in extra-curricular activities will increase in 2012 compared to 2007.

H8 Participation in out-of-school activities will increase in 2012 compared to 2007.

Research Methods

The research was conducted on a sample of 628 male and female pupils from the first to fourth grade (ages 7-10)¹ in primary schools Davorin Trstenjak and Ivan Goran Kovačić in Zagreb in the period between 14 May – 12 June 2007 (a total of 287 pupils, of which 157 girls and 130 boys) and in 2012 (341 pupils, of which 174 girls and 167 boys).

Table 1 shows the structure of the respondents who participated in the study.

Table 1. Structure of the sample by age and year of research (N-number and % percentage); t-test results show the significance of differences in the percentages of subsamples in relation to the total sample (p-significance of the difference)

Grade	2007		2012		t- test
	N	%	N	%	p=level
1	65	22.65	91	26.69	0.5720
2	78	27.18	86	25.22	0.7708
3	81	28.22	86	25.22	0.6610
4	63	21.95	78	22.87	0.8879

The following were the questions used in the guided interview and constructed for the research conducted in 2007 (Prskalo, 2007):

1. How would you rank school subjects according to their impact on your future life?
2. What is your favourite school subject, which ones are the second and third favourite?
3. What are your favourite leisure activities? List them starting from the most favourite!
4. What did you do most yesterday during your leisure time (after school and school related activities)? List the activities beginning with those you engaged most in!
5. List extra-curricular activities you do!
6. List out-of-school activities you do!

For questions 1 - 4 only the first selection was taken into account, while for questions 5 and 6 all kinesiological activities were taken into account. The results were analyzed using descriptive statistics, and the significance of the frequency differences between the subsamples was confirmed using t- test in the program Statistica 7.1.

Results and Discussion

The results obtained from the guided interview and applied research methodology are shown in Figure 1 while the results compared by gender with the assessment of the significance of differences are shown in Table 2.

¹ Children who reach the official school starting age of six years before the 1 of April may be admitted to the first grade. A child who has not reached the official starting age of six years before the 1 of April may be admitted to the first grade of primary education at the request of parents or guardians and if approved by the official county or the City of Zagreb state administration office responsible for primary education. Primary Education Act (NN 69/03)

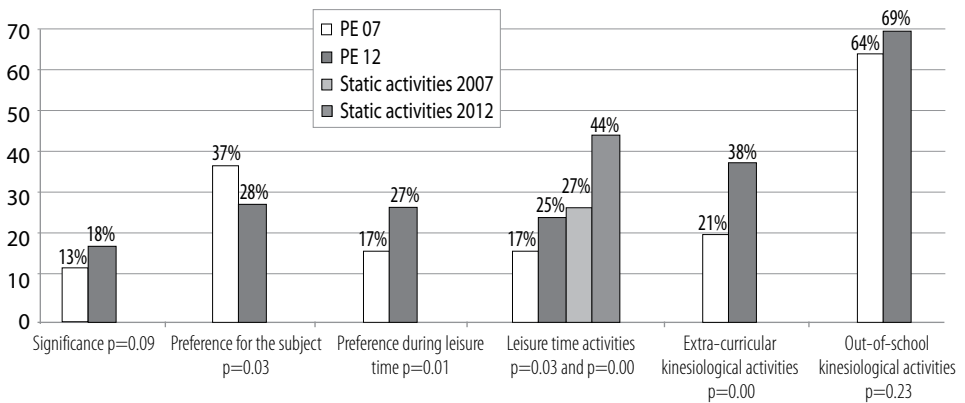


Figure 1. Attitude towards PE and kinesiological leisure activities, and children's participation in extra-curricular and out-of-school kinesiological activities in 2007 and 2012

The results obtained for the sample from 2007 (Prskalo, 2007) showed that only 13% of all respondents put PE in the first place according to its importance for their life. The preference for the subject was expressed by 37% of the pupils, while 17% claimed they preferred and did kinesiological activities in their leisure time. The results also showed that 21% of the pupils participated in extra-curricular and 64% in out-of-school kinesiological activities. Differences between subgroups defined by gender were found in the assessment of the significance PE has on their life and preference for PE as a school subject. Physical Education as the first subject in terms of its significance on their future life was selected by 17% of boys and 9% of girls, and it was preferred by 51% of boys and 26% of girls. On the sample from 2012 gender dimorphism in the estimate of the significance of the subject was lost because 16% of girls compared to 20% of boys put this subject in the first place in terms of its significance on their life.

Table 2. Attitude towards Physical Education and kinesiological leisure activities, and pupils' participation in extra-curricular and out-of-school kinesiological activities by gender in 2007 (Prskalo, 2007) and 2012

Response	2007			2012			
	% (m)	% (f)	P	% (m)	% (f)	p	
Significance	17	9	0.0431	20	16	0.3389	
Preference for the subject	51	26	0.0006	35	22	0.0081	
Preference –leisure time	20	14	0.1383	31	24	0.1490	
Activities done in leisure time	other	60	53	0.3233	24	38	0.0006
	kinesiological activities	15	19	0.4581	35	16	0.0001
	static activities	25	29	0.5289	41	46	0.3570
Extra-curricular kinesiological activities	26	18	0.1770	34	16	0.0001	
Out-of-school kinesiological activities	70	59	0.1060	73	65	0.1115	

