

## Constraints to Visitor Attractions Attendance

### Obmedzenia návštevnosti atraktivít cestovného ruchu

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*The article addresses constraints to visitor attractions attendance. The analysis employed a three-factor model of constraints, which differentiates intrapersonal, interpersonal and structural constraints. The study was carried out on the sample of 981 adult residents of Poland. Three most common barriers constraining attractions attendance were identified, including availability, high entrance fees and lack of time. The constraints were found to be related to a number of socio-demographic characteristics, such as gender, age, education, size of place of residence and household income per capita. A regression analysis helped to determine the influence of the constraints and socio-demographic characteristics on the level of visitor attractions attendance.*

**Keywords:** Constraints. Visitor attractions.

*Stať sa venuje obmedzeniam návštevnosti atraktivít cestovného ruchu. Analýza využíva troj-faktorový model obmedzenia a rozlišuje intrapersonálne, interpersonálne a štrukturálne obmedzenia. Prieskum zahŕňa 981 dospelých obyvateľov Poľska. Tri najbežnejšie prekážky obmedzujúce návštevnosť atraktivít sa týkajú dostupnosti, vysokého vstupného a nedostatku času. Obmedzenia súvisia s mnohými sociálno-demografickými charakteristikami ako je pohlavie, vek, vzdelanie, veľkosť miesta bydliska a príjem na člena domácnosti. Regresná analýza pomohla určiť vplyv sociálno-demografických charakteristík na úroveň návštevnosti atraktivít cestovného ruchu.*

**Kľúčové slová:** Atraktivita cestovného ruchu. Obmedzenia.

**JEL Classification:** L<sub>83</sub>.

## Introduction

Constraints can be defined as factors that shape people's leisure preference, limit their activity or reduce the level of perceived pleasure and satisfaction (Jackson, 2005). The literature concerning constraints to leisure involvement is quite rich (Crawford, Godey,

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1987; Crawford et al., 1991; Jackson, 2005). However, the problem of tourism activity's especially constraints to visitor attractions attendance is discussed much more rarely. Most studies focus on the frequency of attendance, and there is a lack of empirical research identifying constraints and social activity with regard to visitor attractions attendance. According to Witt (1992), it is of utmost importance that the constraints be studied along with their consequences, that is, the levels of participation. Unfortunately, few studies have been performed so far that take into consideration the two phenomena and their interactions at once.

The purpose of the present study is to establish the level of activity with regard to visitor attractions attendance among Poles, as well as to identify the constraints to this activity and factors determining their occurrence. The secondary aim of the study is to determine and characterize groups (segments) of people showing similar levels of activity and limited by similar constraints.

### 1. Leisure constraints

The most commonly listed leisure constraints include lack of time and money (Jackson, 2005), while the ones most difficult to overcome are thought to be psychological barriers, deeply ingrained in social awareness (Kunicki, 1984).

Out of socio-demographic characteristics, the one most strongly related to leisure involvement and the perception of constraints is gender. This mainly results from the social roles of the man and the woman rather than from their respective physio- or psychological features (Shaw, Henderson, 2005). Females are much more susceptible to leisure inhibitors than males. These mainly include lack of free time, lack of partners, transportation accessibility, family responsibilities, fear of crime, lack of prerequisite skills and lack of self-belief (Witt, Goodale, 1981; Searle, Jackson, 1985; Shaw, Henderson, 2005).

The perception of constraints is also influenced by the individual's phase of life. Depending on what stage the individual is in, new constraints become important, while others recede into the background. Jackson (2005) identified four stages of the change in perceiving constraints in an individual's life. In the course of life, factors related to skills and abilities become increasingly important, while the relevance of costs decreases with age. Engagement in family and professional duties, in turn, increases in middle age and decreases during old age, forming a reversed U-shaped curve. An inverted, U-shaped pattern, describes the perception of interpersonal factors, such as social relations with family members, friends, co-workers and neighbours. The perception of constraints also increases with the augmentation in costs, especially in multi-children households (Jun et al., 2008). The same holds true for perceiving lack of time as a leisure participation constraint.

The hierarchical model of constraints developed by Crawford et al. (Crawford, Godey, 1987; Crawford et al., 1991) proposes three constraint categories: intrapersonal,

interpersonal and structural. Intrapersonal constraints include preferences and predispositions favouring certain types of activities. They emerge as a result of individual needs, socialisation, stress, depression, preferred attitudes and attitudes of the peer group, self-perception of skills and abilities. Interpersonal barriers result from social interactions, relations with friends, family members and other individuals (e.g. one might have difficulty finding a companion for a museum visit). Structural constraints depend on family life-cycle stage, time, flexibility, financial situation and opportunities.

