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VISITORS' PERCEPTION OF THE BISKUPIN ARCHAEOLOGICAL FESTIVAL

Key words: visitor attraction, segmentation, exhibitions, archaeological festival.

ABSTRACT

The aim of the research was to evaluate the perception of the exhibition and use of sources of information by the visitors to the 10th Archaeological Festival at Biskupin. 462 people completed the questionnaire. Segmentation of visitors was based on the perception of the exhibition and sources of information. As a result four segments of the visitors were established: *avoiding* (29% of the visitors), *studying* (25%), *average* (28%) and *tourists* (18%). The groups were characterized by socio-demographic variables as well as by other traits. A list of recommendations concerning improvements to the exhibition and the quality of services offered on site were formulated in the conclusions.

INTRODUCTION

Studies concerning perception of exhibitions and forms of heritage interpretation by visitors to tourist attractions are aimed at improvement of the quality of tourist products. Various studies of tourist perception are directly connected with improving the quality of experiences, satisfaction as well as behavioral intentions which are features of key significance in achieving market success by tourist sites.

A wide range of clues on more efficient ways of heritage interpretation can be found in professional literature. Tilden [12] formulated ten rules of interpretation which are constantly being supplemented and extended along with the development of modern interpretation techniques [1, 3, 5].

Numerous correlations between exhibition features and their perception by the visitors have been successfully recognized. It has been discovered that visitors pay more attention to more

dynamic and live exhibitions. Exhibitions containing text only are far less attractive than those with text, photos, models and exhibits. Visitors also prefer exhibition scenarios showing the cause and effect and "a piece of a greater whole". Furthermore, visitors' attention is attracted by interactive computer devices, and audio-player guides are much more popular than interpretation panels or the exhibits themselves. A crucial role in drawing the visitors' attention is played by novel and dynamic presentations, which require less effort from visitors as compared with reading texts. Tourists' attention is also drawn to the content based on sequential presentations of events stimulating visitors' imagination [2, 6, 8, 10, 11].

Models of efficient on-site learning from tourist attractions have also been constructed. A model of mindful visitor by Moscardo [7] postulated that visitors' attentiveness, knowledge and satisfaction are influenced both by elements of the attractions and visitors themselves. The elements of

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tourist attractions that should be seriously re-considered are traditional, motionless and static exhibitions and the media, which do not allow visitors to easily acquire the displayed information. On the other hand, visitors' attention is increased by the diversity of the used media. Multi-sensory exhibitions are more attractive. They are characterized by extraordinary physical qualities, whose content refers to visitors' life and is emotionally moving, and use new types of media, and arrangements of extraordinary or unexpected events. Understanding is also enhanced by questions used to cause controversy or affecting one's ambition. The visitors' attention is also increased by dynamic, live exhibitions enabling direct contact with the object or subject, or by exhibitions structured to underline the interpreted theme. Hein's constructivist model [4] states that the most valuable exhibitions are the ones that have multiple entrance points, have no scheduled route of sightseeing, no beginning or end, offer numerous opportunities of active learning and a number of approaches to the interpreted problem and allow the understanding of the exhibition through various activities and events involving visitors' own experiences, providing a chance to experiment, formulate ideas and come to conclusions of one's own.

The aim of the research was to evaluate the perception of the exhibition and the use of sources of information by the visitors to the 10th Archaeological Festival at Biskupin. The segmentation of the studied visitors was meant to identify groups of people with similar experiences of the exhibitions and similar ways of visiting the Museum. The collected data helped formulate recommendations concerning possible improvement of the exhibitions and the quality of services, and in consequence, increase the visitors' satisfaction.

The Archaeological Museum in Biskupin is one of the main tourist attractions of the Wielkopolsko-Kujawskie Lake District. The annual number of visitors to the Museum reaches 500 thousand. The Archaeological Festival is organized on the grounds of the museum in the third week of September. It is based on the idea of a live open-air museum, implementing the rules of experimental archaeology. The festival is filled with live presentations of craftsmanship, combat as well as with music and dancing performances. It also offers a wide range of catering and souvenir services. Permanent and temporary exhibitions are shown during the festival, in the Museum's pavilion.

