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Factors affecting recreational activity of young people from secondary schools

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Authors' Contribution:
A – Study Design
B – Data Collection
C – Statistical Analysis
D – Data Interpretation
E – Manuscript Preparation
F – Literature Search
G – Funds Collection

Key words: *recreational activity, young people, finance, leisure time, Greater Poland.*

Abstract

Background: *The paper discusses factors which determine young people's recreational activity in their leisure time. Learning about the factors of recreational activity will support efficient promotion of active lifestyles, improvement in health condition and education of young people, and participation in different forms of recreation.*

Material/Methods: *In order to conclude on the statistical significance of the relationships and the strength of correlation between the variables, the author used Pearson's chi-square test for independence and Cramer's V coefficient. The research hypothesis was tested at two levels: α = 0.01 (denoted in the paper as **) and α = 0.05 (denoted in the paper as *). The study was carried out among the subjects from a homogeneous age group of young people (15 to 19 years old) from secondary schools in the Greater Poland Voivodeship. The survey covered a research sample of 600 people.*

Results: *The survey, carried out among young people aged 15 to 19 years, found that recreational activity in both genders diminished with age. The study also showed that the studied young people participated in the following forms of recreation in their leisure time: computer (24.86%), cycling (18.59%), team games (14.35%), walking (7.79%), swimming (7.49%), spending time in a café or a pub (5.87%) and going to the cinema (0.42%). Among the factors that determine recreational activity, the significant role is played by financial factors, lack of interest in recreational activity, lack of free time and recreational equipment.*

Conclusions: *Rational participation in recreational activity contributes to maintaining health and affects good mood of individuals. A system of education should be created in society to promote recreational activity among young people and its effect on the quality of health and life.*

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Introduction

In industrial and post-industrial societies, work had the central place in human existence. In the knowledge society, the importance of work has been replaced by leisure time. Time has become more precious because of the increased pace of living. Throughout the 20th century, working time and leisure time became a commodity which should be rationally managed [1]. Leisure time is an important factor in life quality. The amount of leisure time and the way of spending this time determines good mood and health of a human [2, 3, 4, 5]. Education of children and young people for the rational use of their leisure time is an essential problem. A particular role in this education is played by school education supported by families and actions taken by governmental and non-governmental organizations. Recreation, which represents an element of physical activity, is an active form of spending leisure time by young people and adults. Without recreation, all health strategies, maintaining and improving health and the proper growth of children would be impossible [6]. Through cognitive, educational, hygienic, health-related and socio-educational values, recreation represents one of the most attractive methods of spending leisure time among children and young people. The most attractive type of this education in the countries of the European Union is termed outdoor education [7]. In consideration of the above problems, the particular focus should be on instilling healthy habits into young people, education and teaching with consideration for the values of recreation (recreation axiology).

The aim of the paper is to identify the factors which determine young people's recreational activity in their leisure time. Identification of the factors in this activity will support promotion of active lifestyles among young people, improvement in health condition and it will draw attention to the need for education and teaching aimed at participation in different forms of recreation.

Material and methods

The study was based on the following methods: literature study, a diagnostic survey and a statistical method. The method of a diagnostic survey adopted the technique of a questionnaire. In the statistical method, Pearson's chi-square and Cramer's V were used. In order to conclude on the statistical significance between the variables studied, the author used Pearson's chi-square test for independence. Furthermore, the Cramer's V coefficient was calculated. It indicates the strength of relationships between variables while adopting the null hypothesis (Ho) of the lack of any relationship between the tested variables. The research hypothesis was tested at two levels: $\alpha = 0.01$ (denoted in the paper as **) and $\alpha = 0.05$ (denoted in the paper as *). In the case of presence of a relationship at these levels, an alternative hypothesis was adopted. Cramer's V is an indicator of the strength of the relationship between variables. This strength is defined on a scale from 0 to 1. The values closer to 1 represent a stronger relationship. Statistical computation of the survey material collected in the study was carried out by means of the STATISTICA computer software. The study is focused on the presentation, analysis and interpretation of the results obtained from the questionnaire survey.