The following conclusions follow from the above-model: the leisure involvement process is sequentially influenced by a number of factors, including constraints. The sequential influence of the constraints results in a hierarchy of their importance. At the initial stage of an individual's development, the constraints influence the formation of leisure preferences. Then, depending on the undertaken leisure activities, interpersonal constraints may occur. Finally, when the two types of constraints have been overcome, structural barriers may emerge, which are intervening factors between leisure preferences and participation.

In the initial phase of the decision-making process, therefore, the individual focuses on preferences and anticipated benefits, but as the moment of final decision draws closer, situational constraints start to play an increasingly important role (Jackson, Searle, 1985; Woodside, Lysonski, 1989).

Constraints to participation are more and more frequently perceived as changeable – that is, a number of people participate in activities despite the existing constraints by employing various strategies to overcome them. Constraints may modify the participation, but they do not prevent it completely. The power of motivation and the perception of benefits that can be gained through an activity are what determines success in overcoming constraints. As a result, the efficient overcoming of constraints leads to an increase in activity involvement (Nadirova, Jackson, 1999).

### 2. Visitor attractions attendance constraints

Constraints to visitor attractions attendance and their influence are not much different from other constraints to leisure involvement. They include lack of time resulting from professional and household responsibilities and lack of energy after work, lack of money and low general morale, lack of similar habits and needs in free time, competition from other forms of leisure, lack of transportation (no own car or poor public transport), costs of transport, negative perceptions of historic sites as "ruins" or "always the same" and only for tourists (Davies, Prentice, 1995). Tian et al. (1996) studied a group of people who did not attend the Galveston Museum (USA) and identified six factors inhibiting museum-goers from visiting museum attractions: cost, time, access, programme, repetition and interest.

Jun et al. (2008), when studying persons who did not visit museums despite being interested in it, found that certain socio-demographic features are correlated with certain types of constraints. Income is correlated with intrapersonal and structural barriers. Age,

sex and the number of children in the household significantly influenced interpersonal constraints. The perception of museum attendance constraints is a function of both main socio-demographic features and the interaction between them. The perception of intrapersonal constraints, for instance, varies between genders, depending on the number of children in the household. Moreover, the place of residence "filters", as it were, the influence of socio-demographic features.

In the case of museum attendance, the constraint of distance or lack of transportation may be especially relevant to those who live outside of urban centres, where no institutions of this type exist. Similar to communication difficulties are problems related to finding companionship, health issues and limitations in the choice of various activity forms (visitor attractions of various type) (Searle, Jackson, 1985; McCarville, Smale, 1993).

Authors agree that if there is knowledge about the existence of an attraction, the decision about visiting it is a compromise between the perception of benefits that can be gained by the visit and the cost necessary to overcome constraints involved in the visit (Woodside, Lysonski, 1989; Um, Crompton, 1992; Tian et al., 1996). Constraint perception is also influenced by the number of alternative options available in the free time, which are selected on the basis of barriers related to finances, time and other factors.

Visiting attractions, and especially museums, results from the daily routine schedule, which is a reflection of individual leisure style. According to the expectancy-value theory by Fishbein and Ajzen (1995), behaviours depend on the predicted benefit gained through performing these behaviours. Consequently, leisure activities result from the perception of attributes which can satisfy leisure needs. Leisure plans differ depending on status, visits, upbringing and the perception of benefits received by visiting an attraction. Hood (1983) found that people whose leisure patterns did not include visitor attractions attendance showed willingness to spend time with others (a desire to experience social interactions) and wished for active participation and a sense of comfort. Such individuals perceive museums as formal, scary and inaccessible places, which limit both social interaction and active participation. Museum-goers, in turn, point out the possibility of learning new things, encounter new experiences and use their spare time in a valuable manner. They had been used to such behaviours since early childhood.

The model of activity constraints related to visitor attractions attendance proposed by Davies and Prentice (1995) comprises three factors (stages): motivations, barriers and actual behaviours. The first stage includes the formation of motivation to undertake an activity. This motivation can be either positive or negative. The second stage of the process includes existing constraints, objective or imaginary, and a way of reacting to them. The third stage includes actual behaviours, that is, the activity regarding attraction attendance (or lack of such activity). According to the model, four types of behaviour may occur. The first type is found in positively motivated individuals, who nevertheless refrain from visiting attractions because of the barriers they cannot overcome. The second type of behaviours is typical of individuals who experience no constraints, but do not visit attractions because of negative motivation. The third type of behaviours

occurs in negatively motivated individuals who, additionally, experience insurmountable constraints. Finally, the fourth type of behaviours is found in those who have a negative motivation, but experience no activity constraints. These individuals do attend visitor attractions, albeit irregularly. Naturally, there is a whole range of behaviours in between these distinctive types, stimulated by more or less motivation to visits and inhibited, to a greater or lesser extent, by diverse constraints.

