

# Determining economic value of cultural- historical places by individual's willingness to pay (WTP) method (case study: Hegmataneh hill in Hamadan)

Fatemeh Rezaie

M.S in Urban Management \*Department of human science, Hamedan branch, Islamic azad university, Hamedan, Iran.

**Correspondence:** Fatemeh Rezaie, M.S in Urban Management ,Department of human science, Hamedan branch, Islamic azad university, Hamedan, Iran.

Email: samira86rezaei@gmail.com

## ABSTRACT

The present research aims to determine the economic value of the historical place Hegmataneh by Willingness to Pay (WTP) Method. The statistical population of this study includes all the individuals who have visited the historical place Hegmataneh during the summer 2018. The sample volume included 300 visitors and the convenient method was used for sampling. For evaluating this research, Contingent Valuation Method (CVM) and Double Bi- dimensional Choice (DBDC) were designed and applied for the purpose of estimating the individuals' willingness to pay to visit the Hegmataneh hill. SPSS software was used for analyzing the collected data. WTP is a method in which the individuals are directly asked in an assumed market about the amount of money that they will to pay for the use or protection of the historical place Hegmataneh. The tourists' willingness to visit Hegmataneh was estimated average and the maximum amount of money to visit this historical place was evaluated between 25000 and 50000 Rials. The tourists' willingness to the visit from and protection of the historical place Hegmataneh is lower than the average level. Furthermore, the research results revealed that the household income and individuals' education have been effective on their willingness to pay for the historical place Hegmataneh and the job status, tourist type, sex, age, number of family members and marital status are not effective on the visitors' willingness to pay.

**Keywords:** valuation, historical place Hegmataneh, WTP, willingness to pay.

## Introduction

The cultural heritages includes the items such as artistic and architecture works, cultural achievements and also the thoughts, norms and common perception of the life environment that have inherited from the antecedents. The common feature of all the aforesaid items is that they have not been created by the present generation and have come down by inheritance. These items, in the framework of an approximate classification, can be categorized into the tangible assets (like artistic and architecture

works) and the intangible assets (such as common identity, social and moral norms in common culture) <sup>[1]</sup>. Peacock considers the cultural heritage as a near- public good the nature of which is affected by the inclusion exclusion principle and impossibility of competition in the consumption. Furthermore, the public interest along with the information asymmetry which is the characteristic of artistic goods cause the creation of idiosyncratic strategical phenomena such as free- rider problem in the consumer's behavior <sup>[2]</sup>.

The tourism and historical works are indicative of the culture and belief of a nation and are regarded as a national wealth. The valuation of such places can reveal their significant status in the protection of that country's culture and originality. On one side, the existence of historical works has provided an appropriate situation for the development of the tourism and ecotourism industry in the country. The tourism activities and paying attention to their high potential can increase the public sector income and create the development in the private sector. Therefore, the countries make effort to introduce the interesting

### Access this article online

Website: [www.japer.in](http://www.japer.in)

E-ISSN: 2249-3379

**How to cite this article:** Fatemeh Rezaie. Determining economic value of cultural- historical places by individual's willingness to pay (WTP) method (case study: Hegmataneh hill in Hamadan). *J Adv Pharm Edu Res* 2020;10(S1):81-92.

Source of Support: Nil, Conflict of Interest: None declared.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

attractions and pleasant landscapes of their historical works to the others and, by this way, obtain much money for the purpose of people's welfare and the development of their country. In addition, constructing a healthy and creative society for the continuity of economic growth and development requires the protection and development of the promenades and tourism regions to supply the increasing demands of the human beings<sup>[3]</sup>. The value is derived from a change in the people's welfare resulted from the qualitative and quantitative change in the availability of the good or each of its characteristics. Accordingly, one thing has the value when it improves the human being's welfare and it would have further value, when more welfare is provided<sup>[4]</sup>.

The reasons for the valuation of tourism places are: human beings' perception of the benefits and services and tourism places, presentation of environmental issues related to the tourism places of the country to the decision- makers and planners, providing a link between the economic policies and tourism revenues, evaluation of role and importance of tourism places, modification and reformation of national calculations such as Gross Domestic Product (GDP) and prevention of tourism places destruction<sup>[5]</sup>. From among mentioned nonmarket valuation methods, contingent valuation methods, selection pattern, travel and hedonic cost have been applied in the studies related to the cultural recourses. From among the mentioned methods, the selection pattern and contingent valuation are the best methods for the valuation of cultural goods<sup>[6]</sup> and the contingent valuation method has had the most applications<sup>[7]</sup>.

In developing countries, the financial problems or non- allocation of enough budget to the culture section has made the managers of museums to consider sometimes different monetizing policies in comparison to the developed countries. One of these policies is discriminatory pricing among the visitors of different groups that is like a method for increasing the monetizing level. This method is supported by the researchers such as Ferri (1994), Madison and Foster (2003), too<sup>[8]</sup>.

On one side, Hamedan city has been selected as the Asian capital in current year and is increasingly more ready to accept the internal and external tourists in 2018. With regard to the position and strategic recourses of Hegmataneh, this place had been probably occupied first millennium B.C, although there exists no historical and archeological evidence about this matter; but all what are mentioned is indicative of very much value of this famous global place. The protection of historical places requires extravagant costs. Nowadays, the increase of costs on one side and increase of number of visitors on the other side have increased the costs of services presentation, protection and repair. Since these works require the protection and representation of appropriate services to the visitors at the place and in the path such as the road, parking, medical services, safety and guider, the costs of these services should be provided from a special place. The limitation of government budget and being higher of the protection costs of ancient works and also the creation of developmental substructures of these places indicates the necessity of financial provision by the visitors. Furthermore, the entrance ticket cost of this great place is very low and it can

be said that no considerable money is received. In addition to this that the protection of this place requires very high costs, it is natural that a part of costs of this issue should be paid by the visitors. Generally, these costs are derived from the individuals' mental beliefs or, in other words, their willingness to pay. Therefore, the analysis of factors effective on the people's requirements in terms of economic and social conditions can help considerably the prediction of needs and shortages of tourism regions.

