



## Assessing Effective Factors for the Formation of City Image in Mashhad from the Viewpoint of Tourists by Structural Equation Modeling

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**Abstract.** Considering today's competitive world and need of cities for introduction and survival in the competitive arena, it is inevitable to regard cities as a product. One of the ways to be introduced into the world's competitive market is through presenting the face of the city, which should be able to attract the audience. It seems that the first factor that is very important in this regard, especially from the viewpoint of tourists, is the dimension of city image and its related factors. City of Mashhad is among the urban tourist destinations in Iran for pilgrimage and religious tourism. This city has its own peculiarities which are caused by the position of this city as the first destination for domestic tourist trips and the spiritual capital city of the country. In this study, using analytical-applied method, the effective factors for the formation of the city image from the viewpoint of pilgrims/tourists is assessed and their current status is studied. The quantitative data of the current research that include the views of 385 tourists gathered using questionnaire are evaluated by normal test, one-sample and paired t-test, and radar charts in SPSS and Smart PLS software. The results demonstrate that, among 5 investigated factors (culture-history, architecture and urban planning, transportation and communications, range of services, and environment), the factor of architecture and urban planning is the most effective one for the formation of Mashhad city's image. Also, a significant difference is observed between the current and favorable status of the above factors.

**Keywords:** City Image, Effective Factors, Mashhad, Tourists

### 1. INTRODUCTION

Today, the world has turned into a big market. Rapid progress of globalization means that each country, city, and region should compete with others in terms of taking their share of costumers, tourists, investors, students, and international companies (Anhalt, 2011: 15). Additionally, cities may be the points of entry and exit for tourists to the country or region and turn into a basis for the tourists who travel to the surrounding areas of that city (Movahed et al., 2011: 18).

People should be able to understand their cities, recognize its basic model, public functions, and institutions, and be aware of the available opportunities. In an original city, the origin of things and places can be evidently observed; i.e. urban environment must disclose its essential meanings (Behzadfar, 2011: 42). Therefore, the image of each city is unique from the viewpoint of each person and depends on past experiences and demonstrations of that particular place (Qolipour et al., 2011: 38).

City's tourism image is the direct reference of quality attitude, satisfaction, intention of return, and eagerness for recommendation to revisit the destination. In other words, the image of a tourist destination has a direct impact on the traveling decisions of tourists as well as their perception from and satisfaction with the destination (Martí'nez et al., 2007).

City Image is recognized as one of the tools that, along with the recognition of the competitive advantage of the city, can develop a favorable image on the minds of residents, tourists, and investors. This study tries to identify the most critical and important effective factors in the

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formation of Mashhad city's image in order to assess their impact intensity, discover the relationship between the factors, and analyze the difference between the current and favorable situations.

## 2. PROBLEM STATEMENT

Similar to tourist services which are intangible, images seem to be more important than facts. This statement probably consists of the highest number of predictable situations as the major problem in the marketing issue of today's cities (Sonnleitner, 2011). This means that the current situation of cities in tourism deserves the events and tendencies that are more complicated and faster than other topics. The final achievements of tourism and its services cannot be assessed in advance; but, visitors should develop their images and make their decisions accordingly. Although this image is the error-free representation and visualization of an objective which is in fact similar to the image itself, the very important issue is the existence of potential images on the minds of the audience (Mayo, 1975).

Image plays an important role in the selection of a destination and also influences the selection of the main objective of each destination, trip-related selection for tourists, and its marketing activities. Although all the effective factors for image development cannot be controlled, tourism markets intend to profitably establish, strength, and if necessary change their objectives (Chi & Qu, 2008).

Urban tourism is a complex combination of different activities that are the result of the joining of environmental features and the capability and capacity of the city in terms of attracting tourists and presenting services (Movahed et al., 2011: 18). Urban tourism is considered a lever for the diversification of the economy of cities (Kolb, 2011: 30).

Tourism marketing is the employment of appropriate marketing concepts for adopting strategies to attract tourists to a destination (resort, city, region, or country). Also, this definition states that marketing exchange should supply the needs of the city and citizens. Every city is responsible for supplying its citizens' needs such as maintaining infrastructures and ensuring public security, and economic development. Therefore, city development to a tourist destination is justifiable if the incurring economic profits could improve the life quality of its citizens (Kolb, 2011: 24-23). It is obvious that such an image is heavily dependent on tourism marketing issues and unbelievably plays an important role in the success of tourist destination (Tasci & Gartner, 2007).

Kotler et al. believe that city image can be positive and attractive, negative and weak, combinatory (when the image has positive and negative elements), or contradictory (when the city image is negative for a group and positive for another) (Qolipour et al., 2011: 38). Different factors construct these negative and positive images based on numerous studies. These factors that can be discussed in the field of tourism as well include culture-history (Hanna & Rowley, 2008: 65; Minghui, 2009: 317), architecture and urban planning (Zhang & Zahao, 2009: 250; Kavarazaki, 2013: 44) transportation and communications (Martínez et al., 2007: 120; Järvisalo, 2012: 25-26), range of services (König, 2011: 40; Parkerson & Saunders, 2005: 246), and environment (Zhao et al., 2009: 3; Gaggiotti et al., 2008: 120).

In this study, Mashhad metropolis as the second metropolis after Tehran and the first religious metropolis in Iran was selected as the research area. Because of the existence of holy shrine of Imam Reza (PBUH), city of Mashhad welcomes a huge number of pilgrims and tourists from all over the country on most days of the year, especially in religious occasions. Despite having numerous advantages, city of Mashhad has some weaknesses in terms of providing services, urban planning, etc.; in the case of lack of attention to these issues, irreparable damage would be imposed on the Mashhad city's image, which would have an impact on the minds of tourists.