Techniques of handicraft, combat and dance are presented by performers in historical costumes. Yet, what is missing, are guides who would interpret the heritage of this place and the history of the settlement. This information can be obtained only within the museum's exhibition premises which many people skip, or which some find of little interest. One thing the visitors rate very highly is the free *Biskupin Daily* newspaper, which includes the map of the festival, schedule of events and feature articles. About a hundred thousand visitors take part in the nine-day festival every year.

METHODS

The research was carried out using a questionnaire containing closed questions. The questionnaire included a scale for measuring the perception of the exhibition consisting of ten items and a scale for measuring the sources of information consisting of seven items. The answers were evaluated on a five-point Likert scale. Additionally, the questionnaire included questions characterizing the visitors' experience, interests and socio-demographic variables. Evaluation of the time spent on sightseeing was required as well. The questionnaire also included scales for measuring other variables not mentioned in this report.

The research was conducted between September 18 and 26, 2004, during the 10th Archaeological Festival at Biskupin. People aged 15 and above were asked to fill in the questionnaire on completing their sightseeing tour. In total, 462 completed questionnaires were collected. The research was part of a larger project covering five greatest tourist attractions of the Wielkopolska and Kujawy regions of Poland financed by the State Committee for Scientific Research.

RESULTS

Perception of the exhibition

The visitors' perception of the exhibition was varied. There were few people who were not interested in the exhibitions at all: only 2.1% of visitors to the Biskupin Festival did not find any of the exhibitions interesting; 16% found five exhibitions interesting. This answer was the most frequent one. Interestingly, only 6% of visitors who

came to the Festival described all the exhibitions in question as interesting.

The analysis of the collected data shows that most interest among the visitors was directed towards a few selected exhibitions such as presentations of handicraft ($x = 4.01$); performances involving dance, songs and musical instruments ($x = 3.96$); beer brewing ($x = 3.93$) and demonstrations of combat skills ($x = 3.86$) (Table 1). These were the lively and modern exhibitions having a strong impact on the visitors. More than half of the people questioned visited all the exhibitions and presentations available in Biskupin. They are easy to reach due to short distances from one another, and easy to find thanks to quite good marking on the grounds and festival site maps published in the *Biskupin Daily*.

place of residence and the number of repeated visitors to Biskupin.

The composition of a group of visitors was connected with their perception of the exhibition. The greatest attention to the exhibition was paid by families with children and people who came together with friends, whereas the least attention was paid by individual visitors. Finally, whether a person had visited a similar type of site was not related with the interest one had in the exhibitions. What is obvious, however, the more interesting the subject of a particular tourist attraction, the higher the interest in the visited exhibitions.

Table 1. Evaluation of visitors' interest for each exhibition

Parts of the exhibitions	% of visitors						Mean*
	0	1	2	3	4	5	
Museum exhibition	15.00	6.25	10.89	23.57	23.93	20.36	3.49
Combat skills shows	9.29	4.64	8.93	16.43	24.11	36.61	3.86
Wisz's farmstead	13.57	7.32	9.11	23.04	23.93	23.04	3.53
Live animals yard	10.00	8.39	10.00	17.86	23.75	30.00	3.64
Baking cakes	10.89	7.86	10.89	20.89	20.18	29.29	3.57
Demonstrations of artifacts conservation	14.11	8.04	10.71	21.25	21.96	23.93	3.52
Presentations of handicraft	4.82	3.39	5.71	17.68	28.75	39.64	4.01
Beer brewing	15.36	6.43	6.07	14.64	17.86	39.64	3.93
Dance, songs and musical instruments performances	11.43	4.11	7.14	13.75	26.43	37.14	3.96
Bow and crossbow shooting	15.36	6.96	11.07	16.25	22.86	27.50	3.64

Note: 0 – % of visitors who have not seen a given exhibition; 1 – not interesting; 5 – very interesting; * – mean interest in the visited exhibition (only these people were counted who have seen a given exhibition).