So, the researcher, by studying this issue, aims to answer the following significant questions: how much is the economic value of the historical works Hegmataneh by using Willingness to Pay (WTP) method? Is the historical- cultural value of the historical place Hegmataneh at the above- average level? Is the willingness to protection of the historical place Hegmataneh at the above- average level? Is the willingness to visit the historical place Hegmataneh at the above- average level? Do the demographic features (job status, household income, tourist type, individuals' education, sex, age, number of family members, marital status) have meaningful effect on the determination of economic value of the historical place Hegmataneh by using Willingness to Pay (WTP) method?

## Research theoretical foundations

### Economic valuation concept

The products or services are valuable only when they are appreciated directly or indirectly by the human being. The value is measured with regard to the transactions. Accordingly, it is a relative affair. For this purpose, the money usually is regarded as the arithmetic unit and the value of all the society is the sum of all the individual values<sup>[9]</sup>. The economic valuation compares the benefits resulted from the use of recourses with the costs. The costs are same the benefits<sup>[10]</sup>.

### Historical and cultural heritages valuation methods

Whereas each of valuation methods has its specific advantages and disadvantages for specific usages, their general ranking functionally is difficult. A number of economic valuation methods used generally have been introduced briefly as following:

Generally, two strategies have been presented for the valuation of goods and nonmarket services by the economists:

- A. Non- demand curve- based approaches: including election, Dose- Response approach, Replacement cost approach, mitigation behavior (modifying or preventive behavior) and avertive expenditures approach.
- B. Demand curve- based approaches in which the price of goods is determined by the demand curve and are categorized into two groups: the revealed preferences method which has relation with the normal (Marshallian) demand curve and includes the travel- cost method, random utility method and hedonic pricing methods.

The revealed preferences method has relationship with the compensated (Hicksian) demand curve and includes the contingent valuation method and the selection pattern <sup>[11]</sup>.

### Contingent valuation method

Generally, the contingent valuation method focuses on the evaluation of value of specific environmental changes. The study of contingent valuation begins with an explanation about the change of goods or environmental services. Then, the individuals are asked to specify this matter that to what extent they would be ready to pay for the change. For instance, the analyzers might ask the taxpayers whether they would be successful by the increase of costs in their water bills for the protection of upper water recourses or not. In this method, the respondents should be aware of the nature of what is valued as well and also have correct perception of amount of acceptance of balance between the environmental features changes and their income <sup>[11]</sup>.

The contingent valuation method (CVM) is based on the survey research approach for the valuation of goods and nonmarket environmental services. This approach requires the hypothetical structure or the market assimilation by the use of questionnaire in which the respondents answer the questions related to their willingness to pay or accept the specific environmental changes. This method is applied in the case of consumptive and non-consumptive values.

Although the contingent valuation method has been widely used during the past two decades, there is considerable disagreement about this matter that whether this method measures appropriately the people's willingness to pay for the quality of environment. The people select the goods supplied for the market; therefore, they decide about their purchase in the markets which reflect most probably their real willingness to the pay <sup>[12]</sup>.

This method has been applied more than the other different economic valuation methods and the study of most of researched done in this case in the country reveals that the use of this method has been considerably increased since 2008 and it has been applied in most cases for the purpose of determining the economic and promenading value of natural domains such as forest, lagoon, cave and also for evaluating the recreational value of the urban parks, cultural heritages, etc. It is obvious that the capabilities of this method in the economic valuation of the issues related to urban environment have not been considerably regarded in our country <sup>[13]</sup>.

The contingent valuation method (CVM) is mainly based on the sampling and the financial estimations for the economic values related to any type of change in the access to an environmental good. These estimations are based on the willingness to pay (WTP) and willingness to accept (WTA). The willingness to pay is a criterion for evaluating the amount of income the individual wills to pay for the improvement of quality of environmental good. The willingness to accept also is the estimation of the compensation the individuals accept that for the environmental damage they have caused <sup>[14]</sup>.

The contingent valuation method is one of the mentioned preferences approaches in which the respondents are asked about their willingness to pay for the benefits they have received or their willingness to accept for the loss of their benefits. The theoretical foundations of the contingent valuation method is based on the economy of welfare and assumptions which consider the amounts of declared willingness to pay dependent on the respondents' fundamental preferences. Furthermore, it is the only method which can evaluate the non- use value. The contingent valuation method is an appropriate choice for the valuation of cultural heritages goods <sup>[15]</sup>. The contingent valuation method includes two sections: one is the use of experimental approach based on assimilation or game analysis; and the other section is the use of information obtained from the questionnaire method <sup>[16]</sup>. Perman considers the evaluation contingent, since the information is obtained from the answers inserted in the questionnaires contingent to the existence of assumed market. The main question of contingent evaluation method is that how much money the individuals will to pay for the use or protection of studied recourse? Or, in other words, how much is their willingness to pay (WTP)? Next, the analyzers can evaluate the total value which people consider for that recourse by calculating the respondents' average willingness to pay and multiplying it by total number of the individuals who use or would use the intended recourse. In other words:

$$WTP = N \cdot \overline{WTP} \quad (1)$$

It means, total WTP is obtained by multiplying the average  $\overline{WTP}$  by total number of population: in relation (1) WTP, the weight of all the individuals has been regraded alike <sup>[1]</sup>.

This method tries to determine the individuals' willingness to pay (WTP) under the scenarios of specific assumed market. There are three methods for the calculation of WTP:

The first method is named average WTP which is used for calculating the expected WTP by the numerical integral in the interval between 0 and  $\infty$ . The second one is named average total WTP which is used for calculating the expected WTP by the numerical integral in the interval between  $-\infty$  and  $+\infty$ . The third method is named partial average WTP and is used for calculating the expected WTP by the numerical integral in the interval between 0 and the maximum suggestion (A). The last one is the best method, since this method retains the stability and constancy of the limitations with the theory, statistical efficiency and the capacity of summation that is calculated by the following relation <sup>[17]</sup>:

$$E(WTP) = \int_0^{axA} F_{\eta} dA = \int_0^{MaxA} \left( \frac{1}{1 + \exp[-(\alpha^* + \beta A)]} \right) dA, \alpha^* = (\alpha + \gamma Y + \theta S)$$

That E (WTP) is the expected willingness to pay and  $\alpha^*$  is the moderated intercept that has been added to the main intercept sentence ( $\alpha$ ) by the social- economic sentence. The logit patterns might be evaluated in the form of linear or logarithm functions

that the linear function form is easier for calculating the average WTP and it has been used in most of the studies. This method requires the determination and selection of a further suggestion in addition to the primary one. The suggestion of more and less amounts are ascribed to the answers "yes" and "no", respectively. While using the contingent valuation method and questionnaire information reception, several biases or errors might be created<sup>[18]</sup>. The estimation of statistic samples is without intended biases when the expected value of sample provider is equal to the real value of the society. At the time of using the contingent valuation method and reception of data, most important biases include the strategic bias, starting point bias, hypothetical bias and payment vehicle bias.