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Therefore, the essential problem of this research is to find the views of tourists and pilgrims in Mashhad religious metropolis in terms of achieving the most effective factors for the formation of its image. In this study, attempts are made to assess the effective factors in the formation of Mashhad city's image in the current and most ideal situations via analyzing the views of tourists in two parts of current and favorable situations.

### 2.1. Research questions

- 1) What is the influence and priority of culture-history, architecture and urban planning, transportation and communications, range of services, and environment on/in the formation of Mashhad city's image from the viewpoint of tourists?
- 2) Which variable of the mentioned factors is more important based on the assessment of structural equation modeling?
- 3) Is there a significant gap between the current and favorable status of the factors constituting the Mashhad city's image metropolis?

### 2.2. Research hypotheses

- 1) It seems that the most important factor for the formation of the image of Mashhad city from the viewpoint of tourists is architecture and urban planning.
- 2) It seems that, in culture-history factor, the variable of protection from cultural and historical monuments, in architecture and urban planning factor, the variable of favorability in terms of architectural and urban planning attractions, in the transportation and communications, the variable of security in transportation services, in range of services, the variable of appropriate pilgrimage and tourism infrastructures, and in environment, the variable of green and open spaces are more important.
- 3) There is a significant difference between the current and favorable situations in terms of the mentioned factors for the formation of Mashhad city's image from the viewpoint of tourists.

## 3. RESEARCH HISTORY

Sonnleitner (2011) conducted a research entitled " Destination Image and Its Effects on Marketing and Branding a Tourist Destination" and introduced the critical factors of success in four dimensions of strategic orientation, identity and image of destination, involvement of stakeholders, and monitoring and control. He believes these four dimensions are strongly dependent on each other and no united strategy can be proposed for all the cities, unless being derived from the culture and economy. Qu, et al. (2011) showed that the unique image is known as a new component of destination branding. They suggested that the general image of a destination can act as an intermediary between the set of brand elements (including cognitive, emotional, and unique image components) and future behaviors of tourists (such as objective and recommendation to visit). Marti'nez, et al. (2007) also modeled the image of Granada with a branding approach. They expressed that city's image is a multi-dimensional issue; it is not limited to one of the urban aspects, but also includes many dimensions that may identify some consequences to develop it.

In domestic studies, the research by Divandari et al. (2012) could be noted, in which a model for the major branding of macro-projects such as recreational, residential, tourist, and sports with a local approach and based on database theory was presented. In this model, they described the causal, underlying, and intervening conditions for branding this type of projects.

Also, Saghaei et al. investigated the effects of branding development on the tourism development of Mashhad metropolis as a tourism market within the framework of demand and supply and then analyzed the incurred expenditure and revenue in the tourism economics of this metropolis. Finally, according to the obtained information, the commercial services were considered a critical point for the creation and management of branding in Mashhad metropolis. By creating a new kind of tourism called purchasing tourism, Mashhad could be introduced as a religious metropolis with a prominent brand among the religious metropolises.

#### 4. RESEARCH METHODOLOGY

##### 4.1. Research method

Methodology is a systematic, logical, and principled study that leads scientific search (Khaki, 1999: 193). In each research, four main elements and topics should be considered: research type, research method, data collection method, and information analysis method (Arabi and Fayazi, 2009: 2). Considering the analytical-applied nature of this research, quantitative methods were used for data collection and analysis.

For this purpose, a questionnaire was designed which contained 27 questions in 5 secondary dimensions (including culture-history, architecture and urban planning, transportation and communications, range of services, and environment) and was distributed using simple clustering method among the statistical population consisting of tourists and pilgrims in city of Mashhad. The statistical sample size was estimated as 385 people using Cochran's formula. The responding scale for this questionnaire was based on Likert scale: 1 = Very unfavorable/very low, 2 = Unfavorable /low, 3 = Average, 4 = Favorable /high, 5 = Very favorable /very high. For content and face validity, the questionnaire was given to a number of experts, modified based on their opinions, and eventually confirmed. The reliability of the questionnaire was also evaluated through Cronbach's alpha coefficient with the value of 0.979. In order to analyze the quantitative data, SPSS software was used for the normal test, one-sample and paired t-test, and radar charts. Also, Smart PLS was applied for structural equation modeling.

##### 4.2. Range of research

Mashhad which is a metropolis in the northeast of Iran is the capital of Khorasan Razavi Province (Figure 1). In Afsharian era, this city was the capital city. According to 2011 General Population and Housing Census, this city with the population of 2766258 (Afzali et al., 2013: 28) and extent of 29580 ha (including range and borders) (Farnahad, 2009) ranked second after Tehran. Also, due to the holy shrine of Imam Reza (PBUH), it annually receives more than 32 million pilgrims from inside the country (Jam-e Jam Online News Agency 2008) and more than 1 million pilgrims from outside the country (Mehr News Agency, 2009). Statistics shows that, owing to the holy shrine of Imam Reza (PBUH), each Iranian travels to the holy city of Mashhad once every 3 years on average.



Figure 1. Geographical location of Mashhad (Reference: National Geoscience Database of Iran).

