STUDIES IN PHYSICAL CULTURE AND TOURISM Vol. 16, No. 4, 2009

RAJMUND TOMIK¹, WŁADYSŁAW MYNARSKI²

¹ Department of Theory and Methodology of Physical Education, The Jerzy Kukuczka Academy of Physical Education in Katowice, Poland

SCHOOL TOURISM AND PHYSICAL EDUCATION IN NATURAL SETTINGS BASED ON THE PRINCIPLES AND PRACTICES OF OUTDOOR EDUCATION

Key words: school tourism, physical education, outdoor education.

ABSTRACT

Contact with nature, tourism and sightseeing are undoubtedly great potential interests of schoolchildren. The article constitutes a study of school tourism and physical education classes as criteria for implementing outdoor education in Polish schools. The study used a diagnostic survey method in the form of questionnaire "General offer of the school in the area of extracurricular recreation and sport". The questionnaire was completed by physical education teachers from 292 Polish schools. The statistical analysis revealed that secondary schools had a better tourism than primary schools. However, the school type does not have affect the proportion of physical education classes held in natural settings. The range of tourist activities offered by schools in small towns and villages in Poland is fairly limited in comparison with schools in mid-sized and large cities.

INTRODUCTION

Contact with nature, tourism and sightseeing are undoubtedly among those potential interests of schoolchildren, whose development might be of particular importance in preparation of active pastimes. Outdoor activities during physical education classes or extracurricular active tourism not only make the school's didactic and educational programmes more attractive, but also have unquestionable health-related, cognitive and cultural advantages. J. Drabik (1997) emphasizes that physical activity can effectively counterbalance the progressive hypokinesis of the present day generation [1].

In accordance with the Schengen Agreement, schools in Europe which organize various sightseeing and tourist events can co-operate with various associations and institutions, including

international exchange programmes. The aims of these activities are 'to promote, among school-children and youth, the principles of environmental protection and the ability to use natural resources judiciously,' and to foster active recreation. Extracurricular sightseeing and tourism can be also organized as qualified tourism or walking trips. Participation in these events requires physical fitness and specialist skills including the use of specialist equipment¹.

Correspondence should be addressed to: Rajmund Tomik, The Jerzy Kukuczka Academy of Physical Education in Katowice, Department of Theory and Methodology of Physical Education, Mikołowska 72 a, 40-065 Katowice, fax: (32) 207 53 39, email: r.tomik@awf.katowice.pl

² Department of Tourism, Recreation and Management, The Jerzy Kukuczka Academy of Physical Education in Katowice, Poland

¹ Resolution of the Polish Ministry of National Education and Sport, November 8, 2001, concerning the organization of tourism and sightseeing by state infant schools, schools and institutions (Dz. U. – Official Journal No. 135, item 1516).

B. Domarecka (2008) believes tourism plays invaluable role in the education schoolchildren and youth. Modern teaching and sightseeing have become inextricably tied together enabling further learning through practice. She emphasizes that 'the essence of sightseeing and school tourism consists of emotional experience associated with group engagement in outward bound activities' [5, p. 14]. A. Wartecka-Ważyńska (2007) stresses the cognitive, educational, hygieneand health-related, social and educational aspects of school tourism, which is one of the most attractive pastimes [39]. All these advantages have been frequently included in tourism functions [18, 41], which can be divided into *eufunctions* (positive) and dysfunctions (negative) [1, 32, 33].

Literature on the subject perceives school tourism as a preliminary attempt to prepare young people to pursue tourism as a social phenomenon [11, 40]. R. Kogut and A. Gordon (1999) notice that promotional activities undertaken by Polish tourism organizations and institutions (Towarzystwo Krzewienia Kultury Fizycznej - TKKF -Physical Culture Promotion Association, Polskie Towarzystwo Krajoznawczo-Turystyczne – PTTK - Polish Sightseeing and Tourist Association, Polskie Towarzystwo Schronisk Młodzieżowych -PTSM – Polish Youth Hostels Association, Związek Harcerstwa Polskiego - ZHP - Polish Scouting and Guiding Association) are complementary to the role of the school which inspires and coordinates the educational process [14]. According to R. Winiarski and J. Zdebski (2008) late childhood, also referred to as early school age (7-10 years), is viewed as the preparatory stage of tourist activity development, frequently determining students' future attitudes [40].