## Research literature

### Review of internal related literature

Haghani and A'zami (2017), in a research titled "determination of economic value of historical works Bistoon by using Willingness to Pay (WTP) method", revealed that the variables of income and education level are of the most important factors effective on the level of visitors' WTP for the visit from the historical place Bistoon in both logit and probit methods.

Chiyaneh et al., (2017), in a research titled "evaluation of urban tourism attractions by contingent valuation method (CVM), case study: Shorabil lake of Ardebil", perceived that 68 percent of the visitors will to pay for the visit from Shorabil<sup>[19]</sup>. The variables of education level, sex, visitors' satisfaction, proposed bid, number of family members, amount of income are the factors effective on willingness to pay, while the variable of age is not meaningful. Average willingness to pay among the visitors is 12000 Rials and the recreational value of this attraction was evaluated 18.72 billion Rials.

Yeganeh et al., (2017), in a research titled "evaluating economic value of natural recreation areas and determining factors effective on tourists' willingness to pay (case study: Chahar Bagh meadows in Gorgan), concluded that from among the factors effective on the amount of the region recreational value, the variables of monthly income and nightly residence became meaningful at significance level of 1 percent and the variables number of visits per year, duration of every visit, sex and education became meaningful at the significance level of 5 percent<sup>[20]</sup>. The average WTP was extracted 14521 Rials as the entrance price for every visitors for the use of the region.

Adeli et al. (2017), in a research titled "evaluating recreational value of national park Bemoo in Fars province by using contingent valuation method", revealed that the individuals' willingness to pay has meaningful relationship with the variables of sex, residence to park distance, individual's income, number of visits and proposed price<sup>[21]</sup>. In addition, every individual's average willingness to pay for visit this park and willingness to annual pay of every family were estimated 28961.2 and 98757.69 Rials. Respectively.

Rigchian (2016) has evaluated in a research the economic value of the tourism in historical mosques of Naghsh- e Jahan square 834139 Rials by contingent valuation method.

In the research titled "evaluation of recreational value of forest park Nazhvan by using contingent valuation method" done by Karami et al. (2016), the proposed price became meaningful at the level of one percent and the sex and number of visits were meaningful at the significance level of 17 percent<sup>[22]</sup>. Finally, the visitors' average WTP was evaluated 1137 Rials for the recreational use of Nazhvan Park. Since the women have shown more willingness to pay, the establishment of the parks special for the women in Isfahan city can be economically justified.

Rajabi and Mousavi (2015), in a research titled "economic valuation of tourism of cultural heritages, case study: Jame Abbasi mosque in Isfahan", concluded that among the factors effective on willingness to pay, the effect of family size, knowledge level, willingness to protection of cultural heritages, attitude toward level of entrance bid and income on the willingness to pay had statistical significance<sup>[23]</sup>.

Khodaverdizadeh et al. (2015), in a research titled "evaluating recreational value of Shams Tabrizi Tomb by using contingent valuation method", concluded that 55 percent of the visitors will to pay money to use the mentioned tomb<sup>[24]</sup>. Furthermore, the variables of education, visitors' satisfaction, sex, family size, income and proposed price have meaningful effect on the possibility of individuals' willingness to pay; the age variable was nor statistically meaningful, but it revealed an expected sign. The individuals' average willingness to pay for every visit was evaluated 6250 Rials and the annual recreational value of Shams Tabrizi tomb was estimated about 375 million rials.

Azadi et al. (2014), in the evaluation of economic value of Tagh Bostan by using contingent valuation method (CVM), revealed that the individuals' average WTP for the visit from this place and its protective value are respectively 46006 and 18424000000 rials. The results show that the proposed bid, income level, number of visits from this place and residence are of the variables which affect the rejection or acceptance of the suggestion.

Rajabi and Mousavi (2014), in a research titled "evaluating tourism and protective values of Naghsh- e Jahan square of Isfahan by using contingent valuation method", founded that 68 percent of the visitors will to pay some money to visit and protect the monuments of Naghsh-e Jahan square. With regard to the individuals' willingness to pay and number of internal visitors of Naghsh-e Jahan square monuments in 2010, the tourism value and the annual protective value of Naghsh- e Jahan square were respectively more than 12630 and 465920 million rials.

The results of the research titled "calculation of tourists' willingness to pay for using lagoon (case study: Shirin Sou Lagoon)" accomplished by Lorestani and Astani (2014) revealed that the people will to pay some money for the use of lagoon<sup>[25]</sup>; in such a way that 56 percent of the visitors will to pay some money to visit Shirin Sou lagoon. Furthermore, the results show that the average WTP for the use of Shirin Sou Lagoon is about 4500 rials.

Khaksar Astaneh et al. (2012) evaluated the average WTP of the visitors of Shahr- e Sukhteh 6563 rials for every visit and its total recreational value more than 1292 million rials by using contingent valuation method (CVM) and double choice questionnaire<sup>[26]</sup>.

Farzin and Tehrani (2012) evaluated the internal and external visitors' WTP for the entrance ticket of national museum of Iran and concluded that the internal visitors' WTP is negatively affected by the distance variable, while there observed no meaningful relationship between these two variables in case of external visitors. Furthermore, the variable attitude had positive and meaningful relationship with WTP of both two groups of visitors.