## 5. THEORETICAL BASES

### 5.1. Tourism

Coltann defines tourism as a short-term trip which starts from a point and eventually ends at the same point. During every trip, based on a specific schedule, several places are visited and a high amount of currency is gained by the host country (Saei et al., 2010: 77-76). According to the definition by World Tourism Organization, tourism is an activity which is related to the hosts' life quality, providing demands of visitors, as well as protection from the natural and human-made resources (Hunter & Green, 1995).

The cities which are tourist destinations are multi-functional. They are recognized as the entrance gate to the country, residence centers, and origin of trips to the nearby villages and destinations. In addition, cities are not the locations in which some population has got together with economic activities, cultural life, and under the control of political forces; but, they play an important role as the centers of tourism activities. Figure 2 shows the analysis framework of urban tourism in metropolises. This framework demonstrates the factors, processes, and issues that affect urban tourism (Nourbakhsh and Akbarpour Saraskanroud, 2010: 22-23).



Figure 2. Tourism framework in metropolises (Reference: Nourbakhsh and Akbarpour Saraskanroud, 2010: 23).

### 5.2. City Image

City Image could be known as the images which are formed on the mind of visitors and the mentality obtained through perceivable objectivity. In other words, the power and capability of developing mental images from cities on the mind is a capability which exists in the form of city and can be transferred via some properties. By creating qualities in the layer of urban landscape, these properties related to the form of cities can create a mental image from the form of city on the mind of citizens as well as sense of place (Habib, 2006: 9-8).

In other words, city image is a combination of cognitive and effective factors. The cognitive factors include those urban properties, of which the person has become aware in a personal and special manner, or have identified them. The effective factors also show personal approaches and tendency of city to developing the past experiences related to that place, residents, and objectives of its attached structures (Martínez et al., 2007).

### 5.3. Tourism marketing

The objective of tourism destination marketing is to increase awareness of tourism destination via creating a unique brand (Imani Khoshkhou and Ayoubi Yazdi, 2010: 118). It seems that tourism marketers have imagined the world to be two-dimensional in the past (time and place). In the ancient world, they used to divide time into small pieces and emphasize a static and single time existence. Tourism marketers typically rely only on the supply side; however, their observations are reflected in one dimension in such a state: Attracting tourists for business. Therefore, tourist marketers need a dynamic (vs. static) and holistic (vs. atomistic) method. It is believed that, in future, tourism marketers should consider wider spatial horizons and expand them from a local and regional scale to a global one (Mousaei and Mir Talebi Aghdam, 2010: 83) (Figure 3).

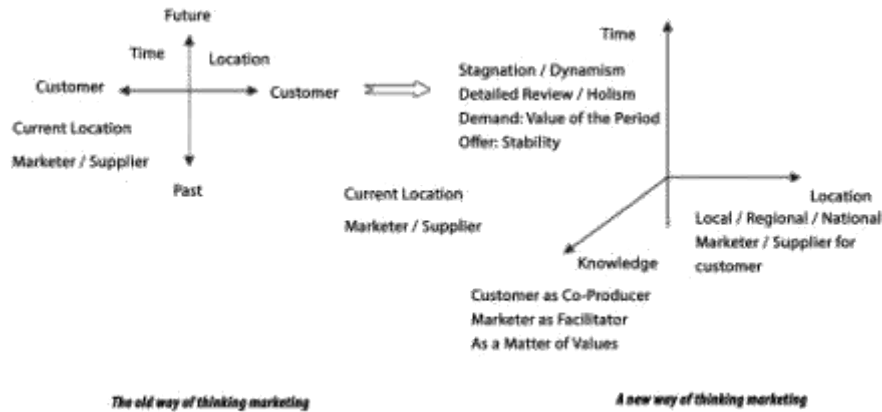


Figure 3. Changes in marketing thoughts (Reference: Mousaei and Mir Talebi Aghdam, 2010: 83).

## 6. SUMMARY OF THEORETICAL FOUNDATIONS AND PRESENTING A CONCEPTUAL MODEL

In this work, based on the studies conducted on the effective factors for the formation of city image and also the properties of city of Mashhad, the effective factors and their variables were identified (Table 1). On this basis, the identified variables were divided into 5 factors including (1) culture-history (Zhao et al., 2009: 3 ; Kavartzis, 2008: 137 ; König, 2011: 40; Martı́nez et al., 2008: 120 ; Parkerson & Saunders, 2005: 246), (2) architecture and urban planning (Gaggiotti et al., 2008: 120; Vanolo, 2008: 377; Pfefferkorn, 2005: 138; Jason & Power, 2006: 16), (3) transportation and communications (Vary, 2011: 558; Sonnleitner, 2011: 36; Helmy, 2008: 42), (4) range of services (Qu et al., 2011: 470; Boisen, 2007: 13; Prilenska, 2012: 13), and (5) environment (Martı́nez et al., 2008: 120; Vanolo, 2008: 377; Zhang & Zhao, 2009: 250).