School trips have been included in the school curriculum since Poland regained independence in 1918 [11]. The magnitude of tourism among contemporary schoolchildren and youth can be estimated with the use of data from school and tourism organizations [17, 34, 37], which, unfortunately, reveal a declining tendency. However, there have been no representative nationwide research studies into the phenomenon. Thus, any precise estimates regarding the use of the above mentioned options of tourism promotion among school students are hindered.

School curriculum updates introduced in Polish schools in 2009 accentuate the need for a physical education program based on students'

exposure to the natural environment. It is recommended that, on bright days, movement activities should be organized in the school sports pitch and in natural settings². Two extra PE classes per week, the content of which is optional but attendance mandatory, should also comprise some forms of tourism devised to awake pupils' interest in tourism and sightseeing and strive for badges of the qualified tourism achievements programme. A school can offer one or several forms of tourism depending on students' interests and natural conditions, e.g. hiking, cycling or kayak trips [30].

A study of W. Pańczyk (1996) shows unambiguously that an outdoor physical education class increases the intensity of physical effort, necessitates the emergence of spontaneous physical activity forms more than indoor physical education, and improves students' general physical fitness [28]. E. Madejski (1997) analysed the results of a pedagogical experiment where students were able to select from among several outward bound forms of physical education classes, he and arrived at similar conclusions. Step count, physical effort intensity, emotional response, physical fitness, and attitudes towards physical culture were of higher levels as compared with the results of students exercising indoors [19].

The unquestionable advantages of school tourism and outward bound physical education classes help further direct the educational process towards natural settings. This is in accordance with a worldwide trend of providing education in the open, i.e. outdoor education. In the 20th century in the United Kingdom and United States [6, 7, 35], 'adventure education' became an important element of 'outdoor education'. The 'adventure' aspect is most significant for the psychophysical development of participants in such activities [4, 20, 21]. Adventure education also includes school adventure tourism, which can comprise, among others, geology-oriented mountain climbing combined with collection and subsequent filing of interesting minerals [35].

J. Ożdziński (2004) believes that outdoor forms of physical education "allow involvement in existential activities aimed at health enhancement through contact with the environment and ecology"

_

² Resolution of the Ministry of National Education dated 23 December 2008 concerning infant school and general education curricula, *Dziennik Ustaw* (Oficial journal of the Polish Parlament), 15 January 2009 r. no. 4, item 17), Physical Education Curriculum.

[27, p. 65]. Outdoor education can function as a source of valuable biological (air, sun, water) and psychological stimuli which reinforce the outcome of being physically active, and activate natural adaptation mechanisms thereby increasing the body's resistance to temperature, light, and mechanical factors. Thus, coddling and oversensitivity to physical and mental stimuli frequently observed among the youth could be prevented [8, 15, 16, 29]. Unforgettable aesthetic sensations bring about respect for nature and distance to everyday life [22]. Outdoor learning also causes situations which promote education through team activities [31, 35].

Considering the above, the idea of a physical education class being carried out in a sports pitch, park, forest, etc. seems well justified. The same regards the incorporation of various forms of tourism and sightseeing into the school curriculum. which once devised, should comply with the needs and interests of the youth as well as with organizational capabilities and conditions of the area. Detailed schedules should be prepared by form masters [18, 36, 41]. These demands and postulates develop parallel to the concept of outdoor recreation activities [10, 12, 38]. Physical education classes are aimed, among others, to prepare students for future engagement in outward bound recreation. Held in natural settings they also help avoid gym overcrowding, which has been an increasing problem since the introduction of two extra physical education classes per week in the Polish school curriculum.

The aforementioned situation caused us to design a study into school tourism and outward bound physical education classes as the criteria of outdoor education implementation in Polish schools.

The following research questions were formulated:

- 1. Do schools organize trips or events based on the philosophy of active tourism, and what is the proportion of physical education classes held in natural settings?
- 2. What tourism promotion organizations are present in schools?
- 3. What percentage of schools introduces active tourism as an element of extracurricular activities?
- 4. Do school location and type affect the implementation of outdoor education?