Raei Jadidi and Sabouhi Sabouni (2011) evaluated the WTP of the visitors of recreational village Kordasht located in East Azarbaijan Province and concluded that 83 percent of the visitors will to pay some money to visit the mentioned village [27]. The variables of education, village attractiveness, income and proposed price revealed meaningful effect on the expected willingness to pay. The variables of age, sex and family size were not statistically meaningful.

Farajzadeh et al. (2009), in a research titled "evaluating willingness to pay of visitors of the historical place Pasargad and analyzing factors effective on that by using contingent valuation method (CVM)", concluded that from among the mentioned factors, the sex, family dimension, distance and income had considerable statistical effect on the individuals' willingness to pay [18]. In the case of the variable sex, it was specified that the women have more WTP in comparison to the men. In addition, it was revealed that the increase of family dimension, distance and income has positive and meaningful effect on the individuals' WTP.

Molayi et al. (2009), in a research titled "evaluating recreational value of Kakh Sardar of Makou and determining factors effective on visitors' willingness to pay", concluded that about 68 percent of the individuals accept the proposed bid and the individuals' average WTP was evaluated 8437 rials for every visit [28].

## Review of related external literature

Saúl Torres et al. (2018), in a research titled "economic valuation of cultural heritages by travel cost method in case of national museum and research center of Altamira", concluded that the evaluation of economic value of the national museum and research center of Altamira varies between 4.7 to 8 million Euro for every year [29].

Sri Surbanti et al. (2017), in a research titled "determining level of payment readiness and economic value of tourism by probabilistic assessment method, case study: Sangiran in Java", concluded that the sex and annual income are effective on the economic pricing of Sangiran [30].

Michelle Haefele et al. (2016) accomplished a research titled "general economic valuation of national park services and programs" [31]. According to the results of a public opinion poll revealed that generally, the protection of national parks including the historical places for the current and future generation was significant for 95 percent of the respondents.

Nandagiri (2015) evaluated the economic value of by willingness to pay (WTP) method [32]. According to the results of this research, swimming and water fountains are of the services that

can increase the rate of visitors' willingness to pay, if they enjoy these services.

Resende et al. (2015) in the economic valuation of presented ecosystem services of the protected region in Colorado Brazil by the contingent valuation method concluded that the annual income, number of families, level of interest in environmental issues were effective on the declared willingness of the visitors [33].

Boelli et al. (2009) studied the recreational demand of the lowlands and highlands by the contingent valuation method. The results revealed that the visitors' willingness to pay for the improvement and development of the substructures in the lowlands and highlands was respectively 12.22 and 9.08 pounds.

Adams et al. (2008) estimated the people's willingness to pay for the protection of Moro do Diabo State Park and Atlantic rainforest in Brazil by contingent valuation method (CVM) [34]. In this study, the individuals' annual willingness to pay for the protection of the park and Atlantic forest was reported respectively 2113548 and 3003463 American dollars.

Ojeda et al. (2008) estimated the nonmarket value of Yagyu River in Mexico [35]. They applied the contingent valuation method in 40 cities reported the individuals' willingness to pay 73 pesos per month. In this study, the relationship between the individuals' willingness to pay and the key variables such as the amount of primary suggestion, income level, education and number of children was studied.

Baral et al. (2008) studied the recreational value of the protected area Annapurna in Nepal by the use of contingent valuation method. In this study, the individuals' average and mean willingness to pay was reported respectively 69.2 and 74.3 American dollars.

Logical extraction and presentation of valuation model in present research

With regard to the study of theoretical foundations and experimental literature of the research, it was specified that WTP method is one of the best methods for the valuation of non-consumptive goods such as the historical and cultural places.

Furthermore, the study of literature reveals that a few researches have been done in the case of valuation of the beautiful places by WTP method in Hamadan city. Therefore, the present study was done for the purpose of evaluating the visitors' willingness to pay for the historical place Hegmataneh by WTP method.

## Research methodology

For the purpose of determining a model for the evaluation of WTP, it is assumed that the individual accepts or reject, in a way, the proposed bid as the tax allocated for the protective value and proposed bid as the entrance price for the recreational value of the tourism place based on the maximization of his/ her utility under following conditions:

$$U(1, Y-A; s) + \varepsilon_1 \geq U(0, Y; S) + \varepsilon_0$$

U: Utility

Y: individual's income

A: proposed bid

S: social- economic features

$\epsilon_1$  and  $\epsilon_0$  : random variables with the mean zero

## Materials and Methods

The present study is a survey applied research. This study has a nature with comparative hypotheses. The research data were analyzed by WTP and SPSS software has been used in this study. WTP method: the evaluation of costumers' maximum WTP is considered as a prevalent method for the awareness of demand function and generally the efficient execution of pricing policies. Meanwhile, the writers study the variables which affect probably the costumers' WTP with regard to the subject and purpose of their researches [36]. In this study, the researcher refers to the variables age, sex, education level, marital status, income and number of family members. In this method, the individuals were directly asked about their willingness to pay some money for the use or protection of the historical place Hegmataneh. The maximum bid of willingness to pay is representative of the value determined by the individuals for the use or protection of this cultural heritage. The use of the term contingent in CVM is for this reason that in this method, an assumed market is created for the goods and tourism and recreational services of Hegmataneh hill. After the creation of assumed market, they were asked about their willingness to pay by the interview; by this way, the individuals' willingness to pay was evaluated.

There are three methods for the calculation of WTP. In this research, the tourists' willingness to pay has been studied by the logit model. The parameters of logit model are evaluated by the use of maximum likelihood method which is the most prevalent method for estimating the logit model. Then, the expected WTP by the numerical integral in the interval between 0 and the maximum suggestion (A) is calculated by the following relation:

$$E(WTP) = \int_0^{Max A} F_{\eta}(\Delta U) dA = \int_0^{Max A} \left( \frac{1}{1 + \exp\{-(\alpha^* + \beta A)\}} \right) dA$$

That, E (WTP) is the expected WTP and  $\alpha$  the moderated intercept that has been added to the main intercept sentence ( $\alpha$ ) by the social- economic sentence  $\alpha [\theta = (\alpha + \gamma y + S)]$ .