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**Table 1.** Theoretical framework of the research

Factor (Code)	Variable (Code)	Factor (Code)	Variable (Code)
Culture-History (CI/HC)	<ul style="list-style-type: none"> <li>- Improving, renovating, and reconstructing buildings in the city center and the area surrounding the holy shrine as well as enhancing the qualities of urban spaces and public arenas (CI/HC1)</li> <li>- Physically improving the spatial area associated with the holy shrine and using Iranian-Islamic architectural models and symbols (CI/HC2)</li> <li>- Existence of appropriate public arenas (streets, squares, parks, commercial complexes, etc.) for the interaction of tourists/pilgrims and strengthening national culture and ethnic unity (CI/HC3)</li> <li>- Protecting the historically and culturally valuable monuments and adjusting physical and activity development with respect to these monuments (CI/HC4)</li> <li>- Existence of high quality cinemas in city of Mashhad (CI/HC5)</li> <li>- Existence of high quality theaters in city of Mashhad (CI/HC6)</li> </ul>	Architecture and Urban Planning (CI/AU)	<ul style="list-style-type: none"> <li>- Developing and equipping network of sidewalks and bike paths in Mashhad metropolis (CI/AU1)</li> <li>- Promoting and improving old constructions and urban spaces with no use, especially the urban buildings surrounding and related to the holy shrine (CI/AU2)</li> <li>- Favorability in the existence of architectural and urban planning attractions (urban elements/symbols) (CI/AU3)</li> <li>- Existence and appropriate distribution of urban furniture on pavements and sidewalks (CI/AU4)</li> </ul>
Transportation and Communications (CI/TC)	<ul style="list-style-type: none"> <li>- Sufficient security of public transportation services (CI/TC1)</li> <li>- Satisfactory quality of interconnecting paths within the city (CI/TC2)</li> <li>- Familiarity of drivers of public transportation with the city roads (CI/TC3)</li> <li>- Appropriate and consistent relationship and association between inter- and intra-urban transportation networks to facilitate the access of the public in Mashhad metropolis and other population centers in this city (CI/TC4)</li> <li>- Sufficient parking spaces in city of Mashhad (CI/TC5)</li> <li>- Sufficient use of traffic signs in city of Mashhad (CI/TC6)</li> <li>- Favorability of observing legal and traffic disciplines in driving by citizens (CI/TC7)</li> </ul>	Range of Services (CI/S)	<ul style="list-style-type: none"> <li>- Existence of suitable infrastructures to provide superior services for pilgrimage and tourism at national and international levels (CI/S1)</li> <li>- Sufficient security of residential centers for tourists/ pilgrims (CI/S2)</li> <li>- Optimal access to residential centers (CI/S3)</li> <li>- Favorability of accommodation costs charged from tourists/ pilgrims (CI/S4)</li> <li>- Appropriate introduction of historical heritage, tourist spots, and entertainment centers in Mashhad city (CI/S5)</li> <li>- Easy access to the brochures introducing the city (CI/S6)</li> <li>- Sufficient number of tourism information centers (CI/S7)</li> </ul>
Environment (CI/EN)	<ul style="list-style-type: none"> <li>- Existence of green space networks (CI/EN1)</li> <li>- Conducting programs to correct spatial and physical status of the city according to safety rules and reduce the factors damaging urban environment (CI/EN2)</li> <li>- Citizens' commitment to environmental issues (CI/EN3)</li> </ul>		-

According to the conceptual model (Figure 4), this study sought to discover the intensity and extent of relationship between each of the five factors including culture-history, architecture and urban planning, transportation and communications, range of services, and environment and the city image of Mashhad from the viewpoint of tourists and pilgrims.

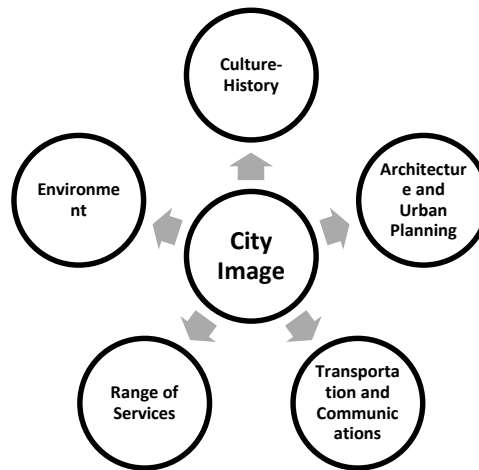


Figure 4. Conceptual model of the research method

## 7. RESEARCH FINDINGS

### 7.1. Descriptive findings

About the characteristics of the statistical sample in this study, it can be briefly said that the 385 pilgrims/tourists were 65% male and 35% female in terms of gender, 6.0% were under 20 years old, 12% between 20 and 25 years old, 74% between 25 and 35 years old, 12% between 35 and 45 years old, and 6% above 45 years old in terms of age, 25% had education level of below high school diploma, 31% had high school diploma, 6% had Associate's, 24% Bachelor's, and 14% Master's and higher degrees). Also, 37% were self-employed, 44% were employees, and 19% were in other occupational groups.

Statistical description of the variables of this study is shown in Table 2 in two cases of the current situation and their effect for achieving favorable situation, as extracted from the questionnaires.

Table 2. Statistical description of research factors in the current situation and their effect

Current situation				Factor	Effect			
Standard Deviation	Median	Mean	Number		Number	Mean	Median	Standard Deviation
0.628	3.67	3.64	385	Culture-history	385	4.71	5	0.371
0.964	3.25	3.48	385	Architecture and urban planning	385	4.57	4/75	0.518
0.878	4	3.84	385	Transportation and communications	385	4.65	5	0.440
1.006	3.42	3.35	385	Range of services	385	4.74	5	0.355
0.982	4	3.65	385	Environment	385	4.73	5	0.424



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## 7.2. Inferential findings

### 7.2.1. Model fitting

To investigate the overall model fitting in this study, GOF (goodness of fit) criterion was used which was associated with the overall part of structural equations models. In other words, using this criterion, the researcher can control the fitting of overall part after evaluating the fitting of measurement part and structural part of the overall model in the study.