Preference for the subject, as well as the participation in kinesiological leisure activities and the involvement PE in extra-curricular kinesiological activities is

significantly in favour of boys. The issue that was raised in 2007 and referred to the willingness of schools to meet the pupils' needs for kinesiological activities when 24% of pupils were involved in extra-curricular kinesiological activities and 64% in out-of-school activities remained current because in 2012 there were 73% of boys and 65% of girls involved in out-of-school activities, and 38% in extra-curricular activities, which is a slight improvement compared to 2007. Nowadays, when life is characterized by insufficient physiological workload, plenty of food of mostly unconfirmed origin, and increased intellectual and emotional stress (Nagyová & Ramacsay, 1999), school needs to provide appropriate facilities for children already from an early school age and participate in children's involvement in out-of-school kinesiological activities. Schools possess numerous opportunities to educate children about the importance of physical exercise on human health in general, and this can be done by integrating a number of school subjects with Physical Education. Furthermore, the school system can help young people to embrace the promoting physical activity for health by providing opportunities beyond the regular Physical Education classes, thus enabling safe access to indoor and outdoor sports facilities with the support of teachers, parents or friends (Heimer & Rakovac, 2010). When it comes to the role of Physical Education and a more objective view of the role of this educational area, one should accept that scientifically based exercise may significantly affect not only the morphological, motor and functional features, but also the overall personality. Actually, this should again be emphasised because preschool teachers, generalist teachers and Physical Education teachers may greatly influence the above mentioned anthropological characteristics, and moreover, this influence may be so strong that it can confidently be said that there are no, or rarely any human activities in which so many characteristics can be simultaneously affected to such an extent as they can be through skilful and professional physical exercise (Findak et al., 2003). It may be anticipated that children with higher levels of motor skills in childhood will have a higher level of physical activity in adolescence (Raudsepp & Pall, 2006, Wrotniak et al., 2006, Barnett et al., 2009). Therefore, it is needless to say that there is no optimal growth, development or education without physical exercise because it is a partially conditioned need which nothing can compensate. On the contrary, from the kinesiological point of view an important conclusion is that ignoring or preventing the need for exercise is one of the major causes of disturbance in the overall development. In fact, from the point of view of Kinesiology, education is a planned process of an ongoing formation of certain traits, abilities and knowledge, which promotes the health and development of the individual and his/her relationship to the surrounding world, particularly work, environment, society and other people. Thus, if it is true that education is an ongoing, planned and systematic process, that it can only take place in a situation that itself is educational, that a well-organized work is one of the basic conditions for this, and especially the process of exercise which completely or as much as possible satisfies the real needs of children and pupils, it is not difficult to

conclude that in fact a well-organized physical exercise is one of the basic conditions for education (Findak & Prskalo 2004). Empirical indicators suggest that additional physical activity has a significant impact on the level of motor skills (Koutedakis & Bouziotas, 2003; Casajus et al., 2007).

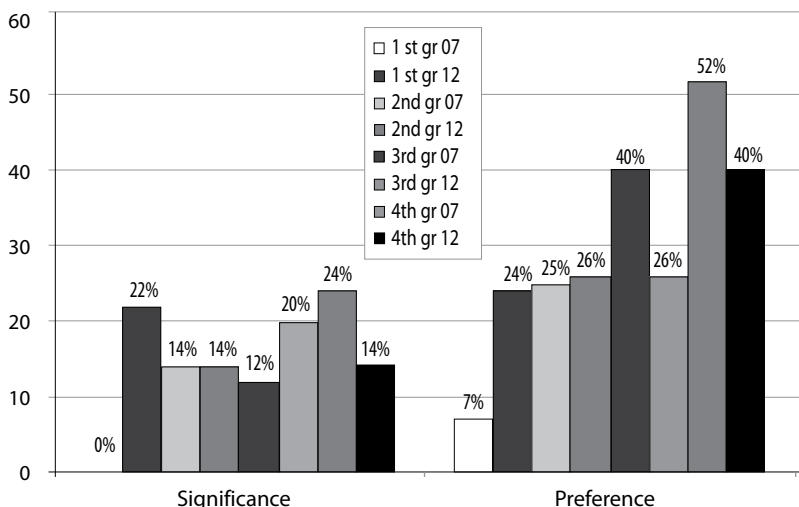


Figure 2. Attitudes towards Physical Education in the sub-samples defined by age in 2007 and 2012

The assessment of the importance expressed through ranking of Physical Education in the first place according to its importance for personal future (Figure 2) shows age variations and was the lowest in the first grade and the highest in the fourth grade in 2007. In 2012 these results are not repeated, because as many as 22% of first grade pupils put Physical Education in the first place.

Table 3. Percentage significance level of the choice of Physical Education with reference to its importance on life and preference for the subject estimated using - test in the subsamples according t to age in 2007 and 2012

Grade	Significance	Preferences
1 st	0.0539	0.1541
2 nd	1.0000	0.8883
3 rd	0.1619	0.0800
4 th	0.1300	0.1570

Table 3 shows that the preference for PE increased with age and t-test did not confirm significant differences in the assessment of significance and preference for PE. In this instance the results confirmed the need for a particular level of maturity required for the acceptance of the importance of PE and its preference over other school subjects (Prskalo, 2007). It should also be noted that Physical Education lesson is a basic organizational form of work which, through its objectives, resources and organisation creates favourable conditions for the introduction of the child into other

organizational forms of work (Findak, 1999), and is therefore the basic generator of good use of leisure time via participation in some form of kinesiological activity (Prskalo, 2005).

