

“The Measurement of City Image: Urban Tourism Market Segmentation”

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Abstract

The article deals with urban tourism. It focuses on the problems connected with the evaluation of different attributes of the city tourism product and its image perceived by the tourists. A study was conducted among hotel guests who stayed in Poznan (Poland). The research allowed to identify the most relevant attributes of the city's image based on which the segmentation of respondents was made. The attributes of image which the city administration should pay the most attention to are: price level, cleanness of the city and internet accessibility. The importance of these elements is perceived by the tourists as above the average while their evaluation thereof as below the average. The factor analysis of the city image attributes allowed to identify six hidden dimensions of the image including the affective dimension, tourist infrastructure, entertainment and gastronomy, tourist attractions, functional dimension and hospitality. In addition, two segments of users who significantly differ in terms of evaluation of Poznan tourism product were identified: moderate satisfiers – those who were perceive the elements of Poznan image as average and satisfiers – the tourists who value these elements high.

Key words: urban tourism, city image, perception, satisfaction, Poznan

Introduction

The constantly growing interest in the development of urban tourism is due to two reasons. First of all, large cities become the main destination of domestic and international tourist flow (Law 2002). Secondly, tourism begins to play a more and more significant role in the economic, social and spatial development of large cities (Maitland and Newman 2009; Page and Hall 2003: 3). As Ashworth describes it (1989), cities are the main areas which generate tourist flow.

Nowadays, urban tourism is perceived as a corner stone of a policy of urban development that combines satisfying visitors' expectations through a positive input in city development and also provides prosperity to the citizens (EC 2000: 9). Together with the growing city authorities awareness of the profits which result from urban tourism such as increased employment rate and income, there is also an increase in activities aimed at promoting tourism. Growing competition between the European cities creates a need to conduct active marketing campaigns connected with the s and developing their image in the eyes of current and potential visitors. The basis for such activities should be a perception analysis of the two basic elements by tourists who visit the city. It gives a chance to distinguish the factors which are the biggest strengths or weaknesses of a city, and also to segment the market with regard to potential visitors to a city.

The aim of this article is to identify the attributes of the tourism product and the city image as well as to identify the groups of tourists who share a similar perception of this product. The study was conducted in Poznan, Poland in 2009. The article consists of four parts. The first part presents the theoretical background for

urban tourism, city image and visitors satisfaction measurement. Subsequently, the method of research is presented followed by the main cognitive results. In the summary conclusions of the study are presented, the limitations of analysis are identified and possible future areas of research are specified.

Theoretical Overview

The term of urban tourism refers to tourist activities undertaken in urban areas. Page (1995) has developed the following typology of urban tourism destinations: capital cities, capitals of culture, metropolitan centers, historical centers surrounded by walls, historic cities, port districts, industrial cities, seaside resorts, newly-built resorts, tourist-entertainment complexes, specialized tourist service centers and cities of art.

A significant increase in the interest in urban tourism was observed in the early 1980s. It was connected with the need for the revitalization of city centers, the development and diversification of cultural activities in the cities as well as with the increased consumer interest in the heritage and urban development of cities and with the pursuit of new forms of activities and services offered for tourists (Kolb 2006; Page and Hall 2003). An additional factor which influenced the development of urban tourism was the change in style of holiday spending among the Europeans from rare but long stays to more frequent but shorter ones. The increase in mobility also had a strong impact on it (EC 2000).

Cities can be offered and sold on tourist markets on the basis of different travel motives which may include a basket of individual products such as tourist attractions, tourism facilities and other 'commodities' (Ashworth and Voogd 1990: 7). In specific, a city can be treated as a complex where it is pos-

sible to distinguish the core and background elements. The first group includes both the city scenery (urban settings, architectural heritage, green areas, coastlines) as well as other cultural heritage objects (museums, theaters, exhibitions), sports facilities, entertainment (casinos, theme parks), festivals and other cultural events. The core attractions are supplemented by the hotel-gastronomic service sector (hotels, restaurants, pubs) and trade (shops, markets, fairs) (Enc. of Tourism 2000). C. Law (2002) distinguished primary, secondary and additional elements of a urban tourism resources. The primary elements provide the main reason aim of the visit. Among them there are (1) places of cultural activity (museums, art galleries, theaters, cinemas, concert halls, conference centers and other tourist attractions), sport facilities (indoor and outdoor) and entertainment facilities (nightclubs, casinos, festivals, events); (2) leisure setting: physical (historical tracts, interesting architecture, monuments of architecture, parks and green areas, waterfronts), social-cultural features (liveliness of the place, local traditions and garments, cultural heritage, tourists' attitude, safety). Secondary elements consist of accommodation, gastronomy, shops and markets. Among the additional elements Law (2002) distinguishes accessibility, transportation and parking areas and tourist information (maps, signs and guides).