**Table 3.** Mean of communality values and R-square values of the variables in endogenous model.

Factor	Communality	R-square
Culture-history	0.716	0.926
Architecture and urban planning	0.646	0.953
Transportation and communications	0.724	0.886
Range of services	0.708	0.933
Environment	0.803	0.815
Mean	0.719	0.903

$$GOF = \sqrt{R^2 * Communality} = \sqrt{0.90 * 0.72} = 0.805$$

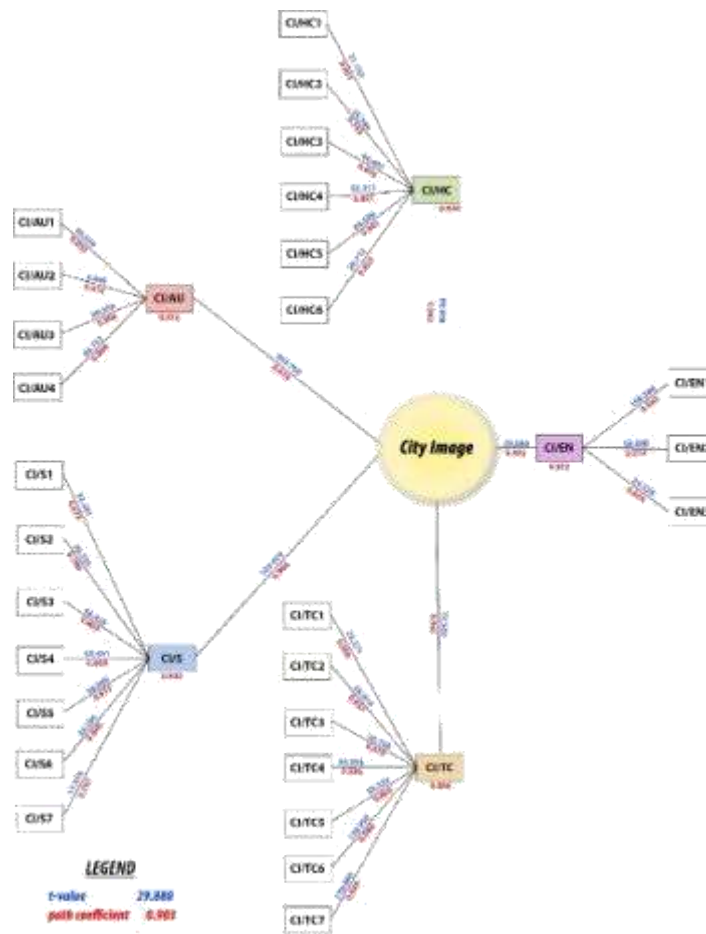
According to the three values of 0.01, 0.25, and 0.36 introduced as weak, average, and strong values for GOF and the value of 0.805 in this research, the overall fitting of the model was found to be strong.

### 7.2.2. Investigating significant and standardized coefficients of factor loading (effect of variables):

After investigating the fitting of the measurement, structural, and overall models, the researcher is allowed to investigate the research hypotheses to achieve the findings. To investigate the hypotheses, two charts are needed. The first chart shows t-values and is used to confirm/reject the hypothesis.

Figure 5 shows the significant coefficients of t-values associated with each hypothesis. On this basis, if the significant coefficient of the path between two dependent and independent variables are greater than 1.96, the effect of the independent variable on the dependent one at the level of confidence of 95% will be significant and the considered hypothesis will be rejected/confirmed.

Also, Figure 5 demonstrates the coefficients of each independent variable to the dependent one, which is used to investigate the changes of dependent variable against the independent variable. Using standardized coefficients of the factor loading related to the paths of each hypothesis, it is possible to understand the changes of the dependent variable from the independent one.



**Figure 5.** Significant coefficients of t-values and standardized coefficients of factor loading (path coefficient) of the research variables.

### 7.2.3. Testing the hypotheses

**Hypothesis 1.** It seems that the most important factor for the formation of the image of Mashhad city from the viewpoint of tourists is architecture and urban planning.

According to Table 4 which shows the investigation for the factors, from the viewpoint of tourists/pilgrims, the factor of architecture and urban planning with the path coefficient of 0.976 was identified as the most important factor among the other factors of culture-history, transportation and communications, range of services, and environment. According to Figure 5, the significant coefficients of the factors were investigated and their values were found to be greater than 1.96. Therefore, all the five factors of this study affected the city image.

**Table 4.** Investigating path coefficient of the research factors.

Main dimension (Code)	Factor (Code)	Path coefficient
City image (CI)	Culture-history (CI/HC)	0.962
	Architecture and urban planning (CI/AU)	0.976
	Transportation and communications (CI/TC)	0.941
	Range of service (CI/S)	0.966
	Environment (CI/EN)	0.930

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**Hypothesis 2.** It seems that variable of protecting from cultural and historical monuments in culture-history factor, favorability in the existence of architectural and urban planning attractions in the architecture and urban planning factor, variable of sufficient security of public transportation services in transportation and communications factor, existence of suitable infrastructures for pilgrimage and tourism in range of services, and existence of green and open spaces in the environment factor are more important.