The logit models might be evaluated in the form of linear or logarithm functions. In this study, the linear logit has been applied, since the linear form is easier to be applied for the calculation of average WTP. SPSS software is used for statistical analysis of the variables, mathematic calculations and the estimation of parameters of logit model.

The statistical population of the research includes all the individuals who visit the ancient hill Hegmataneh during the summer 2018. The statistical population included the local and nonlocal individuals of Hamadan city that visited the historical place Hegmataneh during the spring 2018 and was selected totally by simple random method. In this research, the convenient method was used for evaluating the number of needed sample and the number of sample based on the mean and variance of statistical population (visitors of the historical place Hegmataneh) was determined 300 members by using Cochran formula or Krejcie and Morgan Table. The most prevalent tool used in this research was the questionnaire. For this purpose, the contingent valuation questionnaire, single- bounded dichotomous choice (SBDC) and double- bounded dichotomous choice (DBDC) methods were designed and performed by the researcher for evaluating the individuals' willingness to pay for the visit from the historical place Hegmataneh hill with regard to the research variables. The researcher- made questionnaire includes four section: the demographical features were represented in the first section. The second section was used for the historical and cultural value of the historical places. The level of willingness to visit the historical places was represented in the third section. The last section was used for the proposed bid for the visit from the historical place Hegmataneh by double- bounded dichotomous choice method.

## Results

According to the following table, the historical and cultural value of the historical places and the individuals' willingness to protect and visit these places has been studied that the results have been presented as following:

**Table 1: status of individuals' willingness to the protect and visit (separately sorted by the questions) Hegmataneh hill by using single- sample t- test**

| Question  | Mean | Standard deviation | t amount | Freedom level | Level of significance |
|---|------|--------------------|----------|---------------|-----------------------|
| Role of historical works in protection of societies heritages   | 3.82 | 1.17               | 12.18    | 299           | 0.000                 |
| Role of historical works in national identity   | 4.05 | 1.12               | 16.30    | 299           | 0.000                 |
| Role of historical works in creation of sense of belonging in the individuals                               | 4.04 | 0.97               | 18.59    | 299           | 0.000                 |
| Role of historical places in the societies knowledge about their history, culture and identity              | 4.08 | 0.94               | 19.95    | 299           | 0.000                 |
| How much of the protection cost of the historical places is paid by the visitors?                           | 2.37 | 1.09               | -9.86    | 299           | 0.000                 |
| How much of the protection cost of the historical places is paid by all the individuals?                    | 2.74 | 1.25               | -3.46    | 299           | 0.000                 |
| How much money you will to pay for the protection of historical works?                                      | 2.49 | 1.09               | -8.01    | 299           | 0.001                 |
| Is the visit from the historical place Hegmataneh an ideal activity in leisure time?                        | 3.20 | 1.04               | 3.29     | 299           | 0.000                 |
| Is the visit from the historical place Hegmataneh one of your favorites?                                    | 3.26 | 1.07               | 4.23     | 299           | 0.000                 |
| Is the study and going to the historical place Hegmataneh one of your favorite activities during your trip? | 3.17 | 1.06               | 2.74     | 299           | 0.006                 |
| Would you like to travel long distance to visit the historical place Hegmataneh?                            | 3    | 1.11               | -0.05    | 299           | 0.008                 |

|   |      |      |       |     |       |
|---|------|------|-------|-----|-------|
| Would you like to pay any amount of money to visit the historical place Hegmataneh? | 2.59 | 1.13 | -6.28 | 299 | 0.000 |
|---|------|------|-------|-----|-------|

The role of historical works in the protection of the heritages of societies has the mean more than the statistical mean (3). So it can be said that the historical works play important role in the protection of heritages of the societies. The mean of role of historical works in the national identity is more than the statistical mean (3). So it can be said that the historical works play an important role in the national and cultural identity of the societies.

The role of historical works in the creation of sense of belonging in the individuals has the mean more than the statistical mean (3), so it can be said that the historical works create a sense of belonging in the individuals. The role of historical places in the societies' knowledge about their history, culture and identity has a mean more than the statistical mean (3). So it can be said that the historical works play an important role in the societies' knowledge about their history, culture and identity. In question five, the mean is less than the statistical mean (3), so it can be said that, from most of the respondents' viewpoint, the visitors are not responsible for the costs of protection of the historical places. In question six, the mean is less than the statistical mean (3), so it can be said that not all the individuals are responsible for the costs of protection of the historical places. In question seven, the mean is less than the statistical mean (3), so it can be said that the respondents will not to pay high costs for the protection of historical works. In question eight, the mean is more than the statistical mean (3), so it can be said that the visit from the historical place Hegmataneh is an ideal activity in the respondents' leisure time. In question nine, the mean is more than the statistical mean (3), so it can be said that the visit from the historical place Hegmataneh is considered as one of the respondents' favorites. In question ten, the mean is more than the statistical mean (3), so it can be said that the study and travel to the historical place Hegmataneh are of the respondents' favorite activities during the trip. In question eleven, the mean is more than the statistical mean (3), so it can be said that the respondents will to travel long distance to visit the historical place Hegmataneh. In question twelve, the mean is less than the statistical mean (3), so it can be said that the respondents would not like to pay any amount of money to visit the historical place Hegmataneh.

**Table 2: amount of individuals' willingness to pay a cost to visit from the historical place Hegmataneh**

| Proposed bid     | Frequency | Percentage |
|------------------|-----------|------------|
| 25000 to 50000   | 163       | 54.3       |
| 50000 to 75000   | 74        | 24.7       |
| 75000 to 100000  | 43        | 14.3       |
| 100000 to 125000 | 16        | 5.3        |
| 125000 to 150000 | 4         | 1.3        |

With regard to the table, it is observed that, for the visit from the historical place Hegmataneh, 163 (54.3 percent), 74 (24.7

percent), 43 (14.3 percent) and 20 (6.6 percent) individuals respectively will to pay 25000- 50000, 50000- 75000, 75000- 100000 and more than 100000 rials.

**Hypothesis 1:** the historical- cultural value of the historical place Hegmataneh is at the average and above- average level.