Table 4. Percentage significance level of the choice of Physical Education with reference to its importance on life and preference for the subject between the subsamples defined by age in 2007 estimated using t-test (Prskalo, 2007)

significance	1 st	2 nd	3 rd	preference	1 st	2 nd	3 rd
1 st				1 st			
2 nd	0.1394			2 nd	0.1425		
3 rd	0.1746	0.7081		3 rd	0.0220	0.0766	
4 th	0.0444	0.1691	0.0821	4 th	0.0330	0.0019	0.1906

Table 5. Percentage significance level of the choice of Physical Education with reference to its importance on life and preference for the subject between the subsamples defined by age in 2012 estimated using t-test

significance	1 st	2 nd	3 rd	preference	1 st	2 nd	3 rd
1 st				1 st			
2 nd	0.1388			2 nd	0.1223		
3 rd	1.1746	0.7024		3 rd	0.2450	1	
4 th	0.1394	1	0.3102	4 th	0.4742	0.0580	0.0580

The results in Tables 4 and 5 partially confirmed the hypothesis H1 which assumed that attitudes towards Physical Education for girls and boys of young school age would depend on gender and age differences. Specifically, attitudes towards the importance of Physical Education and preferences for the subject in 2007 depended on age differences, but in 2012 the age was not a predictor of the attitudes towards the importance of and preference for the subject. Also, part of H1 according to which the highest number of pupils, both male and female, would put this subject in the first place according to its impact on their lives and their preference for the subject was rejected. It is concerning that the overall amount of work in education, which is insufficient and does not provide optimal transformational effects, is not compensated by activity in leisure time. Physical activity is an important preventive measure in the development of obesity as well as a number of other health disorders (Bouchard and Després, 1995). The effect of physical exercise on the reduction of body mass is conditioned by the characteristics of the activity, its volume, physical condition of an individual and the initial values of triglyceride concentration in the serum (Mišigoj-Duraković and Duraković 2012).

Preference for kinesiological leisure activities showed a regular increase except in the fourth grade in 2007, which can be explained by the maturity of children to accept this type of leisure activity. Figure 3 shows preferences for kinesiological activities during leisure time in the subsamples defined by age in 2007 and 2012. Certainly, leisure time opens the possibilities for the increase of workload placed on children thus increasing the amount of movement, and consequently its impact on the totality of a person's characteristics and health as the primary goal of a humanistic educational process. The

extent to which children - soon to be grown people, will participate in these activities will significantly depend on the parents and the first person children encounter at the start of their education – the teacher. The teacher’s readiness to promote the value of physical exercise, positive attitude towards exercise and the importance that it carries will have an impact on a child’s, i.e. pupil’s readiness to implement these values on a daily basis and in their leisure time (Prskalo, 2005).

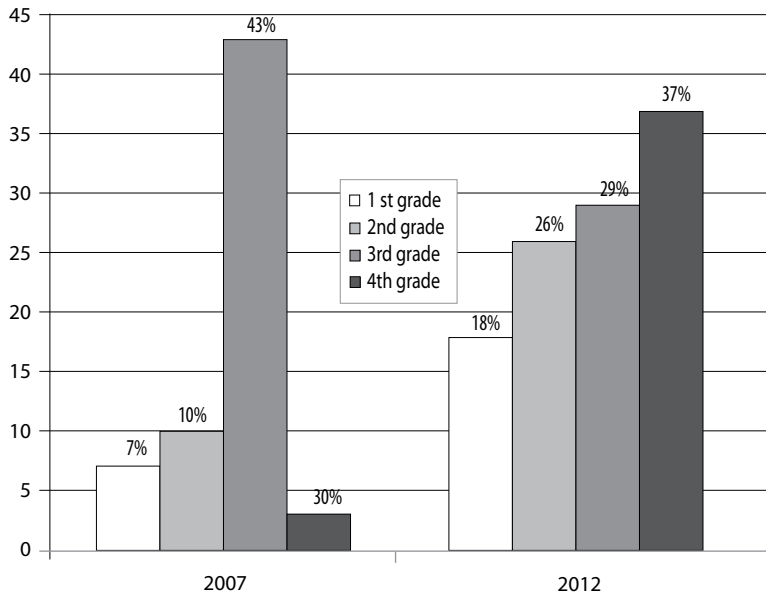


Figure 3. Preferences for kinesiological activities during leisure time in the subsamples defined by age in 2007 and 2012

Table 6 shows the significance of the differences in the percentage of children who selected kinesiological leisure activities between the subsamples defined by age.

Table 6. Percentage significance level of the choice of kinesiological activities between the subsamples defined by age in 2007 and 2012 estimated using t-test

significance	1 st	2 nd	3 rd	preference	1 st	2 nd	3 rd
1 st				1 st			
2 nd	0.7276			2 nd	0.2011		
3 rd	0.0143	0.0000		3 rd	0.0856	0.6610	
4 th	0.4770	0.1089	0.0000	4 th	0.0062	0.1333	0.2790

Table 6 shows a significant difference in 2007, but not among all grades, while in 2012 there is regularity in the difference by age, and the significance increases from the first to fourth grade where it is significant.

As observed in Table 2 in the 2012 subsample the choice of kinesiological leisure activity depended on gender, hence the second hypothesis “Attitudes towards kinesiological activities during leisure time depend on gender and age differences, and both in 2007 and 2012 the highest number of pupils will show preference for and

will engage in kinesiological activities during their leisure time” is partially accepted but only the part related to 2012, while the second part of the hypothesis pertaining to the highest number of pupils choosing kinesiological activities has to be rejected.