Monitoring the level of satisfaction that tourists perceive having used a tourism product is important as a satisfied customer is more likely to return, recommend the destination to others, or even to pay a higher price for the services offered at such a place (Baker and Crompton 2000). Martilla and James (1977) concluded that satisfaction is a function of expectancies of certain product attributes as well as the perception of these attributes by the consumers. The satisfaction is achieved when

the expectations are met or exceeded. When the expectations are higher than the current perception of a product we encounter dissatisfaction. The importance-performance analysis (IPA) is an effective tool of evaluating customer satisfaction.

Similarly, many authors describe quality as a discrepancy between customer expectations towards a product/service and its perception (Parasuraman et. al 1985, Carman 1990, Cronin and Taylor 1992, Zeithaml et. al 1990). Identification of these differences (gaps) allowed Parasuraman et. al (1985, 1988) to establish SERVQUAL quality evaluation method which is based on analysis of differences between expectations and perception.

According to Crompton (1979), destination image is an attitudinal concept consisting of the sum of beliefs, ideas and impressions that tourist hold of a destination. Whereas Echtner and Ritchie (1991: 4) believe that image is a dynamic concept, "a distinct way of processing and storing multi-sensory information in working memory". Image can be alsomultidimensional: image is something that comprises of the ideas or conceptions held individually or collectively of the destination under investigation. Image may comprise both cognitive and evaluative components (Embacher i Buttle 1989).

Echtner and Ritchie (1993) implemented extended literature research to identify a number of features characteristic of a place image (Fig.1): (1) destination image should be envisioned as having two main components: attribute based and holistic, (2) each of these components contains functional (tangible) and psychological (abstract) characteristics and (3) image can range from that based on „common” functional and psychological traits to those based on more distinctive (unique) features, events or auras.

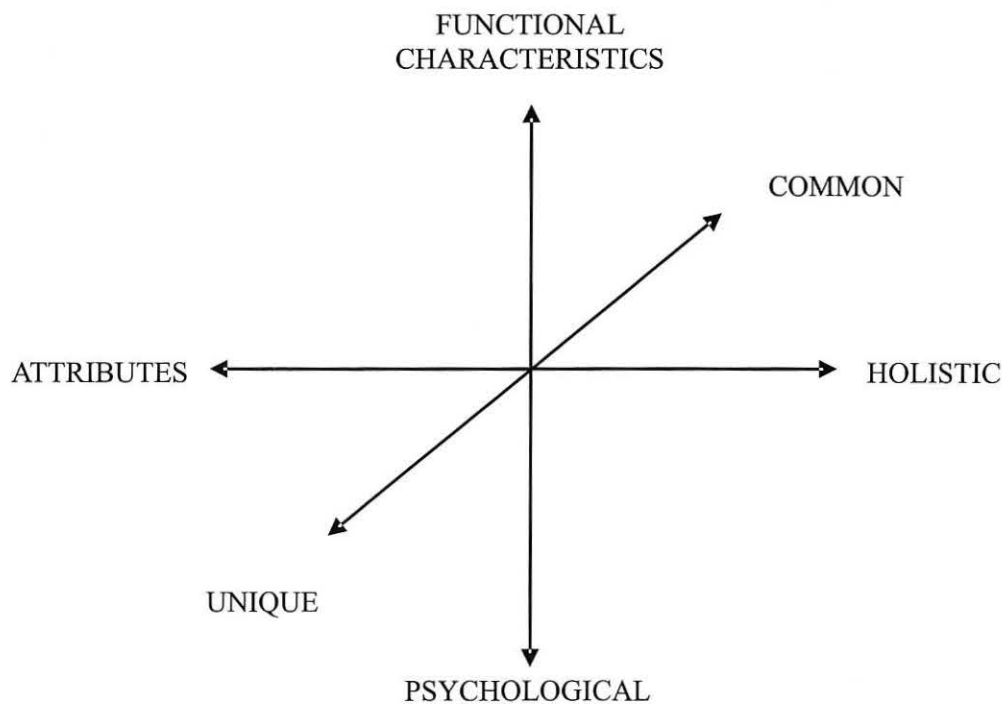


Fig. 1. The components of destination image (Echtner i Ritchie 1993)

Other authors distinguish two primary dimensions of image: cognitive and affective (Balaoglu i MaCleary 1999). The cognitive factor consists of the beliefs and knowledge about primarily tangible physical attributes of a destination while the affective factor describes the affective evaluation of the quality of experiences concerning the attributes and the environment as a whole. Four pairs of affective attributes have been distinguished which constitute the semantic differential scale: arousing-sleepy, pleasant-unpleasant, exciting-gloomy and relaxing-distressing (Russell and Pratt 1980, Balaoglu and MaCleary 1999, Pike and Ryan 2004). Moreover, the two-dimensional model postulates that the creation of cognitive image precedes the creation of the affective image (Ryan and Cave 2005, Voght and Andereck 2003). Goodrich said that consumers' attitudes toward a product are influenced by the combination of the results of pre-purchase image and post-purchase perceptions (Goodrich 1977).

