

Urban Walking: Perspectives of Locals and Tourists

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Abstract

Urban planners and architects have done extensive research on walkability: what it means and how it correlates with urban design and quality of life of the locals, however, it has been hitherto neglected from the aspect of tourism studies. Many cities worldwide are or tend to be walkable as this leads to more sustainable and prosperous communities. In addition, walking-friendly environments greatly cater for leisure and tourism, as in many cities, walking is an integral part of tourist experience. Therefore, tourism industry can be of tremendous help for the city authorities in understanding walkers' needs and experiences.

Taking into account both the locals and tourists, this research sought to: (1) determine the most frequently utilised modes of transportation in Novi Sad in Serbia and Koper in Slovenia; (2) assess their reasons for walking and perception of the quality of pedestrian infrastructure; and (3) evaluate the psychometric properties of the questionnaire designed for the purpose of this study.

The results show that the great majority of respondents walk in these two cities. The locals walk primarily to achieve physical fitness, whereas tourists walk primarily to explore the urban spaces. This makes more space for tourism as it combines a competitive supply able to meet visitors' expectations with a positive contribution to the sustainable development of cities and well-being of their residents. Furthermore, this study contributes to emphasising walking as a sustainable form of mobility in urban environment and can be the impetus for profiling Novi Sad and Koper as walking-friendly cities.

Key words: Pedestrian infrastructure, walking, walkability, urban tourism, quality of life

Introduction

Exploring urban areas and engaging with a city can be achieved simply by walking. People are drifting around and interacting with city spaces, experiencing them with all their senses (Pinder, 2005). According to Lee and Moudon (2004), walking occurs primarily in the neighborhood streets and public facilities whose character influences the degree to which they are safe, comfortable, and attractive for this type of activity. Walking infrastructure accounts for an aspect of quality of an urban environ-

ment and can greatly influence the experiences of those who walk, not only of residents, but also tourists, who greatly occupy the cities worldwide. Cities are both big emittive and receptive centres (Ashworth, Page, 2011), which offer a large variety of products to its visitors, namely activities and attractiveness of urban spaces.

Walkability has recently become a buzzword in urban planning. In broad sense, it is the measure of the overall walking conditions in an area. More specifically, it is the extent to which the built envi-

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ronment is friendly to the presence of people living, shopping, working, enjoying leisure pursuits or spending time in it (Abley, 2005). Put simply, walkability is perceived as an area that promotes walking. Some authors (Cohen, 2010; Kolb, 2006; Southworth, 2005; Jovičić, 2003; Burden, 2000) attempted to define critical success factors in tourism development in inhabited areas, referring primarily to residents' quality of life, and influencing tourist experience at a destination they visit. Burden (2000), for example, suggests that places should be designed for people, create sense of place, connect people to nature, be authentic and offer diversity. Knox (2005) argues that 'a good urban design fosters positive sense of place which is usually socially constructed, as in ordinary places, which do not have physical settings with important landmarks, the social construction of place is especially important'. Based on these facts, a good walking infrastructure and people using it for their daily and tourist activities may contribute to increased attractiveness of a place and development of its image, thus directly influence the quality of life of residents and foster urban tourism development as a whole. Some authors go on to distinguish between utilitarian walking, where the purpose is transport, and leisure walking, where the purpose is recreation (Forsyth, et al., 2008).

Technological advances have led to the large-scale, public-access walkability index (Walk Score, 2014). Moreover, there has been an increased number of websites, mobile phone applications, and instruments that gauge the approximate distance travelled on foot by registering the number of steps taken, calculate the walkability of an area (Walkonomics, 2014; Rate My Street, 2014) and give quantitative information about the certain walking route or a neighbourhood. Theoretically, the need for walking and its health benefits, proximity of destinations and exploring the urban environment is being brought together with the contemporary trends and needs of the modern society to follow them, promoting walking in both the real and the virtual world.

Walkable cities have received an increased attention by practitioners and researchers in the fields of urban design, transport, community development and public health, however, there should be more in-depth studies on people's experiences and how they use and perceive cities when they walk, particularly from the aspect of tourism, which seems to be underexplored thus far.

What do walkable cities provide?

There are many cities worldwide that have been promoted as walkable as it is believed that 'walkable neighborhoods with access to public transit, better

commutes, and proximity to the people and places that people love are the key to a happier, healthier and more sustainable lifestyle' (Walk Score, 2014). In this regard, 'walkability' refers to 'liveability' as the sum of the factors that add up to a community's quality of life. The most walkable cities, according to the aforementioned website, are New York in America, Toronto in Canada and Sydney in Australia. Furthermore, walking-friendly environments should cater for leisure and tourism, as in many cities, walking is an integral part of the tourism experience as they seem more inviting and far more hospitable. The appeal of daily activities has already been commercially exploited, as demonstrated by 'like-a-local' tours offered in various European cities. According to various web sources, some of them appear on most lists of the world's most walkable cities, namely Barcelona, Budapest, London, Bruges, Vancouver, Sydney, New York, Salzburg, Prague, Edinburgh, Boston, Melbourne etc.