Two associated research hypotheses were formulated as well:

- 1. Secondary schools have better organizational capabilities regarding outdoor education as compared with primary schools.
- 2. Schoolchildren from big cities receive an offer to participate in some form of active tourism more frequently.

METHODS

The questions were answered based on the analysis of a diagnostic survey, a part of pilot studies conducted at the turn of 2008 and 2009, the aim of which was to refine the questionnaire 'General offer of the school in the area of extracurricular recreation and sport'. Random school selection was not used as the purpose was mainly to verify the value of the research tool, i.e. the questionnaire. Nevertheless, a large number of respondents as well as the fact that the schools were located in several provinces, over a dozen districts, and several dozen communes do justify some cautious conclusions, and the probability of obtaining similar results in the majority of Polish schools.

The questionnaire consisted of 20 closedended questions and several additional closedended, half-open, and open-ended questions regarding various aspects of extracurricular recreation and sports activities, school tourism as well as opportunities and conditions of being involved in physical activity during school hours. The present report uses the answers to questions concerning active tourism and the location of physical education class. The questionnaire was sent together with a letter of intent to school principals and physical education teachers and contained information about the institution affiliated in the research project, research organization, the way questionnaires should be filled in and anonymous data analysis.

The questionnaire was completed by physical education teachers from 292 Polish schools. The majority of responses, i.e. 173 (59.3%), were returned from primary schools; 72 (24.7%) from middle schools, and 47 (16.1%) from secondary schools (Table 1). The study was approved by the Research Ethics Committee of the Academy of Physical Education in Katowice and each subject gave their informed consent.

Table 1. The number and type of schools

School type (student' age)	n	%
Primary school (11-13 years)	173	59.25
Middle school (13-16 years)	72	24.66
Secondary school (16-19 years)	47	16.10
Total	292	100.00

Seventy-nine schools (27.1%) were located in large cities (over 100.000 inhabitants), 77 (26.4%) in mid-sized cities (25.000 – 100.000), 33 (11.3%) in small towns (up to 25.000), and 103 (35.3%) in villages (Table 2).

Table 2. The number and location of schools

Location	n	%
Large city (>100 thousand inhabitants)	79	27.05
Mid-sized city (25-100 thousand inhabitants)	77	26.37
Small town (< 25 thousand inhabitants)	33	11.30
Village	103	35.27
Total	292	100.00

It was assumed that the school type (primary, middle, secondary) and location (large city, midsized city, small town, village) might influence the scope and forms of school tourism as well as the number of outdoor physical education classes. The aim of the statistical analysis was to clarify to what extent the above specified independent variables were associated with the school's 'outdoor education' offer. Nonparametric Pearson's Chisquare $(\chi 2)$ test, and – in the case of a form with fewer than eight students - the Maximum-Likelihood Chi-square were used in statistical analysis Correlations between the variables and the location of physical education classes were estimated by means of univariate analysis of variance. Statistically significant results nonparametric tests and analysis of variance (p < 0.05) indicated significant correlations between independent (school type and location) and dependent (elements of outdoor education) variables.

RESULTS

The physical education teachers under study confirmed organization of trips and other tourist events within the framework of the active tourism concept in the majority of the schools. The offers turned out to be significantly determined by the school type: different forms of school tourism were more frequent in middle and secondary schools (83.3% and 83.0%, respectively) as compared with primary schools (69.0%). School location did not reveal any associations with outward bound activities (Table 3).

Table 3. Active tourism and school type / location

Variable	n	%	Total				
School type							
Primary school (11-13 years)	119	68.79	173				
Middle school (13-16 years)	60	83.33	72				
Secondary school (16-19 years)	39	82.98	47				
Pearson's $\chi 2 = 7.750$; df=2; p=0.0209*							
School location							
Large city (>100 thousand inhabitants)	61	77.22	79				
Mid-sized city (25-100 thousand inhabitants)	55	71.43	77				
Small town (< 25 thousand inhabitants)	29	87.88	33				
Village	73	70.87	103				
Pearson's χ2=4.526; df=3; p=0.210							
Total	218	74.66	292				

^{*} statistically significant (in all tables)

School tourism was most frequently initiated and organized by the form master, both in the middle (75.0%) and secondary schools (80.1%). As opposed to location, the school type had an effect on the engagement of form masters in this form of activity. Trips and tours were also organized by other teachers including physical education teachers;

however, they were less involved than form masters and neither the type nor location of the school affected tourism promotion by those teachers (Table 4).