### 3. Methodology

Data for the study were collected through the Omnibus survey conducted by the Centre for Public Opinion Research Foundation (*Fundacja Centrum Badania Opinii Społecznej*) between 30 November 2009 to 8 October 2010 on a representative random sample of 981 adult Polish residents. The sample had been drawn from the Common Electronic System of Population Register (*Powszechny Elektroniczny System Ewidencji Ludności – PESEL*). Interviews were carried out face-to-face with the use of CAPI (Computer Assisted Personal Interviewing). Survey questions covered a wide range of socio-political issues. Some of them concerned activity and constraints related to visitor attractions attendance. The first question was, "How often do you visit a museum, a zoo or a botanical garden?" The possible answers included: *once or several times a month, once or several times a year, less often, never* and *difficult to say*. The question related to activity constraints was as follows: "What is the reason that you never, or hardly ever, visit a museum, a zoo or a botanical garden?" Respondents were asked to point out any of the 13 constraints, which comprised three constraint factors: intrapersonal constraints (*I prefer other activities, I am not interested, personal reasons (health, security), lack of time (I am too busy), I do not feel fine there (I cannot understand, I feel bored, Unintelligible exhibitions)*), interpersonal constraints (*lack of companionship, because of children*) and structural constraints (*lack of nearby attractions, poor communication, entrance fees too expensive, always the same things to see, uninteresting expositions*).

Several statistical methods were employed in data analysis. The first step involved the calculation of score averages for individual constraint types. Then averages and standard deviations were calculated for each of the three constraint factors: intrapersonal, interpersonal and structural, as well as for the activity level. The next step involved analysis of variation (ANOVA), employed to determine which socio-demographic features correlated with the constraints and the level of activity.

In the next step, cluster analysis was performed with a view to dividing the sampled group into homogeneous segments based on similar perceptions of activity constraints.

### 4. Sample characteristics

The studied sample comprised 47.6 % females and 52.4 % males (table 1). The largest group was that of the oldest respondents, aged 45-54, 55-64 and older than 64 – 18 % in

each group, while the least numerous groups included the youngest individuals, aged 25-34 – 14.6 % and 18-24 – 13.6 %. Only 25 % of the respondents had a primary education, another 25 % had basic vocational education, 33 % had secondary education, and 15 % had higher education. Most respondents lived in the countryside (37.6 %), while 19.9 % lived in towns and cities with a population of 20,000 to 100,000. Only 12.7 % lived in the largest cities, which made them the least numerous group. The largest group with regard to income included individuals whose household income per capita fell within the range of 751–1000 PLN.

Table 1: Profiles of the respondents (N = 981)

Demographic characteristics	N	%
Gender		
Female	467	47.58
Male	514	52.42
Age		
18-24	133	13.55
25-34	171	17.44
35-44	143	14.58
45-54	177	18.06
55-64	177	18.08
65+	179	18.29
Education		
Primary	248	25.3
Vocational	252	25.7
Secondary	331	33.7
College or university	150	15.3
Residence		
Countryside	369	37.61
Town < 20'000	137	13.92
20'000-100'000	196	19.97
101'000-500'000	155	15.8
501'000 and more	125	12.7
Household income per capita		
<500 PLN	152	15.47
501-750 PLN	149	15.21
751-1000 PLN	203	20.73
1001-1500 PLN	156	15.91
1500 PLN and more	141	14.4

Source: Own elaboration.

## 5. Results

The analysis of the results obtained from the study demonstrated that the respondents' activity regarding visitor attractions attendance is extremely low. Almost half of the sample (44.6 %) visit no attractions whatsoever, whereas 28.1 % visit them less than once

a year (table 2). This means that almost ¼ of the adult Polish population show no activity in this regard. Only 26.9 % claim to attend visitor attractions on a fairly regular basis (once a year or more).

Table 2: Level of activity regarding visitor attractions attendance

How often do you visit a museum, a zoo or a botanical garden?	N	%
Once or several times a month	32	3
Once or several times a year	254	23.9
Less often	276	28.1
Never	414	44.6
Difficult to say	5	0.5
Sum	981	100

Source: Own elaboration.

The analysis of the answers to the question *What is the reason that you never, or hardly ever, visit a museum, a zoo or a botanical garden?* demonstrated that the most common attendance constraint was lack of nearby attractions (for 46 % of the respondents) and lack of time (32.3 %) (table 3), followed by poor (difficult) communication (23.0 %), expensive entrance fees (22.2 %), preference of other leisure activities (20.2 %) and lack of interest (14 %). The remaining constraints were pointed out by less than 10 % of the respondents.