**Table 3: historical- cultural value of the historical place Hegmataneh by using single- sample t- test**

| Question  | Mean | Statistical mean | Standard deviation | t amount | Freedom level | Significance level |
|---|------|------------------|--------------------|----------|---------------|--------------------|
| historical- cultural value of the historical place Hegmataneh | 4.01 | 3                | 0.852              | 20.389   | 299           | 0.000              |

With regard to the aforesaid table, the mean for the historical- cultural value of the historical place Hegmataneh has been obtained 4.01 and this amount is more than the statistical mean (3). This reveals that the historical- cultural value of the historical place Hegmataneh is at the average and above- average level.

**Hypothesis 2:** the level of willingness to protect the historical place Hegmataneh is at the average and above- average level.

**Table 4: level of willingness to protection of the historical place Hegmataneh by using single- sample t- test**

| Question  | Mean | Statistical mean | Standard deviation | t amount | Freedom level | Significance level |
|---|------|------------------|--------------------|----------|---------------|--------------------|
| Level of willingness to protection of the historical place Hegmataneh | 2.70 | 3                | 0.754              | -6.686   | 299           | 0.000              |

With regard to the aforesaid table, the mean for the level of willingness to protect the historical place Hegmataneh has been obtained 2.70 and this amount is less than the statistical mean (3). This reveals that the amount of tourists' willingness to protect the historical place Hegmataneh is less than the average level.

**Hypothesis 3:** the level of willingness to visit from the historical place Hegmataneh is at the average and above- average level.

**Table 5: level of willingness to visit the historical place Hegmataneh by using single- sample t- test**

| Question  | Mean | Statistical mean | Standard deviation | t amount | Freedom level | Significance level |
|---|------|------------------|--------------------|----------|---------------|--------------------|
| Level of willingness to visit the historical place Hegmataneh | 3.04 | 3                | 0.857              | 0.772    | 299           | 0.000              |

With regard to the aforesaid table, the mean for the level of willingness to visit the historical place Hegmataneh has been

obtained 3.04 and this amount is nearly equal to the statistical mean (3). This reveals that the amount of tourists' willingness to protect the historical place Hegmataneh is less than the average level.

**Hypothesis 4:** the demographical features have meaningful effect on the determination of economic value of the historical work Hegmataneh by using WTP method.

4-1. the job status has meaningful effect on the determination of economic value of the historical work Hegmataneh by using WTP method.

**Table 6: job status in the determination of economic value of the historical work Hegmataneh**

| Variable  | Number | Correlation coefficient | Significance level |
|---|--------|-------------------------|--------------------|
| job status in determination of economic value of the historical work Hegmataneh | 300    | -0.124                  | 0.056              |

With regard to the data represented in table 6, obtained correlation ( $r = -0.0124$ ) and the-significance level ( $P = 0.056$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the job status and the determination of economic value of the historical work Hegmataneh.

4-2. the household income has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the willingness to pay (WTP) method.

**Table 7: household income in determination of economic value of the historical work Hegmataneh**

| Variable  | Number | Correlation coefficient | Significance level |
|---|--------|-------------------------|--------------------|
| Household income in determination of economic value of the historical work Hegmataneh | 300    | 0.555                   | 0.015              |

With regard to the data represented in table 7, obtained correlation ( $r = 0.555$ ) and the-significance level ( $P = 0.015$ ), since the significance level is less than 0.05, it can be said with 99 percent probability that there is a positive and meaningful relationship between the household income and the determination of economic value of the historical work Hegmataneh. In other words, the willingness to pay the cost for the protection of and visit from the historical work Hegmataneh is increased by the increase of household income and vice versa. Therefore, 30.80 percent (squared correlation coefficient multiplied by 100) of the variance of determining the economic value of the historical work Hegmataneh can be predicted based on the household income.

4-3: the tourist type has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 8: tourist type in determination of economic value of the historical work Hegmataneh**

| Variable  | Number | Correlation coefficient | Significance level |
|---|--------|-------------------------|--------------------|
| Tourist type in determination of economic value of the historical work Hegmataneh | 300    | 0.041                   | 0.489              |

| Variable  | Number | Correlation coefficient | Significance level |
|---|--------|-------------------------|--------------------|
| Tourist type in determination of economic value of the historical work Hegmataneh | 300    | 0.041                   | 0.489              |

With regard to the data represented in table 8, obtained correlation ( $r = 0.041$ ) and the-significance level ( $P = 0.489$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the tourist type and the determination of economic value of the historical work Hegmataneh.

4-4: the individuals' education has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 9: education in determination of economic value of the historical work Hegmataneh**

| Variable   | Number | Correlation coefficient | Significance level |
|--|--------|-------------------------|--------------------|
| Education in determination of economic value of the historical work Hegmataneh | 300    | 0.543                   | 0.036              |

With regard to the data represented in table 9, obtained correlation ( $r = 0.543$ ) and the-significance level ( $P = 0.036$ ), since the significance level is less than 0.05, it can be said with 99 percent probability that there is a positive and meaningful relation between the education and the determination of economic value of the historical work Hegmataneh. In other words, the willingness to pay the cost for the protection of and visit from the historical work Hegmataneh is increased by the increase of individuals' education and vice versa. Therefore, 29.48 percent (squared correlation coefficient multiplied by 100) of the variance of determining the economic value of the historical work Hegmataneh can be predicted based on the individuals' education.

4-5: the sex has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 10: sex in determination of economic value of the historical work Hegmataneh**

| Variable   | Number | Correlation coefficient | Significance level |
|--|--------|-------------------------|--------------------|
| Sex in determination of economic value of the historical work Hegmataneh | 300    | 0.126                   | 0.334              |

With regard to the data represented in table 10, obtained correlation ( $r = 0.126$ ) and the-significance level ( $P = 0.334$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the sex and the determination of economic value of the historical work Hegmataneh.

4-6: the individuals' age has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 11: individuals' age in determination of economic value of the historical work Hegmataneh**

| Variable   | Number     | Correlation coefficient | Significance level |
|--|------------|-------------------------|--------------------|
| <b>Individuals' age</b> in determination of economic value of the historical work Hegmataneh | <b>300</b> | <b>0.085</b>            | 0.175              |

With regard to the data represented in table 11, obtained correlation ( $r = 0.085$ ) and the-significance level ( $P = 0.0175$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the individuals' age and the determination of economic value of the historical work Hegmataneh.