Both fifth (“Preference for kinesiological activities during leisure time will be higher in 2012 compared to 2007”) and the sixth hypothesis (“Implementation of kinesiological activities during leisure time will increase in 2012 compared to 2007”) have been confirmed by the present research.

Attitudes towards kinesiological activities during leisure time depended on age and gender. Participation in extra-curricular kinesiological activities depended on age differences both in 2007 and 2012, whereas in 2012 it additionally depended on gender. H3 was also not confirmed because there was no significant increase in the importance which the pupils ascribed to Physical Education in 2012 compared to 2007 ($p = 0.09$). However, preference for the subject did increase so H4 (“Preference for PE will increase in 2012 compared to 2007”) was confirmed. Kinesiological activities were more present in out-of-school activities, which may be explained as insufficient willingness of schools to meet their pupils’ needs by providing extra-curricular content. Nevertheless, there is significant improvement in this respect in 2012 which confirms H7 (“Participation in extra-curricular activities will increase in 2012 compared to 2007”). The last hypothesis - H8 was not confirmed since it relates to out-of-school activities which had a high level of participation both in 2007 and 2012.

Conclusion

The research showed disturbingly low frequency of the response that ranked Physical Education as the most significant subject for the pupils’ future life: 13% in 2007 and 18% in 2012. Preference for Physical Education was significantly reduced from 37% in 2007 to 27% in 2012. Spending leisure time in a typically static activity was significantly higher (44%) than doing kinesiological activities (25%) in 2012 as opposed to 2007 when leisure time spent in a static activity was 27% in comparison to 17% spent doing kinesiological activities. Modern society is characterized by obesity and different health related disorders, and the problem has increasingly been present among the younger population thus making the situation even more serious. Children and the youth increasingly spend their leisure time doing activities that require little or no muscular effort. Gender was proven to be an important factor in the preference shown for Physical Education as the school subject but not in the estimate of its importance according to the results obtained in 2012. Furthermore, there still seems to be significantly fewer pupils joining extra-curricular kinesiological activities at school than those joining out-of-school kinesiological activities. It is an additional indication of the unwillingness on the part of schools to meet their pupils’ needs. Consequences of the modern lifestyle can be substantially compensated through kinesiological programmes. It is therefore necessary to accept the fact that one of the basic educational objectives of a school is to create a habit of physical exercise, which should subsequently become the basis of a positive lifelong habit of engaging in physical exercise on a daily basis.

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Kineziološki sadržaji i slobodno vrijeme učenica i učenika mlađe školske dobi u 2007. i 2012. godini

Sažetak

Istraživanje je provedeno na uzorku od ukupno 628 učenica i učenika od 1. do 4. razreda (dobi 7 – 10 godina) u 2007. i 2012. godini. Pokazala se niska frekvencija odgovora koji predmet Tjelesna i zdravstvena kultura po značenju za budući život stavljaju na prvo mjesto u 2007. godini (13%) odnosno 18% u 2012. godini. Preferencija prema predmetu je značajno smanjena u 2012. godini sa 37% na 27%. U 2012. provedba slobodnog vremena u nekoj karakterističnoj statičnoj aktivnosti značajno je viša (44%) nego u nekoj kineziološkoj aktivnosti (25%), za razliku od 2007. kada je u statičnoj aktivnosti provođeno 27% u donosu na 17% vremena provedenog u kineziološkoj aktivnosti. Problemi današnje civilizacije – prekomjerna težina i različiti poremećaji zdravlja – sve su prisutniji i u mladima. Slobodno vrijeme djece i mladeži sve se više koristi za aktivnosti kojima nije potreban gotovo nikakav mišićni napor. Spol je presudan čimbenik kod preferencije školskih predmeta, ali ne i procjene njihova značenja u 2012. godini. Pri tome je u školi u kineziološkim izvanastavnim aktivnostima i dalje značajno manji broj učenica i učenika nego u izvanškolskim kineziološkim aktivnostima. To je i dalje pokazatelj nespремnosti škole da udovolji potrebama učenika. Posljedice suvremenog načina života mogu se u značajnoj mjeri kompenzirati kineziološkim programima. Potrebno je stoga prihvatiti činjenicu da je jedna od osnovnih odgojnih zadaća škole stvaranje navike tjelesnoga vježbanja, što bi trebalo postati temeljem cjeloživotne pozitivne navike svakodnevnoga vježbanja.

Ključne riječi: dinamika; kineziološka aktivnost; učenici; primarno obrazovanje; slobodno vrijeme

Uvod

Negativne značajke današnje civilizacije – prekomjerna težina i različiti poremećaji zdravlja – sve su prisutnije i u mladima. Razlog za takvo stanje sve se više traži u poremećenoj prehrani, ali i u nedovoljnom energetsom rashodu. Sjedilački način