Table 3: Constraints to visitor attractions attendance

What is the reason that you never, or hardly ever, visit a museum, a zoo or a botanical garden?	N	%	Mean	Standard deviation
<i>Intrapersonal constraints</i>			0.736	0.71
I am not interested	122	14.4		
I am too busy	304	32.32		
I prefer other activities	191	20.2		
Personal reasons (health, security)	88	9.26		
Unintelligible exhibitions	9	1.07		
I do not feel fine there (I cannot understand, I feel bored)	8	0.9		
<i>Interpersonal constraints</i>			0.04	0.197
Lack of companionship,	30	3.44		
Because of children	10	1.11		
<i>Structural constraints</i>			0.939	0.873
Lack of nearby attractions	435	46		
Poor communication	222	23.05		
Entrance fees too expensive	200	22.21		
Always the same things to see	49	5.07		
Uninteresting expositions	15	1.39		
Difficult to say	22	1.85		
No response	5	0.08		

Source: Own elaboration.

Values for individual constraint factors were then calculated. The intrapersonal constraints factor included eight constraints, the interpersonal constraints factor included two, and the structural constraints factor included five (table 3). Since every constraint scored using the 0-1 scale, scores for each factor were calculated by adding up scores for individual constraints. Although the intrapersonal constraints factor comprised as many as eight constraints, the highest value was noted for the structural constraint factor ( $M = 0.94$ ), followed by the intrapersonal constraint factor ( $M = 0.74$ ) and interpersonal constraint factor ( $M = 0.04$ ). This means that structural constraints were the most common barriers to visitor attractions attendance in the studied group.

## 6. Constraints, activity and socio-demographic features

Variation in the activity levels with respect to socio-demographic features was studied with a single-factor analysis of variance (ANOVA). A feature which strongly diversifies the level of constraints and activity is gender. Female are more prone to intrapersonal constraints than males ( $F = 13.31$ ;  $p < 0.001$ ) (table 4). However, men distinctively more often reported the other constraints (interpersonal and structural). Even so, visitor attractions attendance activity of males is still higher than of females ( $F = 5.96$ ;  $p = 0.015$ ). The highest level of activity is observed in respondents aged 35-44, but the age group 25-34 follows closely. Individuals younger than 25 and older than 44 display a significantly lower activity level. Age groups are only differentiated with regard to intrapersonal constraints ( $F = 4.28$ ;  $p = 0.001$ ). This relationship follows a U-shaped curve: the lowest level of intrapersonal constraints among middle-aged respondents (aged 35-44) and the lowest level among the youngest (18-24) and the oldest ones (aged 65 and more).

The relationship between the level of education and the level of activity is directly proportional: the lowest activity can be observed within respondents with primary education. Activity rises with the increase of education level, reaching its peak among individuals with higher education. The education level only influences the perception of structural barriers: they are inversely proportional to education, and decrease with the increase of education ( $F = 7.08$ ;  $p < 0.001$ ). The level of activity is closely related to the size of the respondents' place of residence: the lowest values are found within respondents from rural areas and the highest in residents of large cities. This mainly results from the perception of structural constraints, which score, on the average, twice as often in countryside residents than in large-city dwellers. The relationship of the size of the place of residence to intrapersonal and interpersonal constraints shows a reversed pattern: their level rises correlated with the increase in the size of the place of residence. Similar relationships were found for activity levels: the level of activity rises with the increase in the level of income ( $F = 17.81$ ;  $p < 0.001$ ), while the level of structural constraints goes down ( $F = 8.72$ ;  $p < 0.001$ ). Intrapersonal constraints level, in turn, rises with the increase in the level of income ( $F = 5.70$ ;  $p = 0.0015$ ).