4-7: the number of family members has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 12: number of family members in determination of economic value of the historical work Hegmataneh**

| Variable   | Number     | Correlation coefficient | Significance level |
|--|------------|-------------------------|--------------------|
| <b>Number of family members</b> in determination of economic value of the historical work Hegmataneh | <b>300</b> | <b>-0.002</b>           | 0.969              |

With regard to the data represented in table 12, obtained correlation ( $r = -0.002$ ) and the-significance level ( $P = 0.969$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the number of family members and the determination of economic value of the historical work Hegmataneh.

4-8: the marital status has meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

**Table 13: marital status in determination of economic value of the historical work Hegmataneh**

| Variable   | Number     | Correlation coefficient | Significance level |
|--|------------|-------------------------|--------------------|
| <b>Marital status</b> in determination of economic value of the historical work Hegmataneh | <b>300</b> | <b>0.138</b>            | 0.325              |

With regard to the data represented in table 13, obtained correlation ( $r = 0.138$ ) and the-significance level ( $P = 0.325$ ), since the significance level is more than 0.05, it can be said with 99 percent probability that there is no meaningful relation between the number of family members and the determination of economic value of the historical work Hegmataneh.

To continue, the effect of the independent variables on the dependent one is studied by using the linear logit regression, in such a way that if the tourists will to pay 100000 Rials and more than this amount to visit Hegmataneh hill or if they will to pay less than this amount, the amount of variable would be respectively 1 and 0:

**Table 14: effect of independent variables on dependent variable by using linear logit regression**

| Block 1                  | Chi 2                  | Freedom level        | Significance level |
|--------------------------|------------------------|----------------------|--------------------|
|                          | 12.70                  | 6                    | 0.048              |
| Variable                 | Evaluated coefficients | Statistical t- value | Significance level |
| Sex                      | -0.199                 | 0.437                | 0.673              |
| Number of family members | 0.074                  | 0.190                | 0.698              |
| Education                | 0.406                  | 0.266                | 0.027              |
| Age                      | 0.292                  | 0.166                | 0.078              |
| Marital status           | -1.155                 | 0.621                | 0.063              |
| Level of income          | 0.207                  | 0.215                | 0.034              |
| Job status               | -1.366                 | 0.481                | 0.555              |
| Tourist type             | -0.624                 | 0.960                | 0.516              |
| Fixed amount             | -2.263                 | 1.389                | 0.533              |

In aforesaid table, with regard to Chi 2 test (12.70), since the significance level 0.048 is less than 0.05, it can be said that the regression is meaningful; it means that the independent variables can predict the dependent variable. To continue, with regard to the amounts of significance level, it can be said that the variables of household income and education affect the economic value of the historical work Hegmataneh.

## Discussion and Conclusion

The present research has aimed to determine the economic value of the historical work Hegmataneh by the use of willingness to pay (WTP) method. With regard to the data analysis, it can be said that the role of historical work in the protection of heritages of the societies, national identity, creation of sense of belonging in the individuals and the societies' knowledge about their history, culture and identity has been important for the visitor and creates value for them. Therefore, these values have been effective on the determination of economic value of the historical place Hegmataneh. This indicates that the visitors are aware of the historical value and one thousand years history of the historical place Hegmataneh. Indeed, it can be said that, among the historical places, the visitors know the historical work Hegmataneh and its historical antiquity. Therefore, the historical- cultural value of the historical place Hegmataneh is at the average and above- average level.

The level of the tourists' willingness to protect the historical place Hegmataneh is less than the average level. This matter is so haunting. Although the value of the historical place Hegmataneh is evident for the visitors, they consider themselves separated from its history and one- thousand years civilization of this place and do not will to pay some money for its protection and consider it the government's responsibility. Of course, the visitors' unwillingness might be indicative of the weakness in two issue: 1- Since the government takes over rulership of all the affairs and the planning and budgeting are done by the government and urban managers, so this affair is accomplished by them, too. 2- The weakness in the national and cultural identity existing in the society and visitors causes they do not accomplish any activity for its protection, although they are aware of values of this historical

place. Of course, this might be caused by the greater matters that the researcher is not capable of doing that.

With regard to the results of data analysis, the mean for the willingness to visit the historical place Hegmataneh has been obtained 1.72 and this amount is nearly equal to the statistical mean (3). This indicates that the visitors' willingness to visit the historical place Hegmataneh is at the average level.

It seems a cultural and identity weakness should be exist among the visitors that their willingness to pay is at the average and even below- average level. They have perceived perfectly the historical value of this historical place, but they do not any willingness to protect and pay further cost for the visit, development and improvement of the historical place; and this is so sorrowful.

The demographical features (job status, household income, tourist type, individuals' education, sex, age, number of family members, marital status) have meaningful effect on the determination of economic value of the historical work Hegmataneh by using the WTP method.

There is no meaningful relationship between the job status and the determination of economic value of the historical work Hegmataneh. The results of present research do not correspond to the findings of the researches done by Haghani & A'zami (2017), Chiyaneh et al. (2017), Yeganeh et al. (2017), Adeli et al. (2017), Karami et al. (2016), Rajabi & Mousavi (2015), Khodaverdizadeh et al. (2015), Azadi et al. (2014), Rajabi & Mousavi (2014), Lorestani & Astani (2014), Khaksar Astaneh et al. (2012), Farzin & Tehrani (2012), Farajzadeh et al. (2009), Sri Subanti et al. (2017), Resende et al. (2015). Furthermore, they correspond to the results of Raei Jadidi and Sabouhi Sabouni's study (2011). The results reveal that the individuals' job status creates no effect on their willingness to pay for the historical place Hegmataneh and it has no considerable effect on the valuation of this place. With regard to the individuals' selection of the place for the visit and the cost they will to pay for that place, it seems their job status is not effective on their willingness to pay for the pleasant landscapes. In other words, the individuals decide about the visit from the places based on their families' interest not based on this matter that whether they are public servant, self- employed or unemployed.