Scales to measure the image of a city as a tourist destination are developed relatively rarely. Among the few that exist are the image evaluation research done in Sheffield (Bramwell 1998), in Sydney and Canberra (Edwards et. al 2009) and in FIFA Worlds Cup 2010 host-cities (Donaldson and Ferreira 2009).

This article presents the results of studies designed to measure product attributes and tourist image of Poznan, the capital of Greater Poland, the historical region and administrative province in West-Central Poland. There are over 560 thousand inhabitants in the city and about 1 million in the metro region. In 2009 over 496 thousand visitors and 892 thousand overnight stays were recorded (USP 2009). Because of its location (between Berlin and Warsaw, 160km from the Polish-German border), the city is readily accessible and that is why it has been developed as a trade, services, industrial, and academic center. It could be an attractive destination for cultural and heritage tourists, event participants, and leisure and recreation visitors as well. Tourists may visit the old town with its numerous monuments and buildings, especially of Renaissance and Baroque heritage, 20 museums and other attractions, large recreational areas, and a national park near the city.

Methodological Approach

Data for this study was collected through a questionnaire based survey conducted among hostel guests who came to Poznan during the first quarter of 2009 (1 January-31 March 2009). The survey was done by trained B.A. students from the Poznan University of Economics. interviewers asked the respondents to fill in questionnaires at a breakfast time. In the strive to perform exhaustive research, at a specified time in the morning, a interviewer assisting the questionnaire filling was present in every hostel. In order to obtain valuable results, it was important that the respondents stay was at least one night before the survey so that they were able to evaluate selected elements of the city's tourist offer and evaluate its attractiveness. 502 respondents participated in this study, while the refusal rate reached 27% of all those asked.

Before the questionnaire was developed, scales used to evaluate destination image and attributes of a urban tourism product were analyzed. The scales designed by Echtner and Ritchie (1993), Baloglu and Mangalolu (2001) and Pikkemaat (2004) were used in the questionnaire development. Attributes of the urban tourism product were evaluated twice by each respondent. First, they were asked to specify the importance of a given attribute for the respondent using a 5-level Likert scale (from *absolutely unimportant* to *very important*). Then they were asked to evaluate the same element in reference to the current offer of the city of Poznan using also a 5-level Likert scale (from *very bad* to *very good*). This way, 23 functional (tangible) attributes of the city's were evaluated. The perception scale was supplemented with three psychological (abstract) attributes measured using a 5-level semantic differential scale. The questionnaire also included a segment where the respondents provided information about gender, age, education, country of origin, number of previous stays in Poznan, type of trip, who they came with, the length of their stay in Poznan and the main goal of their visit.

A number of statistical methods were used to analyze the data. First, the averages of expectations and perceptions for each element of Poznan's tourism product and average assessment of psychological attributes were calculated. Means for all the attributes together were also calculated in order to provide the placement of the axes on the expectations-perceptions grid. Then, in order to discover the hidden dimensions of Poznan's image and to reduce the number of variables a factor analysis was performed which included 26 elements of tourist image. Principal components method and VARIMAX rotation were used. Minimum eigenvalue of 1,0 was assumed for factor inclusion and minimum factor loading of 0. to decide whether a given item of the scale should be included in the factor (Hair et. al 2007). The reliability of the factors was checked using Cronbach's coefficient alpha (α). Following Hair et. al (2007), it was assumed that the value of Cronbach's alpha should be at least 0.7 although in certain specific situations it can drop down to 0.6.

In the next step a cluster analysis was performed to segment tourists who visit Poznan into homogenous groups of people who similarly evaluated certain elements of the city image. Segmentation was done using K-Means¹ method, as segmentation criterion using the factors extracted in factor analysis.. An algorithm was selected to group cases, sort distances and to take observations at a constant interval. The goal was to obtain a certain number of case clusters (among people who visited Poznan) which were as different as possible in their perception of Poznan's image. As a result of analysis of variants of 2, 3, 4, 5, 6 clusters, a 2-cluster variant was chosen as optimal. The criterion for selecting this variant were the results of analysis of variance (ANOVA) (testing significant differences between means of the extracted factors) and Euclidean distances between them. The clarity and ease of interpretation was the reason why the two-cluster variant was chosen.