To investigate this hypothesis, it is necessary to study the factors individually. On this basis, in the factor of culture-history, variable of high-quality cinemas in Mashhad, in architecture and urban planning, variable of favorability in the existence of architectural and urban planning attractions (urban elements/symbols), in transportation and communications, variable of favorability of legal and traffic discipline for citizens, in range of services, two variables of existence of suitable infrastructures to provide superior services for pilgrimage and tourism at national and international levels and favorable introduction of historical heritage, tourist spots, and entertainment centers in Mashhad city, and in environment, variable of the existence of green and open spaces had the most impact on the formation of city image based on the viewpoint of tourists/pilgrims. The influence of all the variables of these five factors based on the column of path coefficient is shown in Table 5.

**Table 5.** Investigating path coefficients of the research variables.

Factor (Code)	Variable (Code)	Path coefficient	Factor (Code)	Variable (Code)	Path coefficient
Culture-History (CI/HC)	Improving, renovating, and reconstructing buildings in the city center and the area surrounding the holy shrine as well as enhancing the qualities of urban spaces and public arenas (CI/HC1)	0.841	Transportation and Communications (CI/TC)	Appropriate and consistent relationship and association between inter- and intra-urban transportation networks to facilitate the access of the public in Mashhad metropolis and other population centers in this city (CI/TC4)	0.906
	Physically improving the spatial area associated with the holy shrine and using Iranian-Islamic architectural models and symbols (CI/HC2)	0.733		Favorability of observing legal and traffic disciplines in driving by citizens (CI/TC5)	0.940
	Existence of appropriate public arenas (streets, squares, parks, commercial complexes, etc.) for the interaction of tourists/pilgrims and strengthening national culture and ethnic unity (CI/HC3)	0.876	Range of Services (CI/S)	Existence of suitable infrastructures to provide superior services for pilgrimage and tourism at national and international levels (CI/S1)	0.873
	Protecting the historically and culturally valuable monuments and adjusting physical and activity development with respect to these monuments (CI/HC4)	0.891		Sufficient security of residential centers for tourists/ pilgrims (CI/S2)	0.786
	Existence of high quality cinemas in city of Mashhad (CI/HC5)	0.901		Optimal access to residential centers (CI/S3)	0.869
	Existence of high quality theaters in city of Mashhad (CI/HC6)	0.823		Favorability of accommodation costs charged from tourists/pilgrims (CI/S4)	0.869

Architecture and Urban Planning (CI/AU)	Developing and equipping network of sidewalks and bike paths in Mashhad metropolis (CI/AU1)	0.831	Environment (CI/EN)	Appropriate introduction of historical heritage, tourist spots, and entertainment centers in Mashhad city (CI/S5)	0.873
	Promoting and improving old constructions and urban spaces with no use, especially the urban buildings surrounding and related to the holy shrine (CI/AU2)	0.516		Easy access to the brochures introducing the city (CI/S6)	0.845
	Favorability in the existence of architectural and urban planning attractions (urban elements/symbols) (CI/AU3)	0.906		Sufficient number of tourism information centers (CI/S7)	0.767
	Existence and appropriate distribution of urban furniture on pavements and sidewalks (CI/AU4)	0.896		Existence of green space networks (CI/EN1)	0.945
Transportation and Communications (CI/TC)	Sufficient security of public transportation services (CI/TC1)	0.809	Environment (CI/EN)	Conducting programs to correct spatial and physical status of the city according to safety rules and reduce the factors damaging urban environment (CI/EN2)	0.914
	Satisfactory quality of interconnecting paths within the city (CI/TC2)	0.838		Citizens' commitment to environmental issues (CI/EN3)	0.824
	Familiarity of drivers of public transportation with the city roads (CI/TC3)	0.615			

**Hypothesis 3.** It seems there is a significant difference between the current and favorable situations in the mentioned factors effective for the formation of image of Mashhad city from the viewpoint of tourists.

To test this hypothesis, paired t-test was used in order to compare the mean of the variable in the two dependent groups (comparing means before and after the test) (Table 6). The investigated hypotheses were as follows:

$$\begin{cases} H_0: \mu_1 = \mu_2 \\ H_1: \mu_1 \neq \mu_2 \end{cases}$$

**Table 6.** Paired t-test of city image factors.

Group	Mean	Standard deviation	t-test	Significance level	95% confidence interval	
					Lower bound	Upper bound
City image	-1.087	0.535	-26.50	0.001	-1.168	-1.006

Therefore, at the confidence level of 95%, the obtained significant level for each of the variables was compared with the value of 0.05; since the significant level was lower than the considered error coefficient (0.05),  $H_0$  was rejected. As a result, considering that the confidence interval of city image variable was negative, the mean was higher in the favorable situation than the current one. Figure 6 shows this issue in a radar chart and for the five factors. On this basis, the best

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situation was related to the factor of transportation and communications and the weakest situation was the range of services.

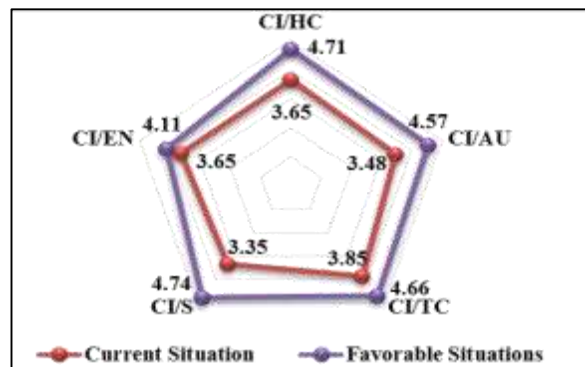


Figure 6. Radar chart of effective factors for the formation of city image in the current and favorable situations.