There is positive and meaningful relationship between the household income and the determination of economic value of the historical work Hegmataneh. In other words, the individuals' willingness to pay for the protection of and visit from the historical place Hegmataneh is increased by the increase of household income. So, 30.80 percent of the variance of determination of the economic value of historical work Hegmataneh can be predicted based on the household income. With regard to this matter that the household income is an important factor in the in the classification of the shopping or consumption market, the individuals' income is effective on their willingness to pay and the economic valuation of the historical place Hegmataneh. The results of present research correspond to the findings of the researches done by Haghani & A'zami (2017), Chiyaneh et al. (2017), Yeganeh et al. (2017), Adeli et al.

(2017), Karami et al. (2016), Rajabi & Mousavi (2015), Khodaverdizadeh et al. (2015), Azadi et al. (2014), Rajabi & Mousavi (2014), Lorestani & Astani (2014), Khaksar Astaneh et al. (2012), Farzin & Tehrani (2012), Farajzadeh et al. (2009), Sri Subanti et al. (2017), Resende et al. (2015). Furthermore, they do not correspond to the results of Raei Jadidi and Sabouhi Sabouni's study (2011).

The data analysis reveals that there is no meaningful relationship between the tourist type and the determination of economic value of the historical work Hegmataneh. In the explanation of this hypothesis, it can be said that the individuals, either internal tourists or external ones, take into account the current economic status at the time of visit from the historical works. The results of present research correspond to the results of Farzin and Tehrani's (2012) study. The results of this research also showed that the tourist type creates no considerable change in the determination of economic value of the historical place Hegmataneh.

There is positive and meaningful relationship between the education and the determination of economic value of the historical work Hegmataneh. In other words, the individuals' willingness to pay for the protection of and visit from the historical place Hegmataneh is increased by the increase of individuals' education and vice versa. Therefore, 29.48 percent of the variance of determination of the economic value of historical work Hegmataneh can be predicted based on the individuals' education. The researches reveal that the individuals with higher level of education have more willingness to pay. Furthermore, Rajabi and Mousavi (2015), in their study, indicated that the individuals with higher level of knowledge reveal more willingness to protect the cultural heritages. So, they will to pay more money to visit the tourism attractions. The result of this research correspond to the results of studies done by Haghani & A'zami (2017), Chiyaneh et al. (2017), Yeganeh et al. (2017), Khodaverdizadeh et al. (2015), Raei Jadidi and Sabouhi Sabouni (2011). There is no meaningful relationship between the individuals' sex and the determination of economic value of the historical work Hegmataneh. The results of present research do not correspond to the findings of the researches done by Chiyaneh et al. (2017), Yeganeh et al. (2017), Karami et al. (2016), Rajabi & Mousavi (2015), Khodaverdizadeh et al. (2015), Farajzadeh et al. (2009), Sri Subanti et al. (2017) and correspond to the results of study of Raei Jadidi and Sabouhi Sabouni (2011). The results reveal that the sex (male or female) has no effect on the individuals' willingness to pay for the visit from the historical place Hegmataneh. The women have more willingness to pay in most of the researches. But, in this research, the sex plays no considerable role in the economic valuation of this place and the visitors' willingness.

The data analysis reveals that there is no meaningful relationship between the individuals' age and the determination of economic value of the historical work Hegmataneh. In the explanation of this hypothesis, it can be said that this might be affected by this matter that most of the visitors go to these places with their families and accordingly, there are different age groups in one

family. For this reason, the element age has no meaningful effect on the economic valuation of the historical place Hegmataneh. The results of this research correspond to the results of studies done by Chiyaneh et al. (2017), Khodaverdizadeh et al. (2015), Raei Jadidi and Sabouhi Sabouni (2011).

The results of data analysis reveals that there is no meaningful relationship between the number of family members and the determination of economic value of the historical work Hegmataneh. This corresponds to the results of the studies done by Chiyaneh et al. (2017), Rajabi & Mousavi (2015), Khodaverdizadeh et al. (2015), Raei Jadidi and Sabouhi Sabouni (2011). The present research and the aforesaid researches reveal that the number of family members has no effect on the visitors' willingness to pay. In the explanation of these results, it can be said that the level of family members' interest is the criterion for making decision about the visit from a historical place and the number of members plays no role in this case.

With regard to the data analysis, it can be perceived that although most of the visitors (74 percent) were married, but the visitors' marital status has had no effect on the visitors' willingness to pay. It can be interpreted that since most of the visitors, specially the nonlocal ones, usually go to the historical places with their families, the marital status has played no role in the individuals' willingness to pay. So, there is no meaningful relationship between the individuals' marital status and the determination of economic value of the historical work Hegmataneh.

Generally, the variables of household income and education affect the economic valuation of the historical work Hegmataneh. The data analysis reveals that for the visit from the historical place Hegmataneh, 54.3, 24.7, 14.3 and 6.6 percent of the individuals respectively will to pay 25000- 50000, 50000- 75000, 75000-100000 and more than 100000 rials.

In present research, the data collection tools have been limited to the questionnaire and the other methods such as the interview, observation and so on have not been applied. Since the questionnaire has been the only tool used in present research, this study with the restrictions which use of these tools has, is not except from the similar studies. The other limitation is that the research has been accomplished on the internal visitors. The number of visitors with Ph.D degree or higher that have participated in this study has been few. The number of individuals with the age of over 60 years has been few in this research.

## References

1. Rajabi, M., Mousavi, S. Evaluating Tourism and Protective Values of Neghsh- e Jahan Square in Isfahan by Using Contingent Valuation Method, *Financial Economy*, 2014; 8(27): 127- 152.
2. Peacock, A. A future for the past: The political economy of heritage, *Proceedings of the British Academy*, 1995; 87: 187-243.
3. Mojabi, S., Monavari, S. Economic Valuation of Pardisan and Lavizan Parks, *Quarterly of Environmental Sciences*, 2005; V. 7: 63- 71.
4. Montazer Hojat, A; Anvari, E; Bashi, M. Evaluating Willingness to Pay of Tourists of Shushtar Historical Waterfalls, *Global Conference of Management, Economy and Accounting*, 2015.
5. Haghani, F., A'zami, A. Determination of Economic Value of Historical Works Bistoon by using Willingness to Pay (WTP) Method, *Scientific