It is very common that numbers of tourist groups that occupy cities worldwide speak in favour of experiencing them on foot, therefore, the question that we may ask is what makes these places suitable for walking – is it their attractive design, street furniture, architecture, attractions, local residents or, perhaps, something more ephemeral, such as national restaurants, old households, etc? As Methorst, et al. (2010) argue, some of the factors that are essential for creating walkable environments are streetscape elements, weather conditions, facilities and provisions like aesthetics and greenery, all of which may influence people's decision to walk. There are certain perceptual pleasures that pedestrian-friendly places provide: a sense of local history, the atmosphere and feel of the place, interactions between people, traditional or (post)modern architecture, but also just an aimless wandering through urban spaces. The leisurely experience of urban areas is not necessarily romantic (Urry, 1990) and is not particularly based on the visual, but also on the olfactory and auditory senses (the smell of freshly baked bread early in the morning or the sound of music from a local café). Even just the feeling of excitement being in an unfamiliar environment may account for the unique experience (Solnit, 2009), as often, the appeal of a city includes a plethora of sensual stimuli (Edensor, 2000). Even most mundane places, seen through pedestrians' eyes, tend to reveal their attractive side that has the particular aesthetic potentials and carry special meanings (Ameel, Tani, 2012). Taking part in the city's everyday life, people may be drawn into unexpected encounters or even see hidden inscriptions in urban architecture, and therefore build highly embodied relationships with the spaces they walk in.

Multiple benefits of walking

It is assumed that exploring urban areas on foot may have multiple benefits; for example, experiential, ecological, educational, economic, social and health benefits.

Walkability is a key foundation for the sustainable city and sustainable community, as walking is considered a 'green' mode of transport that not only reduces congestion, but also has low environmental impacts, conserving energy without air and noise pollution (Forsyth, Southworth, 2008). Furthermore, recent research suggests that walking promotes both mental and physical health (Southworth, 2005). There have been a number of initiatives (The Walking Site, 2005; 10.000 Steps Project, 2013) that encourage walking, suggesting that 30 minutes a day, five days a week, can increase longevity and improve quality of life. Some researchers and planning professionals speculate that the environmental design may support opportunities for physical activity, especially for walking for travel and recreation (Forsyth, et al., 2007; Rodriguez, et al., 2006; Doyle, et al., 2006; Frumkin, et al., 2004; Frank, et al., 2003; Owen, et al., 2000; Burden, 2000; Sallis, et al., 1998).

According to Litman (2004), walking provides a variety of economic benefits, including consumer cost savings and public cost savings (reduced external costs), more efficient land use, community livability, improved fitness and public health. The needs, opportunities and benefits associated with walkable communities are similar regardless of the differences in community type (Bicycle Federation, 1998). Given a safe and comfortable environment, people also look for sense of belonging and pleasure so as to enhance their walking experience (Mehta, 2008). Apart from being a mode of transport, walking can also be considered as a way of looking at space and attaching emotions to environments. If there exists a well-designed pedestrian infrastructure and fosters sense of place, it might contribute to a greater attractiveness of the urban environment and could as well be one of the 'pull' factors for tourists and would attract more locals to walk. People living in highly walkable neighborhoods tend to walk more than those living in less walkable areas (Owen, et al., 2004), however, there is evidence that the locals' motives for walking is predominantly transport, rather than recreation (Toit, et al., 2007).

One of the questions confronted in this research is that regarding the most utilised mode of mobility in Novi Sad and Koper and what people's main reasons for walking are, presuming that walkability contributes to greater satisfaction, comfort and enhances the experiences of those who walk, irrespective of being a local or a tourist. Beyond this, the authors sought to assess the psychometric properties of the survey conducted in this study and draw the key elements

of walkability in the two cities. The instrument itself may find more general use in the future and be a useful tool for assessing aspects of walkability in other cities worldwide.

Methods

A specific questionnaire was designed for the purpose of this study. A total of 409 participants were sampled from the two focus areas, eventually falling into four categories – local residents, people employed in Novi Sad and Koper but live elsewhere, daily visitors and tourists. Two subsamples were extracted – Koper (N=225) and Novi Sad (N=184) which were both saturated by local and non-local respondents. The researchers intended to acquire a large amount of direct responses from a specifically targeted group. The great majority of the data was collected *in situ* in the pedestrian zones of both cities and at the premises of Tourism Organisation of Novi Sad and Tourism Information Centre Koper. The researchers believed that these sites were the most suitable for sampling as they provide more opportunities for face to face interaction. In Novi Sad the data was being collected for two weeks in July 2014, whereas in Koper the data was being collected for two weeks in September 2014. The response rate percentage was 100% as all the responses were valid and useful for processing.