života iz školskih klupa se prenosi u svakodnevne zadaće i slobodno vrijeme. Ono se sve više koristi za aktivnosti kojima nije potreban gotovo nikakav mišićni napor (Prskalo, 2007), a pitanje slobodnog vremena prestaje biti pitanje dokolice, okupacije, zabave i razonode (Dumazedier, 1967) te sve više postaje i kineziološki problem. Na taj način otvara se u teorijskom smislu potreba uspostave kineziološke grane koja bi se zvala kineziologija slobodnog vremena, kao što je pedagogija slobodnog vremena u sustavu pedagoških disciplina (Previšić, 2000), a u empirijskom smislu otvara se potreba istraživanja slobodnog vremena i njegove dinamike. Način života u suvremenom društvu prati nova tehnološka otkrića i dostignuća. Jasno, takav način života ostavlja na djecu svoje pozitivne i negativne posljedice. Takve promjene posebice se odražavaju na zdravlje već u najranijoj mladosti. Preokupacija je odgojnih sustava priprema i osposobljavanje djece za život u suvremenim uvjetima. To povećava odgovornost škole i zahtijeva optimalne odgovore (Prskalo i sur., 2010). Pitanje opstanka čovjeka u životnim uvjetima koji nameću smanjeno kretanje jedno je od temeljnih pitanja suvremenog čovjeka pa se brigom o slobodnom vremenu djeteta utemeljuju navike koja će pratiti pojedinca cijeli život. Stvaranje navike pravilnog korištenja slobodnog vremena posvećenog vježbanju i kretanju postaje s kineziološkog motrišta primarna odgojna zadaća. Posebno se ističe pozitivan odnos prema tjelesnom vježbanju bez kojeg je zdrav način života današnjeg, a još više sutrašnjeg čovjeka nezamisliv. Imajući sve to u vidu, pogotovu ako se uzme u obzir činjenica da je 35,8% populacije u Hrvatskoj tjelesno neaktivno (Mišigoj-Duraković i sur. 2005), ističe se nužnost formiranja navike korištenja dječjeg slobodnog vremena na društveno prihvatljiv i koristan način. Mnoga istraživanja potvrdila su pozitivan učinak aerobne aktivnosti na smanjenje triglicerida u serumu, ali i pozitivan učinak na zdravlje (Mišigoj-Duraković i Duraković, 2012). Primjetan je trend porasta broja djece s prekomjernom težinom već od drugog razreda osnovne škole (Tomic i sur., 2012). Sustavnim znanstveno utemeljenim vježbanjem bitno se može utjecati na čitav niz osobina i sposobnosti. Ako prihvatimo činjenicu da je potreba za kretanjem osnovna biotička potreba te se dijete dragovoljno i u potpunosti predaje spontanij igri ili nekom drugom obliku kretne aktivnosti, nameće se zaključak da je s gledišta korisnog korištenja slobodnog vremena kineziološka aktivnost bez alternative (Prskalo, 2005). Korištenje tjelesne aktivnosti ima vrlo važne zdravstvene prednosti kod djece i mladih. Zbog nepoštivanja uputa o svakodnevnoj tjelesnoj aktivnosti u slobodno vrijeme, tjelesna neaktivnost postaje velik javnozdravstveni problem. Neadekvatan stil života djece i mladih pridonosi stvaranju pretilosti što je danas jedan od najvećih zdravstvenih problema. Svakodnevno nesudjelovanje u tjelesnoj aktivnosti umjerenog do visokog intenziteta povezano je sa slabijim razvojem motoričkih sposobnosti kod djece i mladih (Badrić, 2011). Svaka promjena stanja zahtijeva najprije njegovu dijagnozu, a ovaj rad je doprinos dijagnosticiranju stava učenika i učenika mlađe školske dobi prema kineziološkim sadržajima. Uspoređujući 2007. (Prskalo, 2007) i 2012. godinu utvrdila se promjena stava prema kineziološkim sadržajima ali i mjestu tih sadržaja u svakodnevnoj aktivnosti djece.

Prikazani rezultati proizašli su iz znanstvenog projekta „Kineziološka edukacija u predškolskom odgoju i primarnom obrazovanju“ pod brojem 227-2271694-1696, provedenog uz potporu Ministarstva znanosti, obrazovanja i športa Republike Hrvatske.

Cilj

Cilj je istraživanja utvrditi učeničke stavove prema predmetu Tjelesna i zdravstvena kultura s obzirom na: značenje predmeta u budućem životu djeteta, preferenciju predmeta, preferenciju sadržaja slobodnog vremena, stvarni sadržaj slobodnog vremena te sudjelovanje učenica i učenika u izvannastavnim i izvanškolskim kineziološkim aktivnostima u 2007. i 2012. godini.

Hipoteze

H1 Stav prema predmetu Tjelesna i zdravstvena kultura kod učenica i učenika mlađe školske dobi ovisi o spolnim i dobnim razlikama i najveći broj ovaj bi predmet stavio na prvo mjesto prema utjecaju na njihov život i prema preferenciji i u 2007. i u 2012. godini.

H2 Stav prema kineziološkim sadržajima u slobodnom vremenu ovisi o spolnim i dobnim razlikama, a najveći broj učenica i učenika preferira i provodi kineziološke sadržaje u slobodnom vremenu i u 2007. i 2012. godini.

H3 Ocjena značenja predmeta Tjelesna i zdravstvena kultura povećana je u 2012. godini u odnosu na 2007.

H4 Preferencija predmeta Tjelesna i zdravstvena kultura povećana je u 2012. godini u odnosu na 2007.

H5 Preferencija provedbe kinezioloških sadržaja u slobodnom vremenu povećana je u 2012. godini u odnosu na 2007.

H6 Provedba kinezioloških sadržaja u slobodnom vremenu povećana je u 2012. godini u odnosu na 2007.