The survey was carried out in a group which was homogeneous in terms of age (15-19-year-olds). It was assumed that this age category represents young people who are relatively independent in making decisions on the way and the form of spending leisure time. The studied sample involved a research sample of 600 young people from comprehensive secondary schools and vocational secondary schools in the region of the Greater Poland Voivodeship (850 questionnaire forms were sent). The characterization of the studied sample is presented in Table 1.

Table 1. Characterization of the studied sample

Respondent's age	School type			
	comprehensive secondary school		vocational secondary school	
	number	%	number	%
15	23	7.27	10	3.52
16	123	38.90	6	2.11
17	93	29.43	120	42.25
18	61	19.30	140	49.30
19	16	5.06	8	2.82
Total	316	52.67	284	47.33

The survey was carried out in all the headquarters of 29 poviat authorities in the Greater Poland Voivodeship in 2011/2012. Two secondary schools were randomly selected in these headquarters: a comprehensive secondary school and a vocational secondary school. Furthermore, one class was randomly selected from each school. The general population was represented by 178,966 students from secondary schools: comprehensive secondary schools (60,989 students) and vocational secondary schools (technical schools and basic vocational schools: 117,977 students). With the level of significance set at $\alpha = 0.05$, in order for the sample to be representative, 385 respondents should be examined, whereas at the level of significance set at $\alpha = 0.01$ this number is 660 people. 600 questionnaires which were properly filled in by the students were used for the analysis.

Results

The investigations of the sample of young people aged 15 to 19 found that 77.02% of the subjects participated in different forms of recreation and 22.97% of them were not interested in recreation. Recreational activity in both genders diminished with age. At the age of 15, 90% of young people engaged in recreation, 82.90% at the age of 16, 74.50% at the age of 17, 71.40% at the age of 18 and 62.36% at the age of 19. In their leisure time the studied young people participated in the following forms of recreation: cycling (18.59%), swimming (7.49%), team games (14.35%), walking (7.79%), spending time in a café or a pub (5.87%), going to the cinema (0.42%) and in front of a computer (24.86%) (Table 2). In general, the most popular forms of recreation were active, but a noticeable interest in passive forms of recreation should also be noted (computers, meeting in cafés and pubs). Recreational activity exhibits a similar pattern in other countries of the European Union. According to a survey carried out by Eurobarometr, leisure time spent by young people in almost all the EU countries accounted for 20% of their total time. Over the age of 30, this time shortens considerably (more or less by a quarter), which results from new household and family duties typical of this period of life.

The main types of activities among young people in their leisure time were: sports (walking, riding a bike or other) and going out with friends to the dance, for a drink or a meal (45% and 40%, respectively). Reading just for pleasure was much less popular among the respondents (25%). Using the Internet, video equipment and watching TV as a principal activity in their leisure time involved nearly a fifth of the young people. Listening to music or going to the cinema were the activities which were popular among 15% of young people. Rather rare activities included helping parents with households duties (10%) and shopping (7%), similarly to working (nearly 5%). Regular participation in different organizations (athletic, cultural, youth and local ones) was declared by only 2% of young people aged 15 to 30 years [8, 9].

School was not the preferred place of spending leisure time by young people. Respondents organized their leisure time on their own outside schools, as they expected lower financial costs of participation in selected forms of recreation. Considering monthly income per capita in the family in connection with forms of recreation, it turned out that young people from families with a lower income (up to 1,000 PLN) were interested in cheaper forms of recreation (cycling, computers, the Internet, reading books). By contrast, young people from families with a higher monthly income per family member engaged in more expensive forms of recreation (swimming pools, team games, meeting in cafés and pubs).