The first part of the questionnaire comprised a series of questions that were set to obtain general information about respondents regarding gender, age group, educational level, place of residence and reasons for staying in the cities. In the group of independent variables, two pieces of data were observed using the technique of scalar ranges proposed by Perić (2013), that were related to the most common ways of mobility in urban environment and the role walking has in respondents' everyday lives.

The second part of the questionnaire comprised 30 items that assessed certain aspects of walking – from the pedestrian infrastructure to experiences created while walking (Table 3). The researchers intended to assess the psychometric properties of this part of the questionnaire, which was designed based on the similar studies that were measuring the level of walkability. The respondents assessed the proposed statements on the Likert-type scale assigning them the numeric values (1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree). In this study, the format of a typical five-level Likert item was replaced by so called 'forced choice' method, where the middle option of 'neither agree nor disagree' was not available, therefore either positive or negative response to the statements was measured.

The psychometric characteristics of the questionnaire were assessed by using the following procedures:

(1) Scale Reliability Analysis (calculation of Cronbach's Alpha) and (2) Factor Analysis, PCA model (Principal Components Analysis) with Direct Oblimin Rotation. The statistical inference was conducted at a significance level of 0.05 (Sig.<.05). Both statistical procedures were carried out on both subsamples independently. Eventually, the researchers reduced the number of items, retaining only those that had sufficiently high communalities in both subsamples and whose factor loadings were tolerably high. Data on the factor loadings are shown in Tables 4, 5 and 6 (Pattern Matrix).

Results

The general finding from this study suggests that the dominant way of mobility in both Novi Sad and Koper is walking for all categories of respondents (Table 1). As Table 2 shows, tourists and visitors walk mainly to explore the city, and the locals' predominant reason for walking is recreation.

Analysis of responses on dominant modes of transport in urban areas, shows that by far the highest average scalar value was related to walking, in spite of some significant differences which occurred among certain categories of respondents (Tables 1 and 2).

Scale Reliability Analysis showed a good internal consistency of items. The Cronbach Alpha coefficients were computed for the reliability of the factors thus

identified the value above 0,7, which was in both cases higher than its recommended theoretical value (DeVellis, 2003). In almost all items, high reliability of the scale was confirmed as all 30 claims were homogeneous and focus on the related features.

Based on the original data collected in two subsamples (Novi Sad and Koper), 30 items were subjected to the PCA. Prior to its implementation, the suitability of the data for Factor Analysis was assessed using the software SPSS statistics 15.0. By examining the correlation matrix, the researchers discovered a large number of coefficient values of 0,3 and higher. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was in both subsamples higher than its recommended value of 0,6 (Kaiser, 1970; 1974) thus demonstrated a strong sampling adequacy. In terms of the suitability of Factor Analysis for this dataset, Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, which pointed towards factorability of correlation matrix. Taken together, these tests provide a minimum standard which should be passed before a factor analysis (or a PCA) is to be conducted.

PCA revealed 10 components in the sample Koper with eigenvalues over 1, explaining 16,5% to 3,5% of the variance, and 9 components in the subsample Novi Sad explaining 21,1% to 3,5% of the variance. By reviewing Scree Plot for both subsamples the existence of a clear point of fracture after the second component was established. Based on the criteria of Cattell

Table 1. Average scalar values of modes of transport which respondents of different categories use (One-Way ANOVA was performed)

Subject Status	N	Walking	Car	Bike	Public transport	Taxi	Roller-blades
Residents	191	5,19	3,69	3,62	3,31	3,45	1,72
Employees	26	5,42	4,15	3,54	3,04	3,04	1,58
Visitors	99	5,16	3,86	3,23	3,69	3,18	1,88
Tourists	93	5,26	3,08	3,99	3,75	3,13	1,80
Total	409	5,21	3,62	3,61	3,49	3,28	1,77
F		,487	5,908*	4,576*	4,465*	1,168	,642
Sig.		,692	,001	,004	,001	,322	,588

Table 2. Average scalar values of the main reasons why different categories of respondents walk

Subject Status	N	Easy way to reach destinations	The best way of recreation	The best way to see the city	Avoiding traffic jams	A good way to save money	No alternative
Residents	191	4,25	4,42	3,31	4,00	2,95	2,09
Employees	26	4,35	3,62	2,85	4,42	3,08	2,85
Visitors	99	4,18	3,71	4,56	3,58	2,93	2,04
Tourists	93	4,09	3,51	4,74	3,83	2,75	2,08
Total	409	4,20	3,99	3,91	3,89	2,91	2,12
F		3,53	11,279*	29,865*	5,908*	3,164*	1,713
Sig.		,787	,000	,000	,001	,024	,164