Interest in the visited exhibitions was linked in a significant way to the majority of the visitors' features. Women showed much higher interest in the exhibitions than men (Table 2). Also age was a factor influencing interest in the exhibitions. The greatest interest in the exhibitions was observed among those aged between 36 and 45. It gradually decreased among younger and older discovered between interest in the exhibitions and the visitor's education. The highest interest level was noted in people with a secondary and higher education, and the lowest level was noted in those with a vocational education. No differences in the level of interest were discovered in connection to the population level of a locality, distance from the

Perception of sources of information

The most popular source of information among the visitors are the direction signs – as many as 56% of those who took part in the research defined them as interesting or very interesting (Table 3). Diagrams and maps constituted the second crucial interpretation element. They were seen as interesting or very interesting by 54% of the visitors. Neither of the above mentioned forms of interpretation provided knowledge about the visited site, but they allowed the visitors to find their location on site, reach a wanted destination and monitor the distance from the exit and time providing the sense of mental comfort. Over one half of the visitors gave high grades to the marking

signs and panels and the *Biskupin Daily*. Diagrams and maps ($x = 3.89$) and *Biskupin Daily* ($x = 3.89$) received the highest score.

Table 2. Interest in exhibitions and visitors' characteristics

Features	The average interest in ten exhibitions
Sex	
Female	3.36
Male	3.12
p (U test)	0.001
Age	
Under 18	3.10
19-25	3.31
26-35	3.43
36-45	3.68
46-55	3.59
56-65	3.35
Over 65	3.08
p (H test)	0.0001
Education	
Primary	3.10
Vocational	2.93
Secondary and post-secondary	3.62
Higher	3.41
p (H test)	0.0001
Is this your first visit to Biskupin?	
Yes	3.23
No	3.30
p (U test)	0.34
Is your trip to last more than 1 day?	
Yes	3.37
No	3.26
p (U test)	0.25
Type of group of visitors	
Individual	3.02
With an acquaintance/ husband/wife	3.35
Organized trip	3.21
With family with children	3.54
p (H test)	0.0092
Interest in the subject of the attraction	
Very low	3.28
Low	2.93
Average	3.24
High	3.54
Very high	3.51
p (H test)	0.0001

Table 3. Visitors' interest in various sources of information

Sources of information	% of visitors						Mean*
	0	1	2	3	4	5	
Signs and panels	13.75	7.50	12.14	16.43	23.04	27.14	3.56
Consultations with the staff	28.04	9.46	8.39	9.82	15.36	28.93	3.63
Guide/folder	25.89	8.21	8.21	16.07	19.29	22.32	3.51
<i>Biskupin Daily</i>	25.00	5.18	7.86	11.25	17.68	33.04	3.86
Guide (person)	59.11	7.32	4.82	7.68	6.79	14.29	3.32
Direction signs	9.64	6.43	9.11	18.75	24.11	31.96	3.73
Diagrams. maps	18.39	4.64	7.32	15.00	20.54	34.11	3.89

Note: 0 – % of visitors who did not use a given source of information; 1 – not interesting; 5 – very interesting; * – mean of interest in a given source of information among the test group (only those are included who used a given source of information).

As many as 40% of people visited the Festival on a guided tour. This was probably due to the fact that school groups were dominant among the visitors to Biskupin. Similarly, as in the case of perception of exhibitions, dependences between the features of visitors and sources of information on site of the tourist attraction were examined. Women are far more active in this aspect than men. They attach more importance both to interpretation signs and panels, guides and folders, and to direction marking, diagrams and maps (Table 4). Almost a directly proportional age dependence was noted. Interest in all of the surveyed sources of information rises among the visitors with their age. When comparing interest with regard to the visitors' education levels a far lower interest in signs and panels was revealed in people with a primary education (reluctant to read), and there was some interest in talking to the staff or listening to the guide among those with a vocational education. Also reluctance to listening to the guide among schoolchildren was noticed. The size of the place of residence and distance from it did not affect the visitors' responses. What is interesting, there was no difference in the interest level among those visiting the attraction for the first time and those who have been there before (apart from conversations with the staff). There is also little difference between individual tourists and trip participants: tourists are more interested in talking with the staff and the guide. The greatest interest in sources of information among the visiting groups

was visible among individuals, whereas the lowest among organized groups of visitors. No differences were found among people with different degrees of involvement in sightseeing activities, but interest in the subject of tourist attractions is strongly connected with the interest in sources of information shown during sightseeing.

The mean sightseeing time of the 10th Archaeological Festival at Biskupin amounted to 4.75 hours.