¹ The algorithm used to assign K averages as representatives of cluster of N points ($K < N$). Points are iteratively corrected (starting from a randomly selected sample), so that each of the N points was assigned to one of the K clusters, and each of the K cluster was an average of values of points assigned to it (Bishop, 1995, quoted after StatSoft, Inc. (2001)).

Next, a discriminant analysis was made in order to identify which factors discriminate best between the previously obtained groups (market segments). Finally, an χ^2 test was used to evaluate the differences between the socio-demographic and other characteristics of the segments.

Profiles of Respondents

The respondents consisted of 502 people, among them 43.6% were women and 56.3% were men (Table 1). The largest group consisted of people aged 20–25 (52.7%). The group of people aged 26–35 was half as numerous (25.9%). Other age groups were represented in smaller percentage rates as follows, 9.0% (up to 19 years), 6.3% (45 years and older) and 5.9% (36–45 years). That heterogeneity was the result of the places in which the study was conducted, that is hostels. Guests staying at such places are mostly young people (87.6% of the respondents were people who were up to 35 years old). Most respondents had higher education (58.5%) and almost one third had secondary education (30.2%). Other groups were represented in small

numbers: children and teenage students – 5.0%, people with vocational education – 4.3% and primary education – 1.7%. Polish people dominated among the respondents with 63.9%, the next most numerous groups were the Germans – 7.1%, the Americans – 4.9% and the British – 3.5%. For 45.5% of the respondents it was the first time in Poznan, for 13% the second time and 21.2% came to Poznan for the third time or more. 19.2% of interviewees come to Poznan regularly. For most people (73.7%) Poznan was the main destination in their trip. Most tourists traveled with friends (40.5%), a significantly smaller group were those traveling with an organized group (26.4%) or alone (21.1%). The least numerous group were those who traveled with a partner (8.6%) or with their family (3.2%). The biggest group were those who stayed in Poznan for 2 to 3 days (42.0%) followed by weekend visitors (23.1%) and single-day visitors (14.4%). The most typical purposes of the visit were: business (26.1%), sightseeing and leisure (24.2%), education (15.9%), participation in an event or concert (14.9%) and visiting friends (11.1%).

Table 1. Demographic Profile of the Respondents

Characteristics	%
Gender	
Female	43,65
Male	56,35
Age	
≤ 19	9,03
20–25	52,77
26–35	25,87
36–45	5,95
≥ 46	6,38
Education	
College or university	58,55
High School	30,26
Student	5,04
Vocational School	4,39
Primary School	1,75
Nationality	
Polish	63,98
German	7,17
USA	4,98
United Kingdom	3,59
Others	20,28
Number of previous visit in Poznan	
First	45,58
Second	13,86
Third and more	21,29
Regular visitor	19,28
Type of Travel	
Poznań was a main destination	73,75
Poznań was one of the places I intend to visit	26,25
Party in the group	
Alone	21,17
Family	3,23
Friends	40,52
Partner	8,67
Organized groups	26,41
Length of stay In Poznan	
1 day	14,49
2–3 days	42,05
Weekend	23,14
4–7 days	11,47
8 or above	8,85
Main purpose of the visit	
Business	26,11
Sightseeing, leisure, recreation	24,29
Education	15,99
Participation in event / koncert	14,97
Friends / relatives	11,13
Religious	4,86
Others	2,65

Results

Expectations-perception analysis

In order to position particular elements of Poznan's tourist image on the expectations-perceptions grid, means of expectations and perceptions for all the elements were calculated. The most important elements for the tourists who came to Poznan were: city atmosphere ($M = 4.26$), accommodation (4.22), availability of transport (4.2), safety (4.19), price level (4.05), city cleanness (4.04) ATMs/ cash points/ possibility to pay by credit card (4.02). The least important were elements such as sport and recreation infrastructure (2.88), the knowledge of foreign languages by the local citizens (3.2), museums and galleries (3.3), tourist information centers (3.31) and public toilets (3.39).

The respondents asked to evaluate all the elements of Poznan's tourist offer rated higher shops (4.07), bars and pubs (4.04) as well as nightlife and entertainment (4.02). The respondents rated lowest public toilets (2.94), information centers (3.4), local citizens' knowledge of foreign languages (3.41) and sport and recreation infrastructure (3.39).