The survey showed that only every fourth primary and middle school, and every second secondary school had a school PTTK division (the difference was statistically significant). The association (PTTK) chapters were less often present in village schools. The activities of other associations engaged in tourism promotion and organization, were negligible or non-existent (Table 5).

Tourism was a more frequent component of extracurricular outward bound activities in the middle schools (55.6%) as compared with the primary and secondary schools (40.4%). However, significant differences were brought about not by the type but location of the school; school tourism was more frequently initiated in big cities than in small towns (Table 6).

The implementation of outdoor education in the school is also affected by conducting physical education classes in the natural settings. However, survey data indicate that in 89.7% and 42.8% of the schools the classes were held in the gym and the swimming pool, respectively. Nevertheless, 83.6% of the schools also organized physical education classes on the school sports pitch, and 37.0% in a park/forest/field.

School type and location did not affect the proportion of outdoor physical education classes: 20.3% (primary school) to 23.1% (middle school) of the classes were held on the school sports pitch, whereas only 2.8% of middle school and 3.9% of secondary school PE classes in the park/forest/field. Surprisingly enough, the school sports pitch was least used by small town school students (15.6%), who, however, were more frequently seen in the park/forest/field as compared with their peers from other locations (still only 4.3%). The highest proportion of PE classes on the school sports pitch (23%) were held in villages and large cities, whereas only 2.8% of all large city physical education classes were held in parks, forests, and fields (Table 7).

Table 4. School tourism organizers and school type/location

Variable	Form master		PE teacher		Other teachers		Other persons		Total
variable	n	%	n	%	n	%	n	%	Total
School type									
Primary school (11-13 years)	92	53.18	63	36.42	67	38.73	17	9.83	173
Middle school (13-16 years)	54	75.00	28	38.89	31	43.06	10	13.89	72
Secondary school (16-19 years)	38	80.85	20	42.55	18	38.30	2	4.26	47
	Pearson's χ2=18.034; df=2; p<0.001*		Pearson's χ2=0.622; df=2; p=0.733		Pearson's χ2=0.445; df=2; p=0.800		M-Lχ2=3.248; df=2; p=0.197		
School location									
Large city (>100 thousand inhabitants)	49	62.03	27	34.18	33	41.77	11	13.92	79
Mid-sized city (25-100 thousand inhabitants)	50	64.94	19	24.68	27	35.06	5	6.49	77
Small town (< 25 thousand inhabitants)	24	72.73	18	54.55	16	48.48	1	3.03	33
Village	61	59.22	47	45.63	40	38.83	12	11.65	103
	Pearson's χ2=2.126; df=3; p=0.547		Pearson's χ2=12.671; df=3; p=0.005*		Pearson's χ2=1.928; df=3; p=0.587		M-Lχ2=5.088; df=3; p=0.165		
Total	184	63.01	111	38.00	116	39.73	29	9.93	292

Table 5. Tourism organizations at schools and school type/location

Variable	P	ГТК	TH	KKF	Other		- Total
variable	n	%	n	%	n	%	Total
School type							
Primary school (11-13 years)	42	24.28	9	5.20	17	9.83	173
Middle school (13-16 years)	15	20.83	2	2.78	12	16.67	72
Secondary school (16-19 years)	23	48.94	1	2.13	2	4.26	47
	Pearson's χ2=13.368; df=2; p<0.001*		M-Lχ2=1.415; df=2; p=0.493		M-Lχ2=5.060; df=2; p=0.080		
School location							
Large city (>100 thousand inhabitants)	26	32.91	4	5.06	12	15.19	79
Mid-sized city (25-100 thousand inhabitants)	27	35.06	5	6.49	6	7.79	77
Small town (< 25 thousand inhabitants)	11	33.33	2	6.06	2	6.06	33
Village	16	15.53	1	0.97	11	10.68	103
		Pearson's χ2=11.356; df=3; p=0.010*		M-Lχ2=5.084; df=3; p=0.166		M-Lχ2=3.106; df=3; p=0.376	
Total	80	27.40	12	4.11	31	10.62	292