Table 4: Analysis of variation - statistics for Constraints

Feature	Intrapersonal constraints	Interpersonal constraints	Structural constraints	Activity level
Gender				
Female	0.829	0.023	0.859	1.812
Male	0.663	0.055	1.002	1.954
ANOVA	$F=13.31$ ; $df=1$ ; $p<0.001$	$F=-6.15$ ; $df=1$ ; $p=0.013$	$F=6.53$ ; $df=1$ ; $p=0.006$	$F=5.96$ ; $df=1$ ; $p=0.015$
Age				
18-24	0.912	0.045	0.882	1.742
25-34	0.832	0.065	0.968	2.212
35-44	0.578	0.02	0.947	2.243
45-54	0.699	0.033	0.962	1.759
55-64	0.681	0.039	0.971	1.715
65+	0.774	0.04	0.809	1.742
ANOVA	$F=4.28$ ; $df=4$ ; $p=0.001$	$F=1.10$ ; $df=4$ ; $p=0.35$	$F=0.45$ ; $df=4$ ; $p=0.77$	$F=16.42$ ; $df=4$ ; $p<0.001$
Education				
Primary	0.626	0.047	1.111	1.3
Vocational	0.78	0.038	1	1.563
Secondary	0.727	0.04	0.929	2.036
College or univ.	0.803	0.039	0.724	2.576
ANOVA	$F=2.43$ ; $df=3$ ; $p=0.06$	$F=0.09$ ; $df=3$ ; $p=0.96$	$F=7.08$ ; $df=3$ ; $p<0.001$	$F=103.84$ ; $df=3$ ; $p<0.001$
Residence				
Countryside	0.729	0.021	1.089	1.626
Town < 20'000	0.588	0.029	1.169	1.647
20'000-100'000	0.605	0.049	0.919	1.935
101'000-500'000	0.867	0.057	0.734	2.202
501'000 and more	0.951	0.082	0.508	2.524
ANOVA	$F=7.36$ ; $df=4$ ; $p<0.0001$	$F=2.73$ ; $df=4$ ; $p=0.027$	$F=15.71$ ; $df=4$ ; $p<0.001$	$F=34.38$ ; $df=4$ ; $p<0.001$
Household income per capita				
<500 PLN	0.55	0.05	1.15	1.521
501-750 PLN	0.593	0.037	1.193	1.622
751-1000 PLN	0.802	0.046	0.888	1.796
1001-1500 PLN	0.779	0.031	0.975	2.012
1500 PLN and more	0.854	0.043	0.683	2.341
ANOVA	$F=5.70$ ; $df=4$ ; $p=0.0015$	$F=0.22$ ; $df=4$ ; $p=0.92$	$F=8.72$ ; $df=4$ ; $p<0.001$	$F=17.81$ ; $df=5$ ; $p<0.001$

Source: Own elaboration.

## 7. Regression analysis

In order to assess which constraints and socio-demographic features have the strongest correlation with visitor attractions attendance, a multiple regression analysis was performed, with the level of attendance activity as the dependent variable and five socio-demographic features (gender, age, size of the place of residence, education and income per capita), along with the three constraints factors, as independent variables.

Table 5: Results of the regression analysis

	Beta	B	Std. Error	t(972)	p-level
Constant		1.174	0.135	8.694	0.001
Gender	0.046	0.085	0.049	1.74	0.082
Age	-0.238	-0.132	0.016	-8.459	0.001
Residence	0.218	0.136	0.018	7.541	0.001
Education	0.326	0.289	0.027	10.806	0.001
Household income per capita	0.081	0.042	0.015	2.904	0.004
Intrapersonal constraints	-0.101	-0.129	0.035	-3.661	0.001
Interpersonal constraints	-0.003	-0.015	0.122	-0.126	0.9
Structural constraints	-0.017	-0.018	0.029	-0.608	0.543

Source: Own elaboration.

Table 5 presents the results of the regression analysis. The resulting model explained 33 % of the variation in the variation of the change of activity level ( $F = 60.61$ ;  $p < 0.001$ ). The strongest correlation with the level of activity was observed for education ( $\beta = 0.33$ ;  $p = 0.001$ ), size of the place of residence ( $\beta = 0.22$ ;  $p = 0.01$ ) and household income per capita ( $\beta = 0.08$ ;  $p = 0.004$ ). The model also showed two inverse relationships: the level of activity decreases with age ( $\beta = -0.24$ ;  $p = 0.001$ ) and increases with the decrease in intrapersonal constraints ( $\beta = -0.10$ ;  $p = 0.001$ ). According to the resulting model, the other two constraints factors are irrelevant for the activity level.

## 8. Cluster analysis

The next step involved cluster analysis, performed with the consecutive use of two methods. First, hierarchical cluster analysis was carried out in order to identify the optimal number of clusters which should be assumed in a k-means cluster analysis. As the next step, k-means cluster analysis was performed<sup>1</sup> with a three-cluster variant being treated as the optimal one. In both cases, constraint factors and the level of visitor attractions attendance activity were used as the segmentation criteria. The second analysis employed the algorithm of grouping cases, sorting distances and taking observations at constant intervals. The aim was to divide cases (respondents) into a definite number of clusters that would be maximally different from each other with respect to constraint perception, as well as to visitor attractions attendance activity.

By analysing two-, three- and four-cluster variants, the three-cluster variant was selected as the optimal one (table 6). Selection criteria used were the results of variation analysis (comparison of average measures for selected variables between clusters) and Euclidean distances between them, as well as the clarity of the variant and the ease of its interpretation.

<sup>1</sup> An algorithm to assign K centers to represent the clustering of N points ( $K < N$ ). The points are iteratively adjusted (starting with a random sample of the N points) so that each of the N points is assigned to one of the K clusters, and each of the K clusters is the mean of its assigned points (Bishop, 1995, cited in StatSoft, Inc., 2001).