H7 Uključenost u izvannastavne aktivnosti povećana je u 2012. godini u odnosu na 2007.

H8 Uključenost u izvanškolske aktivnosti povećana je u 2012. godini u odnosu na 2007.

Metode rada

Istraživanje je provedeno na uzorku od 628 učenica i učenika od 1. do 4. razreda (dobi 7 – 10 godina)¹ dviju zagrebačkih osnovnih škola: Osnovne škole Davorina Trstenjaka i Osnovne škole Ivana Gorana Kovačića. Od 14. 5. – 12. 6. 2007. u

¹ „U prvi razred osnovne škole upisuju se djeca koja do 1. travnja tekuće godine imaju navršениh šest godina života. U prvi razred mogu se upisati i djeca koja do 1. travnja tekuće godine nemaju navršениh šest godina života ako to na zahtjev roditelja ili staratelja odobri tijelo županijske državne uprave, odnosno Grada Zagreba nadležno za poslove školstva“. Zakon o osnovnom školstvu (NN 69/03)

istraživanju je sudjelovalo ukupno 287 ispitanika (157 učenica i 130 učenika), a u 2012. godini 341 ispitanik (174 učenice i 167 učenika).

U tablici 1. prikazana je struktura uzorka koji je sudjelovao u istraživanju.

Tablica 1.

U okviru dirigitiranog intervjua konstruiranog za istraživanje provedeno 2007. godine (Prskalo, 2007) postavljena su pitanja:

1. Koji bi školski predmet stavio na prvo, koji na drugo a koji na treće mjesto prema značenju za tvoj život?
2. Koji ti je školski predmet najdraži, koji drugi a koji treći?
3. Što najviše voliš raditi u slobodno vrijeme? Nabroji počevši od najdražeg.
4. Pored školskih obveza, što si jučer najviše radio/radila u slobodnom vremenu? Nabroji počevši od onog čime si se najviše bavio/bavila.
5. Nabroji izvannastavne aktivnosti kojima se baviš.
6. Nabroji izvanškolske aktivnosti kojima se baviš.

Kod pitanja 1. – 4. u obzir su uzeti samo I. izbori, a kod 5. i 6. uzete su u obzir sve kineziološke aktivnosti. Rezultati su obrađeni metodama deskriptivne statistike, a značajnost razlika frekvencija između subuzoraka potvrđena je t-testom koristeći program Statistica 7.1.

Rezultati i rasprava

Temeljem primijenjenog dirigitiranog intervjua i metodologije dobiveni su rezultati koji su prikazani slikom 1. dok su rezultati po spolu s procjenom značajnosti razlike prikazani u tablici 2.

Slika 1.

Iz dobivenih rezultata za uzorak iz 2007. (Prskalo, 2007) vidljivo je da predmet Tjelesna i zdravstvena kultura prema značenju za život na prvo mjesto stavlja samo 13% učenika i učenica. Preferira ga u nastavi 37% a kineziološke sadržaje u slobodnom vremenu preferira 17% koliko ih i prakticira. Uključeno je 21% ispitanika u izvannastavne a 64% u izvanškolske kineziološke aktivnosti. Spolno uvjetovane razlike između podskupina postoje u procjeni značenja tjelesne i zdravstvene kulture za život i u preferenciji predmeta Tjelesna i zdravstvena kultura. U izboru Tjelesne i zdravstvene kulture kao prvog predmeta po značenju za budući život opredijelilo se 17% dječaka i 9 % djevojčica, a preferira ga 51% dječaka i 26% djevojčica. Na uzorku iz 2012. godine gubi se spolno dimorfistička uloga procjene značenja predmeta jer 16% djevojčica u odnosu na 20% dječaka ovaj predmet stavlja po značenju na 1. mjesto.

Tablica 2.

Preferencija predmeta, ali i provedba kinezioloških aktivnosti u slobodnom vremenu i uključenost u izvannastavne kineziološke aktivnosti, značajno je na strani dječaka. Pitanje spremnosti škole da zadovolji učeničke potrebe za kineziološkom