Table 6. Tourism in extracurricular programme and school type/location

Variable	n	%	Total				
School type							
Primary school	70	40.46	173				
(11-13 years) Middle school			-,-				
(13-16 years)	40	55.56	72				
Secondary school	19	40.43	47				
(16-19 years)							
Pearson's χ2=5.016; df	=2; p=0.081						
School location							
Large city (>100 thousand inhabitants)	44	55.70	79				
Mid-sized city (25-100 thousand inhabitants)	31	40.26	77				
Small town (< 25 thousand inhabitants)	9	27.27	33				
Village	45	43.69	103				
Pearson's χ2=8.564; df=3; p=0.036*							
Total	129	44.18	292				

Table 7. Proportion of physical education classes held in the gym, swimming pool *or* in the open and school type/location

37 : 11		Gym		Swimm	ing pool	Sports	s pitch	Park/for	est/field	
Variable	n	\overline{x}	SD	\overline{x}	SD	\overline{x}	SD	\overline{x}	SD	
School type										
Primary school (11-13 years)	169	57.62	25.84	7.13	11.63	20.25	15.82	3.31	5.40	
Middle school (13-16 years)	65	51.66	22.43	6.18	9.16	23.05	15.93	2.82	4.83	
Secondary school (16-19 years)	46	48.17	26.45	2.39	4.76	22.83	17.07	3.89	5.55	
Analysis of variance		F=3.15; p=0.045*		F=3.87;	F=3.87; p=0.022*		F=0.95; p=0.388		F=0.56; p=0.573	
School location										
Large city (>100 thousand inhbitants) Mid-sized city	71	58.73	24.47	6.46	10.95	23.04	19.57	2.28	3.96	
(25-100 thousand inhabitants) Small town	75	53.57	23.99	6.44	9.85	19.85	13.72	3.52	5.35	
(< 25 thousand inhabitants)	32	43.44	27.54	9.28	13.29	15.63	16.55	4.31	5.79	
Village	102	56.21	25.61	4.69	9.09	23.00	14.42	3.50	5.84	
Analysis of variance		F=2.92; p=0.034*			F=1.71; p=0.166		22; .086	F=1.36; p=0.254		
Total	280	54.68	25.39	6.13	10.36	21.32	16.05	3.29	5.29	

DISCUSSION

The 21st century will be an age of intensive development of tourism programmes for children and adolescents. W. Alejziak (2000) maintains that children and youth are expected to become the group most intensively engaged in tourism as compared with adults and senior citizens [1]. Our study was also carried out to determine whether such a trend was present in Polish schools. The reason for conducting the survey among school teachers was the fact that tourism habits start developing during early school age [41]. The Hague Declaration on Tourism issued in April 1984 by the World Tourism Organization (WTO) emphasized the need to introduce tourism to school As considered vital curriculum. for development of tourist industry and tourism, it was agreed that education in this particular area should start at school. It was also postulated that efficient measures should be undertaken to prepare the society "to travel and tourism, and this mainly through incorporation of tourism in school and university curricula" [1, p. 307].

The obtained survey results indicate that active tourism was organized by a large proportion (74.7%) of schools. Similar results were obtained in a study on the scope and range of school tourism carried out by A. Wartecka-Ważyńska (2007) in high schools and vocational schools of the Wielkopolska Region: 71% of the schools' students participated in organized trips (82.25% of high school students, 55.50% of vocational school students) [40]. However, conclusions based on data published by the Institute of Tourism are less optimistic: 54% of respondents admitted involvement in tourism in 2001, and only 44% in 2005 [18]. According to B. Kaczor (1999), the school fails to meet the expectations as a tourism organizer. which is due to the lack of teachers committed to the promotion and participation in various forms of qualified tourism [14]. Although the official

introduction of two extra PE classes a week does create an opportunity for such activities to be organized, the results of our investigations do not show a widespread interest in the idea.