### 8. DISCUSSION AND CONCLUSION

Cities with favorable visual environment could promote the mental image of the society and strengthen their civil pride through extending the citizens' aesthetic experience and thus strengthen the competitive power of city in terms of attracting more capital and creative people by enhancing the city's reputation at national and international levels. City's visual aspect is important, since it can provide the possibility of "reading" the environment as a "text" (Golkar, 2008: 96).

According to what is obtained from the analysis of statistical findings, in spite of the high impact of all the investigated factors on Mashhad city image, their priority was as follows: architecture and urban planning range of services, culture-history, transportation and communications, and environment. Also, the results of hypothesis testing indicated the confirmation of Hypotheses 1 and 3 and rejection of Hypothesis 2.

It is recommended to consider the quality of the environmental around Mashhad and the appropriate power of this city in terms of creating green belt and developing green and open spaces in order to promote the level of the factor with minimum priority, i.e. environment. Also, for the factor of transportation and communications, some cases such as creation of special facilities for extensive recreation including sidewalks and bike paths within the city and resorts surrounding the city and serious attention for equipping the system of urban transportation to new technologies in order to improve its situation could be mentioned.

Emphasis on the dimension of city image in this study and also more importance of architecture and urban planning factor is consistent with the findings by Martinez et al. (2007) for Granada. According to this study, the factors of architectural attractions and citizen perception had the maximum impact and pollution problems and environmental obligations had the minimum impact on the city image of Granada (Martínez et al., 2007). As observed, the first and last priorities of effective factors for the formation of Mashhad city image were consistent with those for Granada. Probably, it could be concluded that the factors of architecture and urban planning and the resulting attractions are the first factor in each city/country that could attract more tourists and also the issues related to the environment have no considerable effect on the thinking process of tourists about a place in comparison with other factors of this study.

## REFERENCES

- [1] Afzali, A., Javdani Iraninejad, M., Mosalmanzadeh, S. (2013). *Statistic Book of Mashhad (2012)*. Mashhad: Vice Chancellor for Planning and Developing Mashhad Municipality Supervised by Statistics and Data Analysis Management.
- [2] Anhalt, S. (2011). *Competitive Identity: Modern Management of Branding for Nations, Cities, and Regions*. (Translated by Mostafa Akbari Motlagh, Mojtaba Shakeriravesh, Mohammad Saleh Sharifi). Tehran: Tahan Publication. 1st Edition.
- [3] Arabi, S. M., Fayazi, M. (2009). Research Strategy in Human Resource Management. *Journal of Human Resource Management Studies*. Imam Hussein University (PBUH). 4 (1). pp 1-23.
- [4] Behzadfar, M. (2011). *City Identity (A Look at Identity of Tehran)*. Tehran: Nashr-e-Shahr Publication. 3rd Edition.
- [5] Boisen, M. (2007). *The Strategic Application of City Marketing to Middle-Sized Cities*. Master Thesis for the title of Research. Utrecht University.
- [6] Chi, C., Qu, H. (2008). Examining the Structural Relationships of Destination Image, Tourist Satisfaction and Destination Loyalty: An Integrated Approach. *Journal of Tourist Management*. 29. pp 624-636.
- [7] Divandari, A., Kermanshah, A., Ekhlasi, A. (2012). Presenting a Branding Model for Recreational, Residential, Tourism, and Sports Macro-projects with a Local Approach Based on Database Theory. *Journal of Business*. 65. pp 27-64.
- [8] Farnahad Consulting Engineers (2009). *Development and Construction Plan (Comprehensive) of Mashhad Metropolis*. Basic Studies on Human and Activity (Population).
- [9] Gaggiotti, H., Cheng, P., Yunak, O. (2008). City Brand Management (CBM): The Case of Kazakhstan. *Journal of Place Branding and Public Diplomacy*. 4(2). pp 115-123.
- [10] Golkar, K. (2008). Visual Environment of City: Evolution of Decorative Approach to Sustainable Approach. *Scientific and Research Journal of Environmental Sciences*. 5 (4). pp 95-114.
- [11] Habib, F. (2006). Inquiry in Meaning of City Formation. *Scientific and Research Journal of Fine Arts*. 25, pp 5-14.
- [12] Habibi, A. (2012). *Applied Training of SPSS Software*. Tehran: Pars Modir Online Database.
- [13] Hanna, S., & Rowley, J. (2008). An Analysis of Terminology Use in Place Branding. *Journal of Place Branding and Public Diplomacy*. 4(1). pp 61-75.
- [14] Helmy, M. (2008). *Urban Branding Strategies and the Emerging ARAB Cityscape (The Image of the Gulf City)*. Stadtebau-Institute University.
- [15] Hunter, C., & Green, H. (1995). *Tourism and the Environment: A Sustainable relationship?*. London and New York.
- [16] Imani Khoshkhou, M. H., Ayoubi Yazdi, H. (2010). Effective Factors for Specific Value of Branding in Yazd Tourism Destination. *Scientific and Research Journal of Tourism Studies*. 13. pp 113-137.
- [17] Jam-e-Jam Online News Agency (2008). News Code: 100898810290; Accessible at <http://www1.jamejamonline.ir/>.
- [18] Jansson, J., & Power, D. (2006). *The Image of the City (Urban Branding as Constructed Capabilities in Nordic City Regions)*. Department of Social and Economic Geography. Uppsala University.
- [19] Järvisalo, S. (2012). *How to Build Successful City Brands? (Case Munich, Berlin and Hamburh)*. University of Applied Sciences.
- [20] Karavazaki, S. (2013). *Visible Cities: The Role of Place Branding for a Sustainable Urban Development in European Cities at a Time of Crisis: A Case Study*. Department of Earth Sciences Master Thesis, in *Sustainable Development: Uppsala University*.