aktivnošću, kad je 24% učenika uključeno u izvannastavne kineziološke aktivnosti, a u izvanškolske 64% učenika, koje se postavljalo 2007. ostalo je aktualno jer je 73% dječaka i 65% djevojčica uključeno u izvanškolske aktivnosti, a 38% u izvannastavne kineziološke aktivnosti. Ipak, u tome je nešto bolja situacija 2012. nego 2007. godine. U vremenu okarakteriziranu nedovoljnim fizičkim opterećenjem, a obiljem hrane najčešće nepotvrđena podrijetla i povećanim intelektualnim i emocionalnim opterećenjem (Nagyová i Ramacsay 1999), škola već od najmlađe školske dobi treba ponuditi primjerene sadržaje i postati čimbenik uključivanja učenika i učenika i u izvanškolske kineziološke aktivnosti. Škola ima bezbroj mogućnosti da kroz integraciju nastave tjelesne i zdravstvene kulture s ostalim srodnim predmetima educira djecu o važnosti tjelesnog vježbanja za ljudsko zdravlje. Isto tako, školski sustav može pomoći mladim ljudima dajući im priliku i termine da i izvan redovitog programa nastave tjelesne i zdravstvene kulture imaju osiguran i siguran pristup sportskim objektima ili prirodnim površinama uz potporu nastavnika, roditelja ili prijatelja (Heimer i Rakovac, 2010). Kada se radi o ulozi predmeta Tjelesna i zdravstvena kultura u objektivnijem sagledavanju uloge ovoga odgojno-obrazovnog područja, treba prihvatiti da se znanstveno utemeljenim vježbanjem može bitno utjecati, ne samo na morfološka, motorička i funkcionalna obilježja, nego i na cjelovitu ličnost. Treba i ovom prilikom istaknuti da odgojitelj, učitelj razredne nastave i učitelj tjelesne i zdravstvene kulture imaju veliku moć utjecaja na navedena antropološka obilježja. Imaju tako snažan utjecaj da se može pouzdano tvrditi da ne postoje ili su rijetke ljudske djelatnosti kojima se u tolikoj mjeri može istodobno utjecati na tako velik broj ljudskih obilježja, kao što je moguće stručno oblikovanim i vođenim tjelesnim vježbanjem (Findak i sur. 2003). Predvidljivo je da će djeca s višom razinom motoričkih sposobnosti u djetinjstvu imati višu razinu tjelesne aktivnosti u adolescenciji (Raudsepp i Pall, 2006., Wrotniak i sur., 2006., Barnett i sur., 2009). Zato nije izlišna tvrdnja da nema optimalnog rasta, razvoja i odgoja bez tjelesnog vježbanja, jer su ti procesi dijelom uvjetovani potrebom za tjelesnom aktivnosti koja se ničim ne može kompenzirati. Naprotiv, s kineziološkog gledišta važna je konstatacija da je zanemarivanje ili sprečavanje potrebe za vježbanjem jedan od uzroka poremećaja ukupnog razvoja. Naime, s kineziološkog gledišta odgoj je permanentni planirani proces formiranja određenih osobina, sposobnosti i znanja, kojima se pospješuje zdravlje i razvoj pojedinca i njegov odnos prema svijetu koji ga okružuje, napose radu, prirodi, društvu i drugim ljudima. Ako je točno da je odgoj trajan, sustavan i planski proces te da se odgajati može samo u situaciji koja je sama po sebi odgojna, dobro organiziran rad jedan od osnovnih uvjeta za odgoj. Proces vježbanja je u potpunosti ili velikoj mjeri prilagođen stvarnim potrebama djece i učenika, iz čega slijedi da dobro organizirano tjelesno vježbanje predstavlja jedan od temeljnih uvjeta za odgoj (Findak i Prskalo 2004). Empirijski pokazatelji govore u prilog tome da dodatna tjelesna aktivnost značajno utječe na razinu motoričkih sposobnosti (Koutedakis i Bouziotas, 2003., Casajus i sur., 2007).

Slika 2.

Procjena značenja predmeta za osobnu budućnost, izražena rangiranjem predmeta Tjelesna i zdravstvena kultura (slika 2.) na prvo mjesto, 2007. godine pokazuje dobne varijacije i najmanja je u prvom razredu, a najviša u četvrtom. U 2012. ta situacija se ne ponavlja jer 22% učenika prvog razreda stavljaju Tjelesnu i zdravstvenu kulturu na I. mjesto.

Tablica 3.

U tablici 3. vidljivo je da preferencija predmeta pokazuje porast s dobi, a t-test' nije potvrdio značajne razlike u procjeni značenja predmeta i preferencije. U ovom slučaju se temeljem rezultata može potvrditi potreba određene zrelosti za prihvaćanje značenja ovog predmeta i njegova preferiranja u odnosu na druge (Prskalo, 2007). Također, treba napomenuti kako je sat tjelesne i zdravstvene kulture osnovni organizacijski oblik rada koji svojim zadaćama, sredstvima i organizacijom stvara povoljne uvjete za uvođenje djeteta u ostale organizacijske oblike rada (Findak, 1999), pa je prema tome i osnovni generator korištenja slobodnog vremena u nekom obliku kineziološke aktivnosti (Prskalo, 2005).

Tablica 4.

Tablica 5.

Rezultati u tablicama 4. i 5. djelomično su potvrdili hipotezu H1 prema kojoj stav prema predmetu Tjelesna i zdravstvena kultura kod učenica i učenika mlađe školske dobi ovisi o spolnim i dobnim razlikama. Naime, stav prema značenju predmeta Tjelesna i zdravstvena kultura i njegova preferencija 2007. godine ovisili su o dobnim razlikama. U istraživanju 2012. godine dob nije bila prediktor stava o značenju i preferenciji ovog predmeta. Također, odbačen je dio H1 prema kojem bi najveći broj učenica i učenika ovaj predmet stavili na prvo mjesto prema utjecaju na njihov život i prema preferenciji. Zabrinjavajuća ukupna količina rada u edukaciji koja je nedovoljna i ne osigurava optimalne transformacijske učinke nije kompenzirana aktivnošću u slobodnom vremenu. Tjelesna aktivnost predstavlja značajnu mjeru prevencije u nastanku pretilosti, ali i niza drugih zdravstvenih poremećaja (Bouchard i Després, 1995). Učinak tjelesnog vježbanja na smanjenje tjelesne mase uvjetovan je vrstom aktivnosti, njenim opsegom, stanjem pojedinca te prethodnim vrijednostima koncentracija triglicerida u serumu (Mišigoj-Duraković i Duraković, 2012).

Preferencija kineziološke aktivnosti u slobodnom vremenu pokazuje pravilan porast izuzev 4. razreda 2007. godine što se može objasniti zrelošću djeteta da prihvati ovakav način provođenja slobodnog vremena. U slici 3. prikazana je preferencija prema kineziološkom sadržaju u slobodno vrijeme u subuzorcima definiranim temeljem dobi 2007. i 2012. godine.