A. Wartecka-Ważyńska investigated several school types and identified organizations most frequently involved in tourism promotion among schoolchildren in Poland: Physical Culture Promotion Association (TKKF), Polish Sightseeing and Tourist Association (PTTK), Polish Youth Hostels Association (PTSM) and Polish Scouting and Guiding Association (ZHP) [40]. However, only a small proportion of schoolchildren belong to these organizations. B. Kaczor confirms the rather insignificant role of these associations in the promotion of qualified tourism among schoolchildren. The involvement of PTTK, SKKT, and ZHP was mentioned by as few as 8%, 7%, and 5% of respondents, respectively. In the opinion of many students this was caused both by schoolchildren's unfamiliarity with the organizations' offers and their low incentive quality [14, p. 114]. Even fewer schoolchildren (2%) noticed any co-operation between TKKF/PTTK and their school in the 1990s [35, 38]. The data presented herein clearly demonstrate that the situation has not improved throughout the years.

Despite respondents' declaration of a considerable proportion of tourism (44.2%) in their extracurricular recreation and sports activities, the data from the Central Statistical Office concerning the school year 2007/2008 show that only 2% of primary and middle school students, and 1% of secondary school students participated in extracurricular sightseeing and tourism programmes organized by their schools [27]. A slightly higher proportion (4% and 5% of girls and boys, respectively) was noted in the 1990s among middle and secondary school students in five provinces of northwestern Poland [35, 38].

Our own investigations show that less than 25% of physical education classes are held in natural settings (sports pitches, parks, forests or fields), which is highly unsatisfactory. Based on his studies, W. Pańczyk (1999) postulated that a half up to two-thirds of physical education hours per school year should be held outdoors [30]. This is consistent with the long-term goals of the teaching process preparing schoolchildren to willingly engage in physical recreation, which is at present an indispensable element of daily life. Research results indicate that tourism is the most popular form of

physical recreation among the adult population of Poland [26]. It should be emphasized here that the most characteristic present-day trend of the world's recreation is the so-called 'return to nature' [10], which allows location change as opposed to staying within a closed space.

The concept of outdoor education also complies with global trends in physical education [3] aimed at combining motor skills improvement with the concept of health-related fitness [2, 24, 25]. For all the above mentioned reasons, physical activity in natural settings is particularly beneficial to health.

The above observations suggest a need for explicit accentuation of tourism in school curricula, and especially those concerning physical education. The two extra PE classes a week provide a considerable chance of a shift to outdoor physical activities. Pertinent legal issues are currently being discussed by the Polish Parliament, and plans are aimed at facilitating the implementation of school tourism and its functions.

The study results led us to draw the following conclusions:

- 1. School curricula contain both tourism and outward bound physical education classes; however, the proportion of these is too small as compared with the needs of contemporary children and youth.
- 2. The PTTK (Polish Tourist and Sightseeing Association) is the only organization actively promoting tourism at school, but its engagement should become more intensive in primary and middle schools (school type) and village schools (school location).
- 3. Although tourism turned out to be an important component of extracurricular programmes in a large proportion of the schools, school-children's participation in tourism was rather insignificant.

The results of statistical analysis allow a verification of the assumed research hypotheses:

- 1. Secondary schools have a better offer of tourist events as compared with primary schools. However, the school type does not have an effect on the proportion of physical education classes held in natural settings.
- 2. The range of tourism offered by small town and village schools is limited as compared with schools located in large and mid-sized cities.

The results of our pilot study suggest that the research should be continued in order to obtain

more representative data sets from schools all over Poland.