Table 3. Scale Reliability Analysis

Q	Statements	Cronbach's Alpha if Item Deleted	
		Koper	Novi Sad
1.	There are many cyclists, rollerbladers and skateboarders on paths that bother pedestrians.	,772	,827
2.	Paths are uneven making it difficult to walk.	,760	,823
3.	There is a fair number of benches and places where pedestrians can rest.	,756	,824
4.	There is a fair number of trash cans on paths.	,760	,826
5.	There are many trees and greeneries in town.	,756	,821
6.	People with special needs can easily use the paths (people in wheelchairs, old people etc).	,757	,821
7.	It is easy for tourists to reach their accommodation on foot wherever they are.	,757	,827
8.	Paths for pedestrians and cyclists are physically separated.	,764	,828
9.	Paths are adjusted for blind and visually impaired people.	,766	,826
10.	Paths are clean and properly maintained.	,754	,823
11.	Paths are wide enough so a few people can walk side by side.	,756	,821
12.	As I walk, I learn about history, culture and spirit of the city.	,761	,826
13.	The crossings are adequately marked.	,755	,819
14.	I feel safe while I walk through the city.	,760	,822
15.	Paths are well lit during the nights.	,757	,820
16.	Cars are parked on the pavements.	,768	,824
17.	There are a lot of (pets) dogs that bother pedestrians.	,767	,825
18.	Road signs and other signs are clear and easily understandable.	,758	,824
19.	I walk in the city centre the most often.	,786	,845
20.	There are many passages, hidden streets and small squares that attract people's attention.	,763	,830
21.	There are dark streets I would rather not walk into.	,769	,830
22.	People on streets are friendly and hospitable.	,757	,831
23.	I always know where I am while walking in the city.	,763	,838
24.	While I walk I am aware that I do something good to my health.	,769	,832
25.	Roads to tourist attractions are clearly marked by signposts.	,756	,826
26.	Paths easily connect some parts of town, city beach, parks and other green areas.	,754	,828
27.	Walking along the streets of the city is a pleasant activity.	,758	,828
28.	For some objects it is difficult to determine what they are and what their significance is.	,761	,831
29.	Paths are well connected to the areas where there is something to see, do or experience.	,753	,825
30.	I only walk along the main streets in town.	,776	,842
Cronbach's Alpha		,768	,832

(1966), only two components for further exploration were retained. These are supported by the results obtained by using parallel analysis of equally large matrix of random numbers (30 variables x 225 respondents for the subsample Koper, and 30 variables x 184 respondents for the subsample Novi Sad). This two-component solution explained 23,1% of the total variance in the subsample Koper (contribution of the first component was 16,5% and of the second component 6,6%) and 29% of the variance in the subsample Novi Sad (contribution to the first component is 21% and the second component 8%). Oblimin Rotation Method was eventually carried out for easier interpretation

of the components. Rotated solution revealed a simple structure in both subsamples. Pattern Matrix and Structure Matrix contained a number of high-value coefficients. Most variables gave factor loadings only to one out of two components (Table 4).

Few items had very low communalities (the proportion of each variable's variance that can be explained by the factors) in both subsamples. The items that were kept in further analysis were these with coefficients lower than 0,2 in both pattern matrixes. Due to that, the following items were eventually excluded from the survey: Q1, Q2, Q4, Q8, Q9, Q17, Q19, Q21, Q28, Q30 (the ordinal number of the items presented in Table 3).

As one of the research questions was aimed at identifying an underlying structure of unobservable variables, a Factor Analysis was selected in preference to PCA, and was carried out on remaining 20 items. Repeated Oblimin Rotation of Principal Components drew a new pattern matrix of high parsimony with two steady factors that were extracted. The first factor was saturated with 11 and the second one with 9 variables. Factors in both subsamples were saturated by the same items with the only difference being their hierarchical order.

Finally, the most important items comprising each factor were isolated; ten items did not load substantially on any factors and were therefore discounted. Based on the contents of these items, the extracted factors were named as follows:

1. *Pedestrian infrastructure* – this factor measured the quality of the physical environment and the overall walking conditions and
2. *Pedestrian comfort and safety* – this factor measured people’s comfort, feeling of safety and security while they walk.