Table 4. Interest in sources of information as compared with visitors' features

Features	Signs and panels	Conversation with personnel	Guide/folder	Guide	Direction marking	Diagrams. maps
Sex						
Female	3.83	3.79	3.64	3.51	3.70	3.72
Male	3.64	3.79	3.28	3.45	3.46	3.49
p (U test)	0.0015	0.82	0.0002	0.69	0.0010	0.0074
Age						
Under 18	3.40	3.16	3.24	3.14	3.49	3.65
19-25	3.44	3.72	3.35	3.34	3.44	3.56
26-35	3.88	3.88	3.58	3.23	3.56	3.58
36-45	3.88	3.96	3.45	3.98	3.63	3.46
46-55	3.90	4.03	3.77	3.93	3.79	3.79
56-65	4.06	4.42	3.68	4.05	3.89	3.88
Over 65	4.13	4.22	4.33	4.55	3.97	3.96
p (H test)	0.0001	0.0001	0.0006	0.0001	0.0019	0.044
Education						
Primary	3.52	3.21	3.31	3.05	3.56	3.68
Vocational	3.66	4.22	3.36	3.90	3.69	3.59
Secondary and post-secondary	3.86	3.96	3.62	3.76	3.73	3.74
Higher with or without a diploma	3.79	3.90	3.56	3.66	3.53	3.55
p (H test)	0.025	0.0001	0.13	0.0005	0.068	0.16
Are you here for the first time?						
Yes	3.71	3.68	3.42	3.50	3.54	3.52
No	3.77	3.88	3.54	3.47	3.64	3.70
p (U test)	0.19	0.019	0.51	0.79	0.21	0.051
Is your trip to last more than 1 day?						
Yes	3.85	4.14	3.58	3.86	3.66	3.80
No	3.73	3.71	3.48	3.41	3.59	3.60
p (U test)	0.36	0.0001	0.24	0.037	0.50	0.069
Type of group of visitors						
Individual	3.95	4.52	3.74	4.00	3.86	4.25
With an acquaintance/ husband/ wife	3.77	3.94	3.52	3.52	3.58	3.55
Organized trip	3.53	3.37	3.37	3.45	3.70	3.73
With family with children	3.83	3.86	3.58	3.44	3.56	3.59
p (H test)	0.0091	0.0001	0.20	0.68	0.11	0.0036
Interest in the theme of the attraction						
Very low	3.32	3.30	3.48	3.73	3.49	3.73
Low	3.45	3.59	3.33	3.32	3.54	3.55
Average	3.69	3.71	3.47	3.41	3.55	3.52
High	3.86	3.88	3.50	3.67	3.60	3.71
Very high	4.10	4.18	3.79	3.66	3.95	3.99
p (H test)	0.0001	0.003	0.14	0.35	0.0011	0.0001

Cluster analysis

The segmentation of visitors to the Biskupin Festival was done using the k-average method. Variables of interest in exhibitions, use of sources of information and the duration of the visit were chosen as criteria for segmentation. The clusters were described by socio-demographic variables (Table 6) and by motivations (Table 7). An algorithm was implemented for grouping the cases and for sorting distances and making observations at a constant interval. The aim of this procedure was to obtain a certain amount of clusters being as different as possible from one another, in terms of the manner of sightseeing. The analysis of variance of 3, 4, 5, 6 and 7 clusters showed a four-cluster pattern as optimal. It proved to be the most legible and easy to interpret. The criteria which were decisive in the choice of this variant were the results of the variance analysis (comparing the averages of chosen variables between the obtained clusters) and Euclidean distances between them.

The obtained clusters were named based on the characteristics of people who formed them: *avoiding* (29% of the visitors), *studying* (25%), *average* (28%) and *tourists* (18%) (Table 5). The first two segments, *avoiding* and *studying*, are easy to interpret and stand in opposition.

Segment 1 “*avoiding*”. These visitors are barely interested in the exhibitions apart from *cake*

baking and *beer brewing*. These two exhibitions received their highest acknowledgement, even though overall, they attached less importance to them than average visitors, yet it is still higher than that of the people belonging to the fourth segment. These two exhibitions (or rather presentations) can be defined as the most entertaining. The “*avoiding*” visitors also displayed the lowest interest in sources of information among all persons questioned. An exception was the information provided by a guide while showing visitors around. In this case, similarly to exhibitions, only people from the fourth segment showed less interest in this source of information. Young people under 18 from cities of up to one hundred thousand inhabitants, coming on one day trips dominated this segment (64%). They were barely interested in the tourist attraction which they visited. The time spent on the site was almost an hour shorter than the average, but as they were visiting the site in a group, it was not of their own choice. They had poor motivation, apart from motives such as to escape and spend time together with other people who are on an average level.