The first cluster comprised 365 individuals (37.2 % of the respondents). They show a relatively low level of visitor attractions attendance activity ( $M = 1.39$ ) and the highest level of intrapersonal constraints (1.19) (with the sample average of 0.74). The level of interpersonal constraint is average (0.05), and the level of structural barriers significantly lower than the average (0.35).

The second cluster, comprising 341 individuals (34.7 %), is also characterised by a low (lower than the average) activity level ( $M = 1.43$ ). Intrapersonal and interpersonal constraints are at a very low level (0.28 and 0.02, respectively), while structural constraints reach an extremely high level (1.73).

The third cluster was the least numerous and comprises 275 individuals (28.0 %), who showed the lowest visitor attractions attendance activity in the studied sample ( $M = 3.12$ ). The level of intrapersonal and structural constraints is average (0.70 and 0.73, respectively), while the level of interpersonal constraints is the highest in the sample (0.06).

The above mentioned characteristics show that each of the identified clusters is dominated by one of the constraint factors: the first one by intrapersonal constraints, the second by structural constraints and the third by interpersonal constraints. The high activity level in the third segment, coupled with the high level of interpersonal constraints, suggests that the interpersonal constraint factor may exert the weakest influence on visitor attractions attendance activity.

Table 6: Cluster analysis results

Factor	Cluster 1 (n=365; 37.3 %)	Cluster 2 (n=341; 34.7 %)	Cluster 3 (n=275; 28.0 %)	Mean
Activity level	1.395	1.437	3.116	1.892
Intrapersonal constraints	1.192	-0.276	0.702	0.736
Interpersonal constraints	0.047	-0.021	0.058	0.041
Structural constraints	-0.351	1.739	0.727	0.939

Source: Own elaboration.

In the next step of the analysis, the clusters obtained in the study were characterised by using socio-demographic features of the studied individuals. Analysis of inter-group differences with Pearson's Chi-square test demonstrated a significant differentiation between the clusters with respect to socio-demographic features (table 7).

The first cluster, comprising individuals limited by intrapersonal constraints, is dominated by females (53 %). There was a significantly lower number of respondents aged 35-44 (10.1 %) and a significantly higher number of individuals aged 65 and more (25.5 %). Compared to the sample average, the cluster included significantly more respondents with vocational education (29.3 %), while those with higher education were under-represented (13.7 %). The place of residence of respondents from the first cluster does not differentiate them from the studied sample. The cluster is dominated by individuals with average income: it includes significantly more individuals whose household income per capita falls within the ranges of 701-1000 PLN and less than 500 PLN.



The second cluster, mainly limited by structural constraints, is dominated by males (61.9 %) and individuals with the lowest education: 28.7 % with primary and 28.2 % with basic vocational education. Almost half of the respondents in this cluster live in the countryside (49.6 %), while 18,5 % live in small towns with a population of up to 20,000.

Table 7: Cluster characteristics based on socio-demographic features

	Cluster 1 (n=365)	Cluster 2 (n=341)	Cluster 3 -275	Mean
Gender				
Female	52,88	38,12	39,64	44,04
Male	47,12	61,88	60,36	55,96
Pearson Chi-square test	$\chi^2 = 18,5733; df=2, p<0,001$			
Age				
18-24	9,86	9,09	17,09	11,62
25-34	13,97	12,61	22,18	15,8
35-44	-10,14	14,96	23,27	15,49
45-54	19,73	21,99	-13,09	18,65
55-64	20,82	23,75	17,09	20,8
65+	25,48	17,6	-7,27	17,64
Pearson Chi-square test	$\chi^2 = 77,1063; df=10, p<0,001$			
Education				
Primary	20,82	28,74	-5,82	19,37
Vocational	29,32	28,15	-12	24,06
Secondary	36,16	34,9	36,73	35,88
College or univ.	-13,7	-8,21	45,45	20,69
Pearson Chi-square test	$\chi^2 = 181,057; df=6, p=0,00000$			
Residence				
Countryside	40	49,56	-23,64	38,74
Town < 20'000	12,88	18,48	9,45	13,86
20'000-100'000	18,08	19,65	18,91	18,86
101'000-500'000	16,99	-9,09	23,64	16,11
501'000 and more	12,05	-3,23	24,36	12,44
Pearson Chi-square test	$\chi^2 = 111,263; df=8, p<0,001$			
Household income per capita				
<500 PLN	-13,99	27,43	-9,17	17,52
501-750 PLN	16,04	24,65	-7,8	16,9
751-1000 PLN	30,72	-19,79	22,94	24,66
1001-1500 PLN	19,11	19,44	23,39	20,4
1500 PLN and more	20,14	-8,68	36,7	20,53
Pearson Chi-square test	$\chi^2 = 104,15; df=8, p<0,001$			

Source: Own elaboration.