REFERENCES

- [1] Alejziak W., Turystyka w obliczu wyzwań XXI wieku (Tourism and challenges of the 21st century), Albis, Kraków 2000.
- [2] Bouchard C., Shephard R.J., Stephens T., Physical activity, fitness and health: international proceedings and consensus statement, Human Kinetics Publisher, Champaign 1994.
- [3] Crumb B., Conventional thought and practice in physical education problem of teaching and implications of change, *Quest*, 1993, 45: 339-356.
- [4] Csikszentmihalyi M., Przepływ. Psychologia optymalnego doświadczenia (Flow. The Psychology of optimal experience), Moderator, Taszów 2005.
- [5] Domerecka B., Jak organizować szkolną turystykę? (How to organize school tourism?), Municipium S.A., Warszawa 2008.
- [6] Dougherty N., Outdoor recreation safety, Human Kinetics, Leeds 1998.
- [7] Drabik J., Aktywność, sprawność i wydolność fizyczna jako mierniki zdrowia człowieka (Physical activity, fitness and efficiency as measures of human health), AWF, Gdańsk 1997.
- [8] Ferguson N., Imperium. Jak Wielka Brytania zbudowała nowoczesny świat (Empire How Britain Made the Modern World, a Polish translation), Sprawy Polityczne, Warszawa 2007.
- [9] Fredrickson L.M., Andersen D.A., A qualitative exploration of the wilderness experience as a source of spiritual inspiration, *Journal of Environmental Psychology*, 1999, 19: 21-39.
- [10] Hoda B., Dohnal T., Rekreologie, Hanex, Olomouc 2005
- [11] Isański J., Turystyka ekstremalna (Extreme tourism), (in:) J. Grad, K. Manzer, eds, Karnawalizacja. Tendencje ludyczne w kulturze współczesnej (Carnivalisation. Ludic tendencies in contemporary culture). UAM, Poznań 2004: 51-60.
- [12] Janowski I., Krajoznawstwo i turystyka szkolna (Sightseeing and tourism at school), Akademia Świętokrzyska, Kielce 2003.
- [13] Jethon Z., Ekologia człowieka w wychowaniu fizycznym i sporcie (Human ecology in physical education and sport), AWF, Wrocław 1994.
- [14] Kaczor B., Uczestnictwo młodzieży szkolnej w turystyce kwalifikowanej (Schoolchildren and qualified tourism), (in:) T. Łobożewicz, R. Kogut, eds, Turystyka kwalifikowana. Turystyka aktywna

- (Qualified tourism. Active tourism), Druk Tur Sp. z o. o., Warszawa 1999: 109-114.
- [15] Kogut R., Gordon A., Rola szkoły w rozwijaniu turystyki kwalifikowanej i aktywnej. (The role of school in the development of qualified and active tourism), (in:) T. Łobożewicz, R. Kogut, eds, Turystyka kwalifikowana. Turystyka aktywna (Qualified Tourism. Active Tourism), Druk Tur Sp. z o. o., Warszawa 1999: 102-108.
- [16] Kożuchowski J., Walory przyrodnicze w turystyce i rekreacji (Nature and its value in tourism and recreation), Kurpisz, Poznań 2005.
- [17] Kwilecka M., ed., Bezpośrednie funkcje rekreacji (Direct functions of recreation), ALMAMER, Warszawa 2006.
- [18] Łaciak J., Aktywność turystyczna dzieci i młodzieży w 2005 roku (Tourism of children and youth in 2005), Instytut Turystyki, Warszawa 2006.
- [19] Łobożewicz T., ed., Krajoznawstwo i turystyka w szkole (Sightseeing and tourism at school), WSiP, Warszawa 1990.
- [20] Madejski E., Wpływ modernizacji szkolnego systemu wychowania fizycznego na efektywność zajęć oraz postawy uczniów wobec kultury fizycznej. Wyniki naturalnego eksperymentu pedagogicznego (Modernization of the school system of physical education and its impact on lesson effectiveness and schoolchildren's attitudes towards physical culture), AWF, Kraków 1997 (doctoral dissertation).
- [21] Miner J., Bolt J., Outword Bund USA, The Mountaineers Books, Seattle 2002.
- [22] Morlock C., The Adventure Alternative. Cicerone Press, Cumbria 1994.
- [23] Mynarski W., Aktywny styl życia koniecznością i wyzwaniem dla współczesnych pokoleń (Active lifestyle as a necessity and challenge for today's generation), (in:) W. Mynarski, ed., Teoretyczne i empiryczne zagadnienia rekreacji i turystyki (Theoretical and empirical issues of recreation and tourism). AWF, Katowice 2008: 60-83.
- [24] Mynarski W., Czynniki i prognozowane kierunki rozwoju rekreacji fizycznej (Factors and trends in the development of physical recreation), (in:) W. Mynarski, ed., Teoretyczne i empiryczne zagadnienia rekreacji i turystyki (Theoretical and empirical issues of recreation and tourism), AWF, Katowice 2008: 11-31.
- [25] Mynarski W., Tomik R., Koncepcja "sprawności fizycznej ukierunkowanej na zdrowie" jako podstawa edukacji fizycznej (The concept of healthrelated fitness as the basis of physical education).