Segment 2 “*studying*” is the opposite of the first segment. These are people with a greater than average interest in all of the exhibitions. All the sources of information are also in the scope of their interest. The time which they dedicated to sightseeing was more than an hour longer than the

Table 5. Results of the analysis of clusters of visitors to the Archaeological Festival at Biskupin (N=556)

Variables	Clusters				Mean
	1 <i>Avoiding</i>	2 <i>Studying</i>	3 <i>Average</i>	4 <i>Tourists</i>	
<i>Interest in exhibitions</i>	163	140	155	98	
Museum exhibitions	(2.331)	3.364	3.432	2.765	2.975
Demonstration of combat skills	(2.902)	4.286	3.387	3.582	3.505
Wisł's farmstead	(2.172)	4.079	2.832	3.265	3.029
Live animals	(2.693)	4.264	3.123	3.071	3.275
Cake baking	2.853	4.250	3.187	(2.082)	3.162
Presentations of monument conservation	(2.344)	3.879	2.755	3.255	3.005
Presentations of handicraft	(3.239)	4.471	3.548	4.327	3.827
Beer brewing	2.902	4.429	3.865	(1.388)	3.288
Dances, songs and instruments performances	(2.546)	4.364	3.529	3.816	3.502
Bow and crossbow shooting	(2.595)	4.000	3.174	(2.296)	3.058
<i>Interest in sources of information</i>					
Signs and interpretation panels	(2.196)	3.871	3.200	3.245	3.083
Talking with the staff	(1.350)	3.986	2.213	3.235	2.586
Information leaflet/folder	(0.791)	3.943	3.135	2.857	2.603
<i>Biskupin Daily</i>	(0.982)	4.121	2.858	4.163	2.856
Being shown around by a guide	(0.883)	1.864	2.110	(0.337)	1.376
Direction marking	(2.540)	4.029	3.710	3.357	3.385
Diagrams. maps	(1.393)	4.036	3.729	3.959	3.162
<i>Sightseeing time</i>	(3.020)	4.989	(2.826)	5.112	3.831

average. These were mainly people aged 36–55, with a secondary or higher education, on a one-day trip from medium-size towns. An over the average number of people on trips lasting longer than one

day and visiting with the family and kids also belong to this group. Their level of interest in the subject of the tourist site was above average and their motivations were strong and comprehensive.

Table 6. Characteristic of clusters with regard to features of visitors to the Archaeological Festival at Biskupin