In order to evaluate the quality of the tourism offer the importance, understood as respondents' expectations towards the quality of given tourist services, was compared with the perception of each of the elements of Poznan's tourism product. Based on the analysis of the quality gap it was discovered which elements of the products do not match the expected level. The biggest discrepancies were noticed for the price level (-0.49), public toilets (-0.45), city cleanness (-0.44) and safety (-0.4). It means that the assessment of these elements was lower than their importance level which is a negative phenomenon and which can result in dissatisfaction about the tourism product. Positive values of the gap mean that these services were evaluated higher than their importance. Among such elements the highest values were recorded for shops (0.66), sport and recreation facilities

(0.58) and museums and galleries (0.34). But the gap analysis itself does not provide information about the factors which can influence tourist satisfaction significantly. The lack of a gap or a low value can be the result of low expectations – not of their high quality. High positive values of gaps can be the result of low expectations towards such elements combined with a relatively good or mediocre evaluation of their quality.

Better information about satisfaction with various elements of the tourism product is offered by the analysis of the expectations-perception grid (Fig. 2). The average values of expectations and perception calculated for all the evaluated attributes were: $M = 3,76$ for expectations and $M = 3,74$ for perceptions.

The attributes located in the first quarter (top right-hand part of the grid) are highly important and were evaluated highly by the tourists. Among them is the city atmosphere (18), getting to the city (1), accommodation (7) and many others (2, 8, 9, 10, 12, 19, 22). The quality of these attributes meets the expectations of tourists, therefore these are not the elements requiring special attention from the city authorities. The most important part of the chart is the second quarter (top left-hand part). Here are those attributes the tourists had high expectations of, but which were evaluated rather lowly. Among them are: the price level (15), city cleanness (20) and access to the Internet (23). These factors need special attention of the city authorities as they can have the strongest impact on the satisfaction level of the tourists visiting Poznan. In the third quarter of the chart (left-hand bottom part) are the attributes which were evaluated lowly, but which at the same time are of low importance. These are first of all the public toilets (21), sport and recreation infrastructure (13), tourist information centers (4) and finally local citizens' knowledge of foreign languages (16). The fourth quarter includes the elements which were evaluated high, but are of low importance to the tourists. Shopping facilities fall into this group (11).

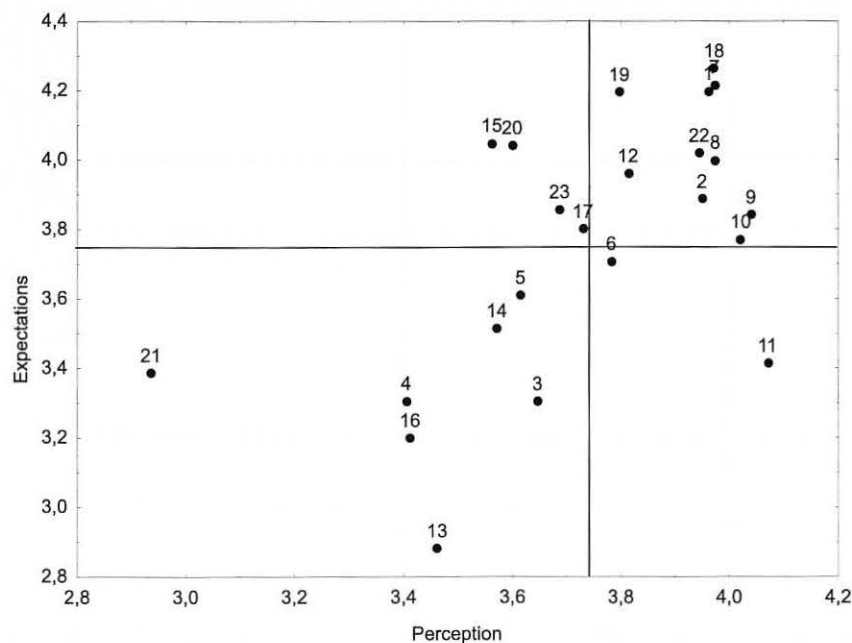


Figure 2. Expectations-perception grid of attributes of Poznan's tourism product

Attributes:

- | | | |
|---------------------------|---|--|
| 1. Getting to the city | 9. Bars and pubs | 17. Locals' attitudes towards Tourists |
| 2. Monuments/ attractions | 10. Night life/ entertainment | 18. City atmosphere |
| 3. Museums and galleries | 11. Shopping facilities | 19. Security |
| 4. Information centers | 12. City transport | 20. City cleanness |
| 5. Signposting system | 13. Sport and recreation infrastructure | 21. Public toilets |
| 6. Cultural events | 14. Parks and green areas | 22. ATMs/ cash points/ possibility to pay by credit card |
| 7. Accommodation | 15. Price level | 23. Access to the Internet |
| 8. Gastronomy | 16. Knowledge of languages | |