Tab. 2. Preference for spending leisure time by young people*** and monthly income per person in families

Monthly income (gross) per person in the family (PLN)	Way of spending leisure time after school activities															
	cycling		swimming pool		computers, the Internet, computer games		walking		team games		café, pub		cinema		other (e.g. reading books)	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Up to 500	50	28.40	4	2.30	61	34.70	6	3.40	19	10.80	5	2.80	8	4.50	23	13.10
501-1000	96	25.60	31	8.30	97	25.90	19	5.10	46	12.30	20	5.30	13	3.50	53	14.10
1001-1500	67	26.00	26	10.10	69	26.70	17	6.60	20	7.80	15	5.80	7	2.70	37	14.30
1501-2000	36	20.00	11	6.10	48	26.70	16	8.90	24	13.30	12	6.70	10	5.60	23	12.80
2001-2500	23	21.30	15	13.90	26	24.10	7	6.50	14	13.00	6	5.60	5	4.60	12	11.10
Over 2500	37	21.90	18	10.70	35	20.70	16	9.50	25	14.80	15	8.90	12	7.10	11	6.50
Total of answers	309	24.40	105	8.29	336	26.54	81	6.39	148	11.69	73	5.76	55	4.34	159	12.55

Value of Chi-square test = 57.277 Cramer's V = 0.1408*
** relationship statistically significant at p > 0.05*
*** respondents were allowed to choose more than one answer*

As results from the study, the way of spending leisure time was largely determined not only by the financial status (56.83%) but also by the lack of interest in recreational activity (20.86%), lack of sports and recreational equipment (10.58%), lack of leisure time (9.76%) and prices of recreational services (1.95%) (Table 3). Although such factors as the lack of sports and recreational equipment might depend on the income per person in the family (the financial factor), factors connected with the lack of interest in recreational activity and the lack of leisure time at all are worrying. These factors depend on tradition and culture in the family, education at school and in families aimed at participation in physical culture (the social and institutional factor). The studied young people in all age categories emphasized the same factors making it difficult to participate in recreation. It appears that the reasons for this situation lie not only in a reduction in actual incomes in households and a high unemployment rate but also in the role of school in terms of educational curricula for recreational activity and educational attitudes of families in this area.

Tab. 3. Factors which make it difficult to participate in recreation,*** and the respondents' age

Age	The factors which make it difficult to participate in different forms of recreation									
	lack of financial funds		lack of interest in recreational activity		lack of sports and recreation equipment		lack of leisure time		prices of recreational services	
	N	%	N	%	N	%	N	%	N	%
15 years	50	58.80	23	27.10	8	9.40	4	4.70	0	0.00
16 years	146	58.90	59	23.80	22	8.90	17	6.90	4	1.60
17 years	200	56.80	64	18.20	43	12.20	41	11.60	4	1.10
18 years	66	46.80	29	20.60	17	12.10	25	17.70	4	2.80
19 years	91	61.90	28	19.00	13	8.84	8	5.44	7	4.76
Total	553	56.83	203	20.86	103	10.58	95	9.76	19	1.95

*Value of Chi-square test = 41.096** Cramer's V = 0,1285**
** relationship statistically significant at p ≤ 0.01*
*** respondents were allowed to choose more than one answer*

Discussion

Young people in Poland and other EU countries engage in many different forms of recreational activity, both active and passive. However, their everyday habits have been transformed due to new opportunities that are offered by today's world (the Internet, computer games). The increasing passive recreation contributes to a higher number of cases of overweight and obesity among young children. Therefore, there is a growing concern over the fact that physical activity among young people has been replaced in recent years by more static activities [10]. The results obtained in the survey demonstrated that young people (24.86%) often spent their leisure time in front of their computers. The data from the Central Statistical Office in Poland suggest that only 30% of the students from primary schools engage in recreational activity at least once a week for an hour [11].

Physical activity, including recreational activity, health and the quality of life are closely related to each other. Human body has been "designed" to move. Therefore, it requires regular physical activity in order to ensure optimum function and avoid illness. It has been demonstrated that sedentary lifestyles represent a risk factor in development of a number of chronic diseases, including cardiovascular diseases that represent the main cause of deaths in the highly civilized world. Furthermore, active lifestyles show a number of other social and psychological benefits. There is a direct relationship between physical activity and life expectancy, which indicates that physically active populations typically live longer than the inactive ones. After intensification of physical activity, people who used to live sedentary lifestyles usually report improved well-being, both with regard to physical fitness and enhanced mental health, and enjoy better life quality [12, 13, 14]. Similar tendencies were observed in the young people in the present study (39.00%), who, among the benefits of participation in recreation, listed mental, relaxation, health and aesthetic values. The problem of passive recreation concerns not only the results of the studies carried out in Poland.