Feature	Clusters				Mean
	1 <i>Avoiding</i>	2 <i>Studying</i>	3 <i>Average</i>	4 <i>Tourists</i>	
Sex:					
Female	61.96%	72.14%	61.29%	70.41%	65.83%
Male	38.04%	27.86%	38.71%	29.59%	34.17%
Pearson's Chi ² test	$\chi^2 = 5.89; df=3. p=0.11$				
Age:					
Under 18	64.42%	28.57%	44.52%	29.90%	43.78%
19-25	19.02%	18.57%	20.65%	24.74%	20.36%
26-35	7.98%	20.00%	10.32%	26.80%	14.95%
36-45	2.45%	15.00%	11.61%	6.19%	8.83%
46-55	4.29%	15.00%	5.16%	5.15%	7.39%
56-65	1.23%	2.14%	3.23%	3.09%	2.34%
Over 65	0.61%	0.71%	4.52%	4.12%	2.34%
Pearson's Chi ² test	$\chi^2 = 88.05; df=18. p<0.001$				
Education					
Primary	65.43%	27.86%	48.70%	30.61%	45.13%
Vocational	4.94%	2.86%	3.25%	6.12%	4.15%
Secondary and post-secondary	7.41%	27.86%	12.99%	18.37%	16.06%
Higher with or without a diploma	22.22%	41.43%	35.06%	44.90%	34.66%
Pearson's Chi ² test	$\chi^2 = 64.05; df=9. p<0.001$				
Size of place of residence					
Village	23.08%	17.65%	31.54%	23.16%	24.07%
Town of up to 100 thousand	42.31%	36.76%	42.95%	34.74%	39.74%
101-500 thousand	21.79%	33.82%	15.44%	22.11%	23.13%
More than 500 thousand	12.82%	11.76%	10.07%	20.00%	13.06%
Pearson's Chi ² test	$\chi^2 = 22.83; df=9. p=0.006$				
Are you here for the first time?					
Yes	26.09%	25.18%	25.16%	29.90%	26.27%
No	73.91%	74.82%	74.84%	70.10%	73.73%
Pearson's Chi ² test	$\chi^2 = 0.84; df=3. p=0.83$				
Is your trip to last more than 1 day?					
Yes	10.43%	23.74%	12.34%	27.55%	17.33%
No	89.57%	76.26%	87.66%	72.45%	82.67%
Pearson's Chi ² test	$\chi^2 = 19.23; df=3. p<0.001$				
Type of group of visitors					
Individual	2.45%	3.57%	4.52%	7.14%	4.14%
With an acquaintance/ husband/wife	23.31%	30.71%	22.58%	38.78%	27.70%
Organized trip	65.64%	43.57%	63.87%	37.76%	54.68%
With family with children	8.59%	22.14%	9.03%	16.33%	13.49%
Pearson's Chi ² test	$\chi^2 = 38.63; df=9. p<0.001$				
Having visited a similar kind of place within the last twelve months					
0	47.53%	45.71%	40.40%	39.58%	43.72%
1	25.31%	25.00%	26.49%	22.92%	25.14%
2	14.20%	13.57%	13.25%	17.71%	14.39%
3 or more	6.79%	5.71%	8.61%	11.46%	7.83%
Pearson's Chi ² test	$\chi^2 = 7.93; p=0.79$				
Interest in the theme of the attraction					
Very low	2.45%	4.32%	2.61%	0.00%	2.53%
Low	22.09%	6.47%	18.95%	9.18%	15.01%
Average	57.06%	46.76%	49.02%	59.18%	52.62%
High	14.11%	30.94%	16.34%	26.53%	21.16%
Very high	4.29%	11.51%	13.07%	5.10%	8.68%
Pearson's Chi ² test	$\chi^2 = 45.78; df=12. p<0.001$				

Table 7. Clusters and the visitors' motivations

Motives	Clusters					Kruskal-Wallis ANOVA
	1	2	3	4	Average	
I wanted to learn something new	(3.277)	3.813	3.454	3.551	3.511	H (N= 548) = 22.94 p < 0.001
I wanted to rest in pleasant surroundings	(3.627)	4.036	3.752	4.000	3.831	H (N= 551) = 14.33 p = 0.0025
I wanted to show something new to my children/family/friends	(2.413)	3.246	3.055	3.371	2.976	H (N= 536) = 31.93 p < 0.001
I wanted to escape from every-day stress	3.580	3.652	3.735	3.704	3.664	H (N= 548) = 1.64 p = 0.64
Because one should visit such a place	(3.634)	4.101	4.007	3.938	3.909	H (N= 549) = 21.92 p < 0.001
I wanted to see a new interesting place	(3.369)	3.926	3.876	3.608	3.694	H (N= 543) = 22.76 p < 0.001
I wanted to spend some time with children/family/friends in a nice way	4.000	4.058	3.993	4.073	4.026	H (N= 546) = 0.61 p = 0.89

Segment 3 “average” did not show any particular interest in the exhibitions, apart from the museum exhibition and beer brewing demonstration. They selectively used the sources of information: they were mostly interested in being shown around by a guide; they also studied folders, information leaflets, diagrams and maps. However, the time they spent sightseeing was the shortest among all who took part. They cannot be distinguished by age or education; in vast part they came from the countryside. They tended to be participants of one-day trips and were usually with a group. They were characterized by varied interests in the subject and by average motivation.