Table 4. Pattern Matrix and Comunalities of Principal Components Analysis for the survey items (Rotation Method: Oblimin with Kaiser Normalization)

	Koper (SLO)			Novi Sad (SER)		
	Pattern Matrix Component		Communalities	Pattern Matrix Component		Communalities
	Factor 1	Factor 2	Extraction	Factor 1	Factor 2	Extraction
Q01	,019	,061	,005	,437	,036	,198
Q02	,336	,030	,117	,636	-,118	,289
Q03	,519	,003	,270	,600	-,135	,346
Q04	,329	,208	,173	,596	-,224	,354
Q05	,491	,070	,256	,614	,099	,410
Q06	,436	,038	,207	,604	,029	,373
Q07	,539	-,073	,284	,287	,199	,144
Q08	,051	,453	,215	,333	,146	,151
Q09	,267	-,038	,070	,520	-,014	,267
Q10	,565	,150	,368	,613	,005	,377
Q11	,458	,183	,269	,620	,147	,441
Q12	,399	,018	,212	,198	,478	,304
Q13	,468	,199	,287	,580	,233	,443
Q14	,217	,478	,308	,543	,133	,340
Q15	,277	,454	,322	,627	,138	,445
Q16	-,070	,560	,307	,577	-,065	,322
Q17	,213	,004	,046	,390	,196	,220
Q18	,397	,165	,205	,405	,250	,265
Q19	-,336	,158	,121	-,224	-,067	,061
Q20	,486	-,220	,252	,117	,474	,260
Q21	-,077	,401	,219	,413	-,166	,171
Q22	,408	,231	,249	,080	,344	,235
Q23	,162	,277	,217	-,293	,483	,264
Q24	,248	-,240	,201	-,110	,594	,339
Q25	,421	,211	,249	,274	,333	,221
Q26	,667	-,082	,435	,131	,516	,310
Q27	,645	-,244	,427	,048	,664	,455
Q28	,117	,389	,171	,338	-,008	,214
Q29	,551	,161	,356	,209	,596	,448
Q30	,226	-,333	,139	-,287	,286	,132
	KMO Measure of Sampling Adequacy = ,709			KMO Measure of Sampling Adequacy = ,781		
	Bartlett's Test of Sphericity = 1449,277 Sig.= ,000			Bartlett's Test of Sphericity = 1524,780 Sig.= ,000		

Table 5. Pattern Matrix, Structure Matrix and Communalities of Principal Components Analysis for adjusted survey after excluding 10 items (Rotation Method: Oblimin with Kaiser Normalization) – Subsample Koper

	Paterrn Matrix Component		Structure Matrix Component		Communalities
	Factor 1	Factor 2	Factor 1	Factor 2	Extraction
Q10	,695	,029	,688	-,142	,474
Q15	,669	,300	,595	,136	,439
Q14	,558	,173	,563	-,216	,294
Q11	,544	-,053	,557	-,186	,313
Q13	,543	-,083	,556	-,470	,323
Q18	,532	,070	,555	-,379	,270
Q6	,451	-,042	,462	-,153	,215
Q16	-,451	-,400	,378	-,475	,342
Q3	,395	-,184	,447	-,310	,225
Q5	,395	-,213	,440	-,281	,243
Q7	,353	-,296	,425	-,383	,263
Q27	,134	,681	,302	-,714	,526
Q20	,038	,568	,178	-,577	,335
Q25	,279	,406	,368	-,468	,298
Q22	,270	,401	,333	-,400	,287
Q26	,268	,355	,515	-,061	,427
Q24	-,056	,344	,329	,389	,112
Q12	,250	,339	,029	-,330	,219
Q29	,211	,258	,516	,036	,370
Q23	,216	-,237	,255	-,135	,201
KMO Measure of Sampling Adequacy = ,796			Bartlett's Test of Sphericity = 841,786 Sig.= ,000		

Table 6. Pattern Matrix, Structure Matrix and Communalities of Principal Components Analysis for adjusted survey after excluding 10 items (Rotation Method: Oblimin with Kaiser Normalization) – Subsample Novi Sad

	Paterrn Matrix Component		Structure Matrix Component		Communalities
	Factor 1	Factor 2	Factor 1	Factor 2	Extraction
Q11	,693	,043	,705	,241	,499
Q10	,669	-,069	,677	,328	,426
Q05	,639	,056	,666	,287	,432
Q15	,636	,105	,655	,239	,454
Q13	,635	,146	,649	,123	,477
Q14	,615	,040	,627	,216	,394
Q06	,600	-,004	,598	,168	,358
Q16	-,573	-,092	,547	,072	,307
Q03	,562	-,091	,536	,070	,294
Q18	,438	,167	,486	,293	,262
Q07	,298	,162	,344	,247	,242
Q27	,057	,636	,240	,652	,428
Q24	-,134	,618	,336	,624	,353
Q23	-,396	,596	,245	,606	,377
Q26	,078	,583	,043	,580	,373
Q29	,171	,575	,245	,533	,417
Q20	,100	,505	,326	,503	,294
Q12	,199	,446	-,225	,483	,289
Q22	,074	,349	,364	,425	,242
Q25	,264	,349	,174	,371	,245
KMO Measure of Sampling Adequacy = ,807			Bartlett's Test of Sphericity = 888,731 Sig.= ,000		