Factor analysis

In order to identify the hidden dimensions and to reduce the number of items on the scale used to measure Poznan's image, a factor analysis was done. It revealed the existence of six factors: *affective* (3 items, α Cronbach = 0,75), *tourist in-*

frastructure (4 items, α = 0,76), *entertainment and gastronomy* (3 items, α = 0,76), *tourist attractions* (3 items, α = 0,75), *functional* (4 items, α = 0,76) and *hospitality* (4 items, α = 0,66) (tab. 2). Five items were deleted due to low factor loadings (below 0,5).

Table 2. Factor analysis of Poznan's tourist image attributes

Atrybuty wizerunku turystycznego Poznania	Factors					
	1	2	3	4	5	6
Affective						
Interesting	0,763					
Tourist friendly	0,783					
Beautiful	0,727					
Tourist infrastructure						
Information centers		0,592				
Signposting system		0,602				
Public toilets		0,718				
ATMs/ cash points/ to pay by credit card		0,540				
Entertainment and gastronomy						
Gastronomy			0,519			
Bars and pubs			0,866			
Night life/ entertainment			0,809			
Tourist attractions						
Monuments/ attractions				0,650		
Museums and galleries				0,810		
Parks and green areas				0,553		
Functional						
Price level					0,623	
City atmosphere					0,521	
Security					0,690	
City cleanness					0,655	
Hospitality						
Accommodation						0,562
Knowledge of languages						0,727
Locals' attitudes towards tourists						0,507
Access to the Internet						0,569
Eigenvalue	2,367	1,905	2,149	2,037	2,346	1,873
Extracted variation (%)	11,27	9,07	10,24	9,70	11,17	8,92
Mean	3,869	3,415	4,012	3,714	3,732	3,706
Standard deviation	0,749	0,762	0,776	0,764	0,729	0,694
α - Cronbacha	0,755	0,726	0,769	0,757	0,762	0,662

Out of the six factors, the *entertainment and gastronomy* ($M = 4.012$) and the *affective* factor ($M = 3.869$) have the highest mean values, while the *tourist infrastructure* ($M = 3.415$) has the lowest mean value. The *tourist attractions* (museums, galleries, parks) and the *functional abstract* have relatively average values ($M = 3.714$ and $M = 3.732$ respectively).

Cluster, Discriminant Analysis and χ^2 tests

As a result of the cluster analysis a two-cluster variant was chosen as optimal. In the first cluster (Cluster 1) 173 respon-

dents were grouped (36.8%) with 297 respondents in the second (63.2%)² (Cluster 2). Analysis of variance showed that the two clusters significantly differ ($p < 0,001$) (tab. 3). The mean scores calculated for each factor in both clusters indicate that tourists in Cluster 2 are much more satisfied with all the city image factors than tourists in Cluster 1. Because mean factor values in Cluster 1 are much below the mean value for perception of all elements (which was 3,74), the first cluster can be described as 'dissatisfiers'. Marks in the second cluster balance around 4 so this segment was described as "satisfiers".

Table 3. Cluster analysis results

Factors	Cluster 1 Dissatisfiers (n=173)	Cluster 2 Satisfiers (n=297)	F	p
Affective	3,204	4,256	53,32	0,0001
Tourist infrastructure	2,981	3,743	85,14	0,0001
Entertainment and gastronomy	3,441	4,400	52,62	0,0001
Tourist attractions	3,185	4,068	73,91	0,0001
Functional	3,137	4,113	52,54	0,0001
Hospitality	3,245	4,002	78,21	0,0001

The goal of the discriminatory analysis was to distinguish factors which mostly differentiate the obtained clusters. As a result, one discriminatory function was derived, with an eigenvalue of 1.40 and a canonical $R = 0.68$ which indicates a strong relation between the clusters' factor scores and the discriminatory function (tab. 4). The factor which most strongly differentiated the clus-

ters was 'Affective'. Other three factors which significantly differentiated the two segments are 'Entertainment and gastronomy', 'Functional' and 'Tourist attractions'. Two other factors – "Hospitality" and 'Tourist infrastructure' – turned out to be irrelevant for the discriminatory function, so there are no differences in the evaluation of these factors by the members of the two clusters.