According to the available data, 40% to 60% of the EU's population live sedentary lifestyles. Therefore, it is essential for the EU member states to prepare national programmes to support physical activity in order to stimulate changes in unhealthy habits and promote the awareness of the benefits of recreational activity for health. These programmes should take into consideration the natural, school and family environments, habits and cultural determinants in each country. According to WHO resolutions, any person should be involved in physical activity for at least 30 minutes a day [15]. These programmes also concern young people at school age, who should engage in everyday physical activity at a moderate to intensive level for 60 minutes a day or

longer, choosing the forms which are properly adjusted to age, pleasant and include varied forms of exercise. Particular focus should be placed on development of motor skills of young people.

Recreational activity, walking, cycling, skating or swimming are correlated with improved health and might represent an important supplementation of physical activity among young people. Sport activity, frequent attendance in fitness and wellness centres and recreational activity (e.g. swimming, rowing, sea and lake sailing or activity in the form of walking, trekking, horse-riding, cycling in the mountains and other environments) has been increasingly popular in countries of the European Union. This physical activity is particular interesting as it helps young people realize that physical activity might have positive effects on both body and mind. The respondents declared that, among the forms of sport activity, they participated in: sailing/canoeing tourism (25.28%), sports camps (5.83%), equestrian tourism (2.77%), hiking (8.75%) and cycling tourism (13.08%). Among young people, cycling to school is associated with a higher level of physical fitness. In Denmark, where this mode of transport is used by almost two thirds of young people, the physical fitness level among cyclists was found to be higher by 8%. This translates directly into health benefits since a quarter of the least physically fit children were diagnosed with thirteen times more problems caused by worse metabolism, such as a higher risk factor of cardiovascular diseases compared to the most active young people. The young people who cycled to school were five times more often placed in the highest quartile of physical fitness. The respondents declared that they were actively involved in the following forms of recreation: cycling (18.59%), swimming (7.49%), walking (7.79%) and team games (14.35%) [16].

The results obtained in a study carried out by the author of the present paper demonstrated that there is a statistical relationship between recreational activity and gender, age and income in families. According to the study, gender was correlated with recreational activity of the studied young people. The studied men were more physically active than women. Recreational activity was also correlated with the subjects' age since participation in recreation declined with age. Young people declared that they did not participate in recreational activity chiefly due to the lack of financial means (56.83%), lack of interest in participation in recreation in their leisure time (20.86%), lack of sports and recreation equipment (10.58%), lack of leisure time (9.76%) and prices of recreational services (1.95%). A national-level survey carried out by E. Biernat also showed that Poles usually declare that they could not participate in recreational activities because of the lack of free time (31.9%). Similar behaviour was observed among Polish respondents in the surveys by the Central Statistical Office and the Institute of Tourism [17, 18].

Conclusions

Recent years have seen considerable civilization and social transitions which determine lifestyles of the people from different age categories, with particular focus on young people. One consequence of these changes is more leisure time. The method of managing this leisure time determines the human health status, also in young generations. Undoubtedly, one of the methods of maintaining physical fitness is active participation in recreation.

Rational participation in recreational activity contributes to maintaining health and instils good mood into a person. However, drawing conclusions about a direct effect of recreational and tourism activity on improvement in the health status and the quality of life of an individual might be premature if a system of recreation-oriented education of young people is not created at the level of central and local administration.

Programmes for sport and recreation for all should be aimed at encouraging all citizens to engage in regular physical activity. However, young people at school age should be the first target group. If educated and prepared to active recreation, young generations will instil the ideas of recreation into next ones.

Therefore, it is purposeful to conduct research work aimed at diagnosis of the interest in active recreation of different social categories, not only young people but also parents and the elderly.

A comparative analysis of the studied problem might produce interesting results not only of the cognitive but also of the application nature.

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