Table 7. Statements that saturated Factors 1 and 2

Statements which saturated Factor 1 (in hierarchical order)	Statements which saturated Factor 2 (in hierarchical order)
Paths are clean and properly maintained.	Walking along the streets of the city is a pleasant activity.
Paths are wide enough so a few people can walk side by side.	While I walk I am aware that I do something good to my health.
Paths are well lit during the nights.	There are many passages, hidden streets and small squares that attract people's attention.
I feel safe while I walk through the city.	Paths easily connect some parts of town, beach, parks and other green areas.
There are enough marked crossings.	People on streets are friendly and hospitable.
There are many trees and greeneries in town.	Roads to tourist attractions are clearly marked by signposts.
People with special needs can easily use the paths (people in wheelchairs etc).	I always know where I am while walking along the city.
Road signs and other signs are clear and easily understandable.	Paths are well connected to the areas where there is something to see, do or experience.
Cars are parked on the pavements.	As I walk, I learn about history, culture and spirit of the city.
There is a fair number of benches and places where pedestrians can rest.	
It is easy for tourists to reach their accommodation on foot.	
Cronbach's Alpha = ,832	Cronbach's Alpha = ,695

According to the results, the researchers eventually refined the survey and reduced the number to 20 variables in a dataset. The final order of the items was determined based on the sum of ranks for each variable in both subsamples (Table 7). Scale Reliability Analysis showed greater internal consistency of items in the first factor. It was logical with respect to the hierarchical nature of factors.

It is evident that both factors comprise the characteristics that are of high importance for the walking experience and should be taken into account when designing urban spaces.

Discussion

The general finding from this study suggests that the dominant mode of mobility in both Novi Sad and Koper is walking for all categories of respondents, irrespective of being a local or a tourist, whereas respondents suggested a slightly better overall quality of walking conditions in Koper. It seemed important for the researchers to make a distinction between tourists, daily visitors, people who live out of Novi Sad and Koper but commute to these cities for work and the locals. The separate analysis and comparison of the two cities was made so that the authorities and tourism planners could get better insights in what aspects of walkability should be improved. The result that walking is the most preferred mode of mobility in both cities indicates the importance of emphasizing walkability as an aspect of urban design and an impetus for competitive positioning of the observed cities as walkable in urban tourism markets.

Saelens, et al. (2003) claim that 83% of all 'trips' undertaken for non-working purposes are within a walking distance. To create places that encourage walking, practitioners need an understanding of the specific characteristics of the built environment that correlate most strongly with walking. According to Methorst et al, (2010), one of the potential ways to improve walking in public spaces is to improve their design with architecture having the leading role in promoting walking, but tourism industry can give its own contribution in terms of developing the specific product based on walking, producing tourism information and all necessary behind-the-scenes preparation and planning. The results of this study may be of high value for the practitioners, hence the two factors that have been clearly extracted in the analysis. Attention should be paid to design of the walking infrastructure, as well as the comfort and safety of those who walk. If tourists feel comfortable and secure in a city, the chances are they would spread a word about the city and would most probably repeat their visit. For tourism, of course, there are also many infrastructural requirements necessary for the promotion and support of walking in the city. For example, good street food, safe walkways that are well lit, clean and maintained, retail distractions and links to heritage and historical attractions can all enhance the allure of walking the city.

One must take into account the importance walkability has primarily on quality of life of the residents – if they easily move through the city on foot and are well informed about its historical, cultural and nat-

ural heritage, consider it a pleasant and safe place to live, they will develop a sense of pride and sense of belonging and will be emotionally more attached to it. Locals, of course, value more these neighbourhoods in which they feel safe, where they can interact and socialise with other people passing by or living in the same area. All of these qualities of residential areas may be augmented by promoting walking in them.

It is important to note the initiatives which encourage local residents to become more aware, and proud of the historical, cultural and natural heritage of their city, as they are extremely beneficial. These strategies should not be too overt, however, as the walk through a city is ideally one of discovery and surprise – signage and direction should be discernible, rather than billboarded.

Apart from the experiential and educational aspect, it is important to once again emphasise the aspect of the health. It has not been explored in depth in this study, however, it should be mentioned as one of the crucial benefits for pedestrians, particularly the locals whose main reason for walking is recreation. The studies that are examining the relationship between the built environment and physical activity (Brown, et al, 2008, McCormack, 2004, Moudon, 1997) are looking at understanding the health benefits in relation to the design of the neighbours. They suggest that the presence of sidewalks, aesthetics and convenient access to shops and stores are important elements of physical activity within the city neighbourhoods.