Table 4. Discriminant analysis of factors describing Poznan's image

Factor	Coefficients	F	p	Discriminant ranking
Affective	0,685	179,8204	0,0001	1
Entertainment and gastronomy	0,431	56,2743	0,0001	2
Functional	0,322	27,8412	0,0001	3
Tourist attractions	0,140	4,7455	0,0291	4
Hospitality	0,087	1,8380	0,1751	-
Tourist infrastructure	0,065	1,0206	0,3121	-

Notice: Wilks's lambda = 0,5389; $F(6,495) = 115,3460$; $p < 0,0001$; eigenvalue 0,89; canonical $R = 0,68$

The last step of the analysis was to check which of the socio-demographic and trip characteristics differentiate the clusters. Out of nine characteristics and variables only two had significant differences between the clusters (tab. 5). The first one was gender: significantly more men (64.0%) than women (35.91%) fell into the 'Dissatisfied' segment and inversely: significantly more women (48.2%) than men (51.7%) fell into the 'Satisfied' segment (χ^2

= 7,00; $p = 0,008$) (proportions of genders in the respondents' group were as follows: 43.6% women and 56.3% men). The second significantly differentiating feature was the party in the group ($\chi^2 = 10,39$; $p < 0,034$). Significantly more people who traveled in a group fell into the Cluster 1 'Dissatisfied' (34.0%) than into the Cluster 2 (22.0%). Much more people who traveled with friends fell into the Cluster 2 (42.5%) rather than in the first one (36.8%).

Table 5. χ^2 test results of a cluster differences

Characteristics	Dissatisfiers (n=173)	Satisfiers (n=297)	Mean (n=470)
Gender			
Female	35,91%	48,21%	43,65%
Male	64,09%	51,79%	56,35%
χ^2 test		$\chi^2 = 7,00$; $p = 0,008$	
Party in the group			
Alone	20,11%	21,77%	21,17%
Family	(3,35)%	(3,15)%	3,23%
Friends	36,87%	42,59%	40,52%
Partner	(5,59)%	10,41%	8,67%
Organized groups	34,08%	22,08%	26,41%
χ^2		$\chi^2 = 10,39$; $p < 0,034$	

Notice: In brackets are the groups of less than 10 people as they were excluded from analysis.

² Due to the lack of attribute scale answers in many questionnaires, only 470 questionnaires were included in the cluster analysis (instead of 502).

Conclusions

The research conducted allows to formulate a number of conclusions aimed at improving the tourist image of Poznan.

The expectations-perception analysis allows to propose some action in order to improve the city's image. The comparison of importance attached to various elements of the image with their evaluation allowed to discover quality gaps, the biggest of which was noticed for the price level, public toilets, city cleanliness and safety. But the city authorities should be truly concerned with the elements that fell into the second quarter of the expectations-perception grid. These are the elements which are very important for tourists, but were evaluated relatively low, such as price level, city cleanliness and the access to the Internet. These elements should be of highest concern to the city authorities in order to improve the city's image. While the city authorities can have little impact on the price levels, the cleanliness of cities and Internet accessibility should become a priority in improving the image of the city.

The factor analysis of the elements of the city's image revealed the existence of six hidden dimensions of the image: affective, tourist infrastructure, entertainment and gastronomy, tourist attractions, functional and hospitality. Two of the above form evident extremes: the entertainment and gastronomy are evaluated most highly while the tourist infrastructure received the lowest marks, which can be another indication for the city authorities as to what action needs to be taken.

The goal of the cluster analysis was to identify the main segments of tourists visiting Poznan. The two identified segments clearly differ from each other in terms of the evaluation of Poznan's image. The first segment consists of people who

evaluate the elements of Poznan's image relatively low. The second segment consists of tourist who value them highly. The factors that significantly differentiate these two groups are: the affective factor, entertainment and gastronomy, the functional factor and the tourist attractions. Similar factors differentiating tourists' segments were identified by Huh et al. (2006), suggesting that these factors, and especially the tourist attractions and entertainment and gastronomy have a significant influence on satisfaction in urban tourism.

Within the 'satisfied' group there are much more women than men, that was also confirmed by Huh et al. (2006). This means that women can generally higher estimate elements of the city's image than men, and men are more demanding customers than woman. Also much more people who came to Poznan with their friends were satisfied. Unfortunately, the tourists visiting Poznan in a group were among 'dissatisfiers'.

The main limitation of this study is connected with the group of respondents. These were mostly people who stayed at hostels that are low-budget accommodation. They were mostly young people, aged up to 35. Adding older, wealthier market segment to the respondents' group could significantly influence the perception of the image. It could also reveal the existence of other segments characterized by other preferences and evaluating Poznan's differently.