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- [21] Kavaratzis, M. (2008). *From City Marketing to City Branding (An Interdisciplinary Analysis with Reference to Amsterdam, Budapest and Athens)*. RIJKSUNIVERSITEIT GRONINGEN.
- [22] Khaki, Q. (1999). *Research Method with an Approach to Thesis Writing*. Tehran: National Research Institute for Science Policy.
- [23] Kolb, B. M. (2011). *Tourism marketing for cities: With an Emphasis on Branding and Special Events for Attracting Tourists*. (Translated by Ali Movahed, Salar Kahzadi, Pegah Izadi). Tehran: Azarakhsh Publication. 1st Edition.
- [24] König, C. (2011). *City Branding of Hong Kong - Imagineering Authenticity*. Stockholm University School of Business.
- [25] Martí'nez, T. L., Garcí'a, S. D., Zapata, J. A., Molina, M. A. (2007). Modeling a City's Image: The Case of Granada. *Journal of Cities*. 24(5). pp 335-352.
- [26] Mayo, E. (1975). Tourism and National Parks: A Psychographic and Attitudinal Study. *Journal of Travel Research*. 14. pp 14-18.
- [27] Mehr News Agency. (2009). Accessible at <http://www.mehrnews.com/>.
- [28] Minghui, Q. (2009). A Study of Success Factors in City Branding: The ISE Conceptual Model. *Marketin Science Innovations and Economic Development*. pp 313-321.
- [29] Mousaei, M., Mir Talebi Aghdam, S. M. (2010). Evaluating International Tourism Marketing Activities by Tourism Organizations in Iran after the Islamic Revolution. *Juornal of Social Sciences (monthly)*. 28. pp 76-93.
- [30] Movahed, A., Amanpour, S., Naderi, K. (2011). Urban Tourism Marketing Based on Branding Using Analytic Hierarchy Process (AHP) Model (Case Study: Kermanshah). *Scientific Journal of Spatial Planning*. 3 (1). pp 17-36.
- [31] National Geoscience Database of Iran. Accessible at <http://www.ngdir.ir/>.
- [32] Nourbakhsh, S. M., Akbarpour Saraskanroud, M. (2010). Role of Tourism in Economic Development of Metropolises; *Journal of Urban Economy*. Special Issue for Urban Tourism Economy. pp 20-24.
- [33] Parkerson, B., Saunders, J. (2005). City Branding: Can Goods and Srevised Branding Models Be Used to Brand Cities? *Journal of Place Branding*. 1(3). pp 242-264.
- [34] Pfefferkorn, J. W. (2005). *The Branding of Cities: Exploring City Branding and the Importance of Brand Image*. MASTERS THESIS. Graduate School of Syracuse University.
- [35] Prilenska, V. (2012). City Branding as a Tool for Urban Regeneration: Towards a Theoretical Framework. *Journal of Architecture and Urban Planning*. 6. pp 12-16.
- [36] Qolipour, A., Abouie Ardakan, M., Peydayesh, E. (2011). Studying the Effective Factors in the Formation of City Image for Effective Urban Branding. *Scientific and Research Journal of Fine arts*. 45. pp 37-46
- [37] Qu, H., Kim, L., Im, H. (2011). A Model of Destination Branding: Integrating the Concepts of the Branding and Destination Image. *Journal of Tourism Management*. 32. pp 465-476.
- [38] Saei, A., Naiji, M., Rezaie, M. (2010). Relationship between Advertisement and Attracting Cultural Tourists in Iran (Case study of Cultural Foreign Tourists in Isfahan). *Encyclopedia of Social Sciences*. 4 (1). pp 69-94.
- [39] Saqaei, M., Javanbakht Qahfarokhi, Z., Hataminejad, H., Sabet Koushakinian, M. (2012). Role of Branding Management in the Tourism Economy of Metropolises (Case Study: Mashhad Religious Metropolis). 1st National Conference on Geography, Environmental Disasters, and Sustainable Development in Ahvaz. Islamic Azad University, Ahvaz Branch.
- [40] Sonnleitner, K. (2011). Destination Image and Its Effects on Marketing and Branding a Tourist Destination (A Case Study about the Austian National Tourist Office with

- a Focus on the Market Sweden). (Master's Dissertation 30 ECTS ed.). Södertörn University - School of Business Studies.
- [41] Tasci, A., Gartner, W. (2007). Destination Image and Its Functional Relationships. *Journal of Travel Research*. 45. pp 413-425.
- [42] Vanolo, A. (2008). The Image of the Creative City: Some Reflections on Urban Branding in Turin. *Journal of Cities*. 25. pp 370-382.
- [43] Vary, A. P. (2011). The Anholt-GMI City Brand Hexagon and the Saffron European City Brand Barometer: A Comparative Study. *Journal of Regional and Business Studies*. 3(1). pp 555-562.
- [44] Zhang, L., Zhao, S. (2009). City Branding and the Olympic Effect: A Case Study of Beijing. *Journal of Cities*. 26. pp 245-254.
- [45] Zhao, X., Shields, T., Latshaw, L. (2009). The Anholt-GfK Roper Nation Brands Index 2009 Highlights Report. GfK Roper Public Affairs & Media.