Segment 4 “tourists” were mostly interested in presentations of handicraft, in conservation of historical monuments as well as in dances, songs and instrumental performances. They were the least interested in folk presentations of beer brewing and cake baking. They devoted the most time of all those examined to sightseeing (over five hours). They were interested in talking to the staff, in the diagrams and maps, and also were highly interested in the *Biskupin Daily*. Among this group there were mainly people aged 26–35 and over 65, mostly with a higher education (45%), inhabitants of large cities. A significant part of these people (28%) come individually on longer trips or with their friends or spouses. To a large degree they were motivated by a desire to show the place to others and to rest in pleasant surroundings.

The above clusters constitute an example of market segmentation of customers (consumers of a given product) of a tourist attraction. The knowledge of them allows us to differentiate the attraction as a product according to selected segments as well as to prepare promotional strategies for each segment on the target market.

DISCUSSION

Lively, modern, interestingly interpreted exhibitions enjoyed the greatest interest among the visitors to the Archaeological Festival at Biskupin. Much lower interest was aroused by the static, passive exhibitions. The attractions with varied exhibition elements can keep the visitors interested in their contents for a longer period of time. This assessment is consistent with the theory of mindful visitor by Moscardo [7], as well as with the rules of heritage interpretation [1, 3, 12], and they confirm that the redesigning of the exhibition and heritage interpretation at tourist attractions according to the above rules is needed.

Low attendance at many interesting exhibitions is the result of poor direction marking on the grounds of the attraction site and insufficient information about the available exhibitions in the reception area. It is extremely important to clearly present all the exhibitions and facilities to the visitors entering the site.

The varied interest in exhibitions depending on the characteristics of the visitors suggests that a

tourist attraction as a product should be perceived from different perspectives. Its perception depends not only on visitors' age and education but also on their sex, place of residence, composition of the group and even the size of their hometown. This makes it necessary to vary the exhibitions, their subjects and forms of interpretation in order to meet the expectations of various groups of visitors.

The most important source of information in the investigated attractions are the interpretation signs and panels and the direction marking. This means there is a need to carefully work on them checking the comprehensibility of the text, readability for visitors of different ages and education levels, but also checking their ability to catch and maintain visitors' attention. On the other hand, other sources of information that are unpopular should be carefully reconsidered. Our attention is particularly drawn to the poor interest in contacting the personnel of the attraction as a source of information. Increasing communicativeness, empathy and interest of visitors in contacts with the staff gives a possibility to significantly rise the attractiveness of the site at relatively low costs. Finally, introducing interactive multimedia devices, which are a source of information enjoying the highest interest among the visitors [6], is a basic requirement presented to the managers of the attraction site.

Differential tests between groups of visitors of different compositions confirmed the correlations postulated by Moscardo [7]: sightseeing with a group or family is connected with less attention dedicated to the exhibition than when sightseeing alone, while people who have already been there before are more likely to look for some staff guidance. Finally, we must acknowledge the reluctance (or difficulty) of poorly educated people towards using sources of information and the reluctance of the youngest visitors (pupils) to use services of a tour guide. It makes it necessary to reconsider the way tour guides communicate to the youngest visitors.

The segmentation of the visitors to the Archaeological Festival at Biskupin revealed four evidently distinct segments (groups) of visitors. Similarly as in other studies of this kind [5, 9], the existence of a group of highly motivated people attentively looking at every exhibition was observed. However, for the managers of tourist attractions it is the three remaining segments that are crucial to their business, including people with

poor motivation and showing little interest in the exhibition. Segments three and four and, especially, one are the customers to which the attention of the management should be drawn. What is bothering is little interest and poor motivation among the young people dominating the first segment and constituting almost one-third of all visitors. There is a role to be played by organizers of the trips in which these people take part, but also by organizers of the festival who should prepare a separate interpretation program especially for this segment. It should be designed exclusively for young customers, following an observation of Beck and Cable [1, p. 69] that "interpretation meant for children, youth and elderly should have a fundamentally different approach."

The interest the exhibition and sources of information generate does not depend solely on the exhibitions themselves. A crucial role is played by the visitor, his or her socio-demographic features, experience, interests, motivation, personality or learning styles.

We must remember that the distinguished segments are statistic generalizations and a given characteristic of these segments does not apply to each individual in a segment. Nevertheless, the segments can be treated as target markets for preparation of tourist products and their promotion. Promotional materials should be directed at certain segments (target groups), emphasizing the possible advantages of sightseeing.

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