As Novi Sad and Koper are relatively walkable in terms of proximity of key destinations within the city, many people opt for moving on foot. Some of the reasons why respondents chose walking included avoiding traffic jams and running their errands. Not starting a car in order to travel short distances is beneficial for both people's health and the environment. However, the crucial point is that most daily visitors and tourists explore areas on foot and for that reason encouraging walking should be taken into serious consideration. It is important to note that there is a critical qualitative element to the feel and experience of traversing a city slowly; meandering even, that may enhance economic impact as there is more time for that coffee, that gift purchase, that snack. Further research might embrace techniques of visual ethnography and ehtnomethodology to capture the ways in which people make sense of the city by walking in them – confronting these urban spaces on their own terms.

Conclusion

Creating good urban spaces requires an in-depth understanding of the characteristics of walking and the needs, abilities and wishes of those who walk. Only based on these characteristics can we successfully

communicate and promote walking in the city. Improving the quality of urban spaces is an essential requirement in satisfying tourists' needs, in enhancing the competitiveness of the tourism industry, and in ensuring balanced and sustainable tourism development. As far as the tourist is concerned, the satisfaction derived from staying at a destination depends not only on experience of specific tourist services, but also on more general factors, for example hospitality, safety and security, sanitation and salubrity, walking infrastructure and visitor management. A large number of elements have an impact on the tourists' perception of a destination, on the level of their satisfaction and, in consequence, on the tourists' willingness to make a repeat visit and to recommend the destination to potential visitors.

Pedestrian friendly cities have received an increased attention from practitioners and researchers in the fields of public health and urban and transport planning, however, there should be more studies in relation to the quality of life and wellbeing of the local communities (Cummins, et al, 2005). The notion of sociability has been explored by Du Toit (2007) who suggested that there are no strong connections between walkable urban environments and social interaction within them. The absence of sociability could be overcome and potentially propelled by designing more recreational areas within the cities, as this study showed that recreation is the locals' most dominant motive for walking. Leisurely strolling along the streets or walking as a form of recreation, may result in intentional or spontaneous casual contacts that may generate a sense of familiarity (Talen, 1999). Over time, the sense of social cohesion and strong community pride may develop, which could potentially become one of the 'intangible city products' that could even affect tourist experiences and draw them into local lifestyle.

This paper reported a two-factor model of different aspects of walkability based on a sample which included 409 respondents of different gender and sociological characteristics. These factors were named Pedestrian infrastructure and Comfort and security. Based on the results, it is possible to illuminate the potential for developing walking infrastructure as an important parameter for increasing the attractiveness of the urban spaces of Novi Sad and Koper, as walkable environment greatly contributes to the quality of life of local population and adds to the overall tourists experience. In this regard, far greater attention should be paid to the street design and the ways it is presented to the city visitors or used by the locals.

Evaluation of walkability of urban areas from the perspective of tourism has not been done so far or has been very little mentioned. The results of this prelim-

inary study were aimed at acquiring awareness of the preferent modes of mobility in Novi Sad and Koper and better understanding of the walking habits of the locals and tourists. Future work will further explore the level of satisfaction of urban spaces' consumers in terms of pedestrian environment and how it qualitatively affects their tourist experience.