The third cluster includes the most active individuals, limited primarily by interpersonal constraints. It is dominated by females (60.4 %) and young persons (39 % of the group is aged up to 34 and 62.4 % are aged up to 44). Almost half of the group has higher education (45.5 %) and comes from large cities (24.4 % live in cities with a population of 501,000 or more and 23.6 % live in cities with a population of 101.000-500.000). This group includes the largest number of individuals with the highest income – they comprise 36.7 % of the cluster.

## Conclusions

The aim of the study was to identify the level of visitor attractions attendance activity, determine activity constraints and identify the features determining their occurrence.

The level of activity of Poles as measured in the study is extremely low: only ¼ of the respondents reported fairly regular attendance (at least once a year) of attractions of various types. However, this level is higher than the one assessed in a previous study conducted in 2000 by OBOP (16 % of the respondents reported visiting a museum at least once a year). Yet the 2000<sup>th</sup> year study only investigated museum visits, which explains the significantly lower level of activity. However, the obtained data do not significantly differ from other European countries. Similar activity levels have been found in the United Kingdom, with 28 to 37 % of the British visiting museums and 25 to 36 % visiting zoological or botanical gardens and parks (Davies, 2005). Interestingly, Lin (2006) found, in a study among citizens of Taipei (Taiwan), that as much as 67.7 % of the respondents attended a museum at least once a year.

The most common constraints reported by the respondents were lack of nearby attractions, lack of time, poor communication and high entrance fees. These barriers do not significantly differ from those pointed out in other studies on leisure activity (Godbey, 1985; Jackson, 2005; McGuire, 1984; Jun et al., 2008). This may result from the so-called constraint generalisation (McCarville, Smaie, 1993; Mannell, Iwasaki, 2005): people generalise constraints influencing one type of leisure into other types. Those who live their lives in a hurry, who feel they lack time to engage into any leisure activity, will feel lack of time regardless of the current needs, the type of activity and arising opportunities.

By analysing the dependence of activity constraints on socio-demographic features, it was observed that all the studied features showed relationships with activity levels. There is a strong relationship of gender (men experience constraints more often), level of education, size of the place of residence and household income per capita to intrapersonal constraints. Similar relationships have been found by (Jackson, Henderson, 1995; Scott, Munson, 1994). The level of structural constraints decreases with the increase in income, but, surprisingly, at the same time the level of intrapersonal constraints increases. The same pattern can be observed for education and the size of the place of residence. Changes in activity levels also correspond to the life cycle, the level of intrapersonal constraints follows a U-shaped curve.

In order to investigate the total influence of all the constraints simultaneously, as Jackson and Henderson (1995) and Scott and Jackson (1996) had previously suggested, a multiple regression analysis was performed. The strongest correlation with activity levels was found for education, size of the place of residence and income. Although the latter constraint has been often listed by other researchers in the context of leisure activity, (McCarville, Smaie, 1993; Searle, Jackson, 1985; Scott, Munson, 1994), education level and size of the place of residence are factors which influence the level of visitor attractions attendance activity in an especially intensive way.

The market segmentation performed in the course of this study may prove a useful tool in visitor attractions marketing, as it helped identify real and potential customers limited by similar constraints. The knowledge of these segments allows tourist attraction managers to develop diversified strategies targeted at specific market segments. The analysis demonstrated that three segments can be identified: the group of active individuals, the group limited by intrapersonal constraints and the group limited by structural constraints.

The active segment comprises relatively young and well-educated individuals living in large cities and having high income. Their activity is above average thanks to their mobility, and constraints such as entrance fees do not limit them in any significant way. This segment can be targeted with more demanding and ambitious offer. It includes potential customers of such institutions as museums and art galleries.

The other two segments include individuals displaying low activity levels and experiencing a number of constraints, especially intrapersonal and structural.

The segment of intrapersonal constraints mainly includes individuals who show no interest in visiting attractions and are limited by lack of time (whether real or imaginary). This segment is mainly comprised of the oldest persons, having basic education and average income. They could be the target market for such attractions as amusement parks, modern interactive centres, visitors' centres and theme parks. These are attractions which appeal even to a less demanding public, which offer many experiences and can arouse interest even in unprepared persons.

The segment of structural constraints includes individuals primarily limited by availability (no nearby attractions or poor communication) and high entrance fees. These are mainly the poorest educated individuals, living in the countryside or small towns and having the lowest household income. It is extremely difficult to encourage them to visit attractions. They can be potential customers of fairs and events held in small towns and villages, preferably admission free, events in regional museums or community centres. Since these individuals do not experience severe intrapersonal constraints (so they are interested in visiting), they can be potential partners for small, regional institutions implementing community activity strategies (Kotler, Kotler, 1998, 2001).