- Annales Universitatis Mariae Curie-Sklodowska, vol. 58, Lublin 2003: 349-353.
- [26] Ostrowska A., Styl życia a zdrowie (Lifestyle and health), PAN, Warszawa 1999.
- [27] Oświata i wychowanie w roku szkolnym 2007/2008 (Education in the school year 2007/2008), Informacje i opracowania statystyczne GUS, Warszawa 2008.
- [28] Ożdziński J., Szanse i zagrożenia dla rozwoju turystyki szkolnej w XXI wieku (Opportunities and threats to school tourism in the 21st century), (in:) S. Bosiacki, J. Grella, eds, Gospodarka turystyczna w XXI wieku. Szanse i bariery rozwoju w warunkach integracji międzynarodowej (Tourism economy in the 21st century. Opportunities and barriers of development in the context of international integration), AWF, Poznań 2004: 65-70.
- [29] Pańczyk W., Zielona recepta (Out in the Open), UKFiT, Warszawa-Zamość 1996.
- [30] Pańczyk W., Biologiczno-zdrowotne i wychowawcze efekty lekcji wychowania fizycznego w terenie i w Sali (Biological, health-related and educational effects of physical education classes in the open and in the gym), ODN, Zamość 1999.
- [31] Podstawa programowa z komentarzami Tom 8. Wychowanie fizyczne i edukacja dla bezpieczeństwa w szkole podstawowej, gimnazjum i liceum (Physical and safety education in primary school, middle school and high school. Curriculum and explanatory comments. Volume 8). MEN, Warszawa 2008.
- [32] Preist S., Gass M., Effective leadership in adventure programming. Human Kinetics, Leeds 2005.
- [33] Rowiński R., Eufunkcje działalności turystycznej dzieci i młodzieży (Eufunctions of children and youth tourism), (in:) Z. Dziubiński, ed., Humanistyczne aspekty sportu i turystyki (Humanistic aspects of sport and tourism), AWF, SALOS RP, Warszawa 2007.

- [34] Różycki P., Zarys wiedzy o turystyce (Introduction to tourism), Proksenia, Kraków 2006.
- [35] Siwiński W., Czas wolny uczniów od nauki a ich uczestnictwo w zajęciach pozalekcyjnych sportowo-rekreacyjno-turystycznych (Schoolchildren's leisure time and their participation in extracurricular sport, recreation, and tourism), PDW "Ławica", Poznań 1994.
- [36] Sonelski W., Wychowanie przez przygodę (Education through adventure), (in:) W. Mynarski, ed., Teoretyczne i empiryczne zagadnienia rekreacji i turystyki (Theoretical and empirical issues of tourism and recreation). AWF, Katowice 2008: 11-31.
- [37] Strzyżewski S., Wychowanie fizyczne poza salą gimnastyczną (Physical education outside the gym). WSiP, Warszawa 1997.
- [38] Tauber R., Sport, rekreacja i turystyka w opinii badanej młodzieży (Youth opinion regarding sport, recreation, and tourism), WSHiG, Poznań 1996.
- [39] Toczek-Werner S., Trendy obserwowane w rekreacji na świeżym powietrzu (Trends in open-air recreation), (in:) J. Wyrzykowski, K. Klementowski, eds, Współczesne tendencje w turystyce i rekreacji (Present-day trends in tourism and recreation), AWF, Wrocław 2004: 105-112.
- [40] Wartecka-Ważyńska A., Turystyka młodzieży i jej uwarunkowania (Youth tourism and its determinants), UAM, Poznań 2007.
- [41] Winiarski R., Zdebski J., Psychologia turystyki (Psychology of tourism), Wydawnictwa Akademickie i Profesjonalne, Warszawa 2008.
- [42] Wojtycza J., Organizacja turystyki młodzieży szkolnej (Organizing tourism for schoolchildren), Akademia Pedagogiczna, Kraków 2004.
- [43] Przecławski K., Człowiek i turystyka. Zarys socjologii turystyki (Man and tourism. An outline of sociology of tourism), Albis, Kraków 1996.