Further research regarding the image should include the forms of activity undertaken by the visitors as well as benefits experienced when staying in the city. The segmentation based on the benefits and not only on the perception of different elements of the image can present more useful information on the actual behavior and preferences of tourists who visit cities.

References

- ASHWORTH G. J. and VOOGD H. (1994): *Marketing and Place Promotion*. In *Place Promotion: The Use of Publicity and Marketing to Sell Towns and Regions*, Gold JR, Ward SV (eds). John Wiley & Sons: Chichester; 39–52.
- ASHWORTH G. J. (1989): *Urban tourism. An imbalance in attention*. In *Progress in Tourism, Recreation and Hospitality Research*, C.P. Cooper (ed.). Belhaven: London: 35–54.
- BALOGLU S. and McCLEARY K. (1999): *A model of destination image formation*. *Annals of Tourism Research*, 26(4); 868–897.
- CROMPTON J. (1979): *An assessment of image of Mexico as a vacation destination and the influence of geographical location upon that image*. *Journal of Travel Research*, 17(4): 18–23.
- DONALDSON R. and FERREIRA S. (2009): *(Re-)creating Urban Destination Image: Opinions*.
- EDWARDS D., GRIFFIN T., HAYLLAR B., DICKSON T. and SCHWEINSBERG S. (2009): *Understanding Tourist 'Experiences' And 'Behaviour' in Cities*. An Australian Case Study, CRC for Sustainable Tourism Pty Ltd., Dewey.
- EMBACHER J., and BUTTLE F. (1989): *A repertory Grid Analysis of Australia's Image as a Summer Vacation Destination*. *Journal of Travel Research*, 28 (3), 3–23.
- Encyclopedia of Tourism (2000), J. JAFARI (ed.). Routledge, London and New York.
- European Commission (2000): *Towards quality urban tourism. Integrated quality management (IQM) of urban tourist destinations*. Enterprise Directorate-General Tourism Unit, Brussels.
- GOODRICH J. N. (1977): *A New Approach to Image Analysis through Multidimensional Scaling*. *Journal of Travel Research*, 16 (2): 3–7.
- HUH J., UYSAL M. and McCLEARY (2006): *Cultural/Heritage Destinations: Tourist Satisfaction and Market Segmentation*. *Journal of Hospitality & Leisure Marketing*, 14(3): 81–99.
- HUNT J. D. (1975): *Image as a Factor in Tourism Development*. *Journal of Travel Research*, 13: 1–7.
- KOLB B. M. (2006): *Tourism Marketing for Cities and Towns: Using Branding and Events to Attract Tourists*. Butterworth-Heinemann: Oxford.
- LAW C. M. (2002): *Urban Tourism: The Visitor Economy and the Growth of Large Cities*. 2nd edition. London: Continuum.
- MAITLAND R., and NEWMAN P. (2009): *Developing world tourism cities*. In *World tourism cities: Developing tourism off the beaten track*, Routledge: Oxon, 1–21.

- PAGE S. J. (1995): *Urban tourism*. Routledge, London & New York.
- PAGE S. J., and HALL C. M. (2003): *Managing Urban Tourism*. Prentice Hall: Harlow 2003.
- PIKE S., and RYAN C. (2004): *Destination Positioning Analysis through a Comparison of Cognitive, Affective, and Conative Perceptions*, Journal of Travel Research, 42 (4): 333–342.
- PIKKEMAAT B. (2004): *The measurement of destination image: the case of Austria*. The Poznan University of Economics Review 4 (1): 87–102.
- RUSSELL J. A., and PRATT G. (1980): "A Description of Affective Quality Attributed to Environment." Journal of Personality and Social Psychology, 38 (2): 311–322.
- RYAN C., and CAVE J. (2005): *Structuring Destination Image: A Qualitative Approach*. Journal of Travel Research, 44 (2): 143–150.
- Tourism 2020 Vision (2000), Europe, vol. 4. Madryt, WTO.
- TYLER D. i GUERRIER Y. (1998): *Conclusion: urban tourism – the politics and process of change*. [In] Managing Tourism in Cities: Policy, Process and Practice (red.) Tyler D., Guerrier Y. i Robertson M., Chichester, John Wiley and Sons.
- USP (2009): *Rocznik statystyczny Miasta Poznania / Statistical Yearbook of Poznan City*. Poznań: Urząd Statystyczny w Poznaniu – Poznań Statistical Office
- VOGT C. A., and ANDERECK K. L. (2003): *Destination Perceptions across a Vacation*. Journal of Travel Research, 41 (4): 348–354.
- WTO (2005): *City Tourism & Culture*. The European Experience, World Tourism Organization, Madrid.
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