Further research of visitor attractions market should take into account the intensity of individual constraints (for instance by measuring them with a multi-point Likert scale) and preferences related to various types of attractions, such as museums, amusement and theme parks, zoological and botanical gardens, fairs, events, etc. The model of visitor attractions attendance activity should, apart from preferences, activity and constraints, also cover motivations and benefits gained through visiting specific types of visitor attractions. Analysis of a model including the above mentioned variables could be performed with the use of structural equation modelling.

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## SPRIEVODCOVSKÁ ČINNOSŤ V CESTOVNOM RUCHU V POLSKU *Turist Guide Activity in Poland*

### 1. Z histórie sprievodcovskej činnosti

Už pred viac ako 2400 rokmi sa grécky filozof Ksenofont zamýšľal nad organizovaním služieb pre vtedajšieho cestovateľa. Navštevovanie neznámych miest sa už vtedy spájalo s potrebou písomnej alebo ústnej informácie.

Dácky Simplicissimus spomína vodcu (sprievodcu), ktorý v roku 1683 viedol uhorského študenta na vrchol Kežmarského štítu a používal lano.

Vo Švajčiarsku sa stalo sprievodcovstvo súčasťou organizačných štruktúr v polovici 19. storočia, keď kantonálna vláda v Berne v roku 1856 prevzala nad sprievodcovstvom štátny dohľad.

Prvý organizovaný výlet pre 570 účastníkov vlakom z Leicesteru do Loughborough usporiadal Thomas Cook (1808 – 1892). Pokladá sa za zakladateľa prvej modernej cestovnej kancelárie.

Začiatkom 20. storočia si sprievodcovská činnosť upevnila svoje postavenie v ponuke cestovných kancelárií a sčasti sa profesionali-zovala.

V Poľsku vznikla v roku 1873 Tatranská spoločnosť (Towarzystwo Tatrańskie), ktoré v roku 1875 vytvorilo oddelenie sprievodcovskej činnosti a dodnes ju zabezpečuje v Tatrách. Vydáva služobné (pracovné) knižky, klasifikuje sprievodcov do skupín, (určňuje) ceny a udeľuje odznak sprievodcu.

Za začiatok profesionálnej sprievodcovskej činnosti sa pokladá organizovanie prvého kurzu sprievodcov po meste Krakov v roku 1902 Spoločnosťou milovníkov histórie a pamiatok Krakova (Towarzystwo Miłośników Historii i Zabytków Krakowa).

### 2. Modely sprievodcovskej činnosti v krajinách Európskej únie

V Európskej únii existujú tri modely prípravy a činnosti sprievodcov cestovného ruchu.

Prvý model sa opiera o reštriktívne predpisy, podľa ktorých musia mať osoby poskytujúce sprievodcovské služby povolenie štátnych úradov. Vykonávanie sprievodcovskej činnosti bez povolenia je nelegálne. Tento model platí vo väčšine európskych štátov, medzi nimi aj v Poľsku. V poľskom zákone je sprievodca cestovného ruchu zaradený do skupiny regulovaných povolání.

Druhý model predpokladá kvalifikáciu pre sprievodcovské služby po určitých miestach – najčastejšie ide o múzeá alebo historické objekty. Takéto licencie sa vydávajú na základe štátnej skúšky, skúšky pred organizátorom kurzu alebo pred riaditeľom daného objektu. Takýto model existuje vo Francúzsku a Spojenom kráľovstve.

Tretí model je charakteristický pre slobodný trh, kde existuje sloboda pri poskytovaní služieb. Sprievodcovská činnosť v cestovnom ruchu nie je upravená zákonom, nevyžaduje sa získanie licencie ani vykonanie skúšky. Existujú však asociácie sprievodcov na báze dobrovoľného členstva, ktoré organizujú kurzy, tvoria normy, poskytujú odbornú pomoc svojim členom. Takýto model sa uplatňuje napr. v Holandsku a Nemecku.

Starostlivosť o zákazníka v cestovnom ruchu upravuje európska norma EN 13809:2003, časť 2.3 Podpora. Vzdelávanie a kvalifikáciu sprievodcov cestovného ruchu upravuje európska norma EN 15565 Služby cestovného ruchu – požiadavky na profesionálnu prípravu a kvalifikačné programy sprievodcov cestovného ruchu. Táto norma hovorí o minimálnych požiadavkách, ktoré po schválení nadobúdajú status národnej normy. Príprava má trvať minimálne 600 hodín, z toho 40 % má tvoriť praktic-