Zasigurno, prostor u kome se uz svekoliko opterećenje djeteta može povećati količina kretanja i samim time utjecaj na ukupnost ljudskih osobina i zdravlja kao prvog cilja svakog humanistički usmjerenog odgojno-obrazovnog procesa, jest prostor

slobodnog vremena. Koliko će u njemu sudjelovati dijete – sutra odrastao čovjek, osim o roditeljima, ovisi i o prvom čovjeku kojeg dijete susreće dolaskom u školu – o učitelju. O njegovoj spremnosti korištenja vrijednosti tjelesnog vježbanja, o njegovu pozitivnom odnosu prema vježbanju i vrijednostima koje ono nosi ovisit će koliko će dijete biti spremno koristiti se tim vrijednostima svakodnevno i u slobodnom vremenu (Prskalo, 2005).

Slika 3.

U tablici 6. prikazana je potvrda značajnosti razlike postotka djece koja su u slobodno vrijeme izabrala kineziološki sadržaj između subuzoraka definiranih temeljem dobi.

Tablica 6.

Iz tablice je vidljiva značajna razlika u 2007. godini, ali ne između svih razreda. U razlici između dobi 2012. godina pokazuje pravilnost, značajnost se povećava od 1. do 4. razreda gdje je i jedino statistički značajna.

Kao što je uočeno u tablici 2. na subuzorku iz 2012. godine vidljivo je da izbor kineziološke aktivnosti u slobodnom vremenu ovisi o spolu pa se djelimice prihvaća i H2 koja glasi *Stav prema kineziološkim sadržajima u slobodnom vremenu ovisi o spolnim i dobnim razlikama, a najveći broj učenica i učenika preferira i provodi kineziološke sadržaje u slobodnom vremenu i u 2007. i 2012. godini.*, ali samo u dijelu iz 2012. Drugi dio hipoteze o najvećem izboru upravo kinezioloških sadržaja treba odbaciti.

U ovom istraživanju mogu se prihvatiti hipoteze H5 i H6 koje glase: H5: *Preferencija provedbe kinezioloških sadržaja u slobodnom vremenu povećana je u 2012. godini u odnosu na 2007.*, H6: *Provedba kinezioloških sadržaja u slobodnom vremenu povećana je u 2012. godini u odnosu na 2007.*

Stav prema kineziološkim sadržajima u slobodnom vremenu ovisi o dobi i spolu. Sudjelovanje u izvannastavnim kineziološki usmjerenim aktivnostima ovisi o dobnim razlikama a u 2012. godini i o spolu. Ni H3 nije prošla provjeru jer se ocjena značenja predmeta nije signifikantno povećala 2012. u odnosu na 2007. godinu ($p=0,09$). Ipak, preferencija predmeta je povećana pa se može prihvatiti H4 koja glasi: *Preferencija predmeta tjelesna i zdravstvena kultura povećana je u 2012. godini u odnosu na 2007.* Kineziološki sadržaji su prisutniji u izvanškolskim aktivnostima, što se objašnjava nedovoljnom spremnošću škole da zadovolji potrebe učenika u izvannastavnim sadržajima, premda se stanje u 2012. godini znatno popravilo te je potvrđena H7 koja glasi: *Uključenost u izvannastavne aktivnosti povećana je u 2012. godini u odnosu na 2007.* Nije dokazana H8 budući tretira izvanškolske aktivnosti koje su imale visoku razinu participacije i u 2007., ali i u 2012. godini.

Zaključak

Istraživanje pokazuje zabrinjavajuće nisku frekvenciju odgovora koji predmet Tjelesna i zdravstvena kultura po značenju za budući život stavljaju na prvo mjesto u 2007. godini (13%) odnosno 18% u 2012. Preferencija prema predmetu Tjelesna

i zdravstvena kultura je značajno smanjena u 2012. godini sa 37% na 27%. Provedba slobodnog vremena u nekoj karakterističnoj statičnoj aktivnosti je značajno viša (44%) nego u nekoj kineziološkoj aktivnosti (25%) u 2012. godini, za razliku od 2007. kad je u statičnoj aktivnosti provedeno 27% u donosu na 17% vremena provedenog u kineziološkoj aktivnosti. Kako su i kod mladih osoba sve prisutniji prekomjerna težina i različiti poremećaji zdravlja kao odlike današnje civilizacije, situacija je tim ozbiljnija. Slobodno vrijeme djece i mladeži sve se više koristi za aktivnosti kojima nije potreban gotovo nikakav mišićni napor. Spol je u 2012. godini presudan čimbenik kod preferencije predmeta, ali ne i kod procjene njegova značenja. Pritom je u školi u kineziološkim izvannastavnim aktivnostima i dalje značajno manji broj učenica i učenika, negoli u izvanškolskim kineziološkim aktivnostima. To je i dalje pokazatelj nespremnosti škole da udovolji potrebama učenika. Posljedice suvremenog načina života mogu se u značajnoj mjeri kompenzirati kineziološkim programima. Potrebno je stoga prihvatiti činjenicu da je jedna od osnovnih odgojnih zadaća škole stvaranje navike tjelesnoga vježbanja, što bi trebalo postati temeljem cjeloživotne pozitivne navike svakodnevnoga vježbanja.