References

- 10.000 Steps Project 2013. Available at: www.10000steps.org.au (accessed 17 November 2014)
- Abley, S. 2005. Walkability Scoping Paper. Christchurch
- Ameel, L., Tani S. 2012. Everyday aesthetics in action: Parkour eyes and the beauty of concrete walls. *Emotion, Space and Society* 5, 3, 164-173
- Ashworth, G., Page S.J. 2011. Urban tourism research: Recent progress and current paradoxes. *Tourism Management* 32, 1, 1-15
- Bartlett, M. S. 1954. A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society Series B - Statistical Methodology* 16, 2, 296-298
- Bicycle Federation of America 1998. *Creating Walkable Communities*. Washington D.C.
- Brown A. L., Khattak A. J., Rodriguez, D. A. 2008. Neighbourhood types, travel and body mass: a study of new urbanist and suburban neighbourhoods in the US. *Urban Studies* 45, 4, 963-988
- Burden, D. 2000. Streets and Sidewalks, People and Cars: The Citizen's Guide to Traffic Calming. Sacramento CA
- Cattell, R. 1966. The scree test for the number of factors. *Multivariate Behavioral Research* 1, 2, 245-276
- Cohen, N. 2011. *Green Cities: An A-to-Z Guide (Vol. 4)*. Sage
- Cummins, S., Macintyre, S., Davidson, S., Ellaway, A. 2005. Measuring neighbourhood social and material context: generation and interpretation of ecological data from routine and non-routine sources. *Health & place* 11, 3, 249-260
- Doyle, S., Kelly-Schwartz, A. Schlossberg, M., Stockard, J. 2006. Active Community Environments and Health: The Relationship of Walkable and Safe Communities to Individual Health. *Journal of the American Planning Association* 72, 1, 19-31
- De Vellis, R. F. 2003. *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, California: Sage
- Du Toit L., Cerin, E. Leslie, E., Owen, N. 2007. Does walking in the neighbourhood enhance local sociality?. *Urban Studies* 44, 9, 1677-1695
- Edensor, T. 2000. Staging tourism: Tourists as performers. *Annals of Tourism Research* 27, 2, 322-344
- Forsyth, A., Oakes, J. M., Schmitz, K. H., Hearst, M. 2007. Does residential density increase walking and other physical activity?. *Urban Studies* 44, 4, 679-697
- Forsyth, A., Southworth, M. 2008. Cities Afoot: Pedestrians, Walkability and Urban Design. *Journal of Urban Design* 13, 1, 1-3
- Forsyth, A., Hearst, M. J., Oakes, M., Schmitz, K. H. 2008. Design and Destinations: Factors Influencing Walking and Total Physical Activity. *Urban Studies* 45, 9, 1973-1996
- Frank, L., Engelke, P., Schmid, T. 2003. *Health and community design: the impact of the built environment on physical activity*. Washington DC: Island Press
- Frumkin, H., Frank, L., Jackson, R. J. 2004. *Urban Sprawl and Public Health. Designing, Planning, and Building for Healthy Communities*. Washington DC: Island Press.
- Jovičić, D. 2010 *Tourism and Environment*. Belgrade: Ton Plus
- Kaiser, H. F. 1970. A second generation little jiffy. *Psychometrika* 35, 4, 401-415
- Kaiser, H. F. 1974. An index of factorial simplicity. *Psychometrika* 39, 1, 31-36
- Knox, L. P. 2005. Creating Ordinary Places: Slow Cities in a Fast World. *Journal of Urban Design* 10, 1, 1-11
- Kolb, B. M. 2006. *Tourism Marketing for cities and towns: using branding and events to attract tourism* (Vol. 10). Routledge
- Lee, C., Moudon, A. V. 2004. Physical activity and environment research in the health field: implications for urban and transportation planning practice and research. *Journal of planning literature* 19, 2, 147-181
- Litman, T. 2007. Economic value of walkability. *World Transport Policy & Practice* 10, 1, 5-14
- Mehta, V. 2008. Walkable streets: pedestrian behaviour, perceptions and attitudes. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 1, 3, 217-245
- McCormack, G., Giles-Corti, B., Lange, A. 2004. An update of recent evidence of the relationship between objective and self-report measures of the physical environment and physical activity behaviours, *Journal for Science and Medicine in Sport* 7, 1, 81-92
- Moudon, A. V., Hess, P. M., Snyder, M. C., Stanilov, K. 1997. Effects of site design on pedestrian travel in mixed-use, medium-density environments. *Transportation Research Record: Journal of the Transportation Research Board* 1578, 1, 48-55
- Owen, N., Humpel, N., Leslie, E., Bauman, A., Sallis, J. F. 2004. Understanding environmental influences

- on walking: review and research agenda. *American journal of preventive medicine* 27, 1, 67-76
- Owen, N., Leslie, E., Salmon, J., Fotheringham, M. 2000. Environmental Determinants of Physical Activity and Sedentary Behavior. *Exercise and Sports Sciences Reviews* 28, 4, 153-158
- Perić, D. 2013. *Research Basics in Sport and Tourism*. Novi Sad: Fakultet za sport i turizam
- Pinder, D. 2005. Arts of urban exploration. *Cultural geographies* 12, 4, 383-411
- Rate My Street, 2014. Available at: www.ratemystreet.co.uk (accessed 17 November 2014)
- Rodriguez, D. A., Khattak, A. J., Evenson, K. R. 2006. Can new urbanism encourage physical activity?: Comparing a new urbanist neighborhood with conventional suburbs. *Journal of the American Planning Association* 72, 1, 43-54
- Saelens, B., Sallis, J., Frank, L. 2003. Environmental correlates of walking and cycling: findings from the transportation, urban design, and planning literatures. *Annals of Behavioral Medicine* 25, 2, 80-91
- Sallis, J.F., Bauman, A. Pratt, M. 1998. Environmental and policy interventions to promote physical activity. *American Journal of Preventive Medicine* 15, 4, 379-397
- Solnit, R. 2001. *Wanderlust: a history of walking*. NY: Penguin Group USA
- Southworth M (2005) Designing the walkable city. *Journal of urban planning and development* 131, 4, 246-257
- Talen, E. 1999. Sense of community and neighbourhood form: an assessment of the social doctrine of new urbanism, *Urban Studies* 38, 1361-1383
- The Walking Site, 2005. Available at: www.thewalkingsite.com (accessed 17 November 2014)
- Urry, J. 1990. *The tourist gaze: Leisure and travel in contemporary societies*. London: Sage
- Walk Score, 2014. Available at: www.walkscore.com (accessed 22 December 2014)
- Walkonomics, 2014. Available at: www.walkonomics.com (accessed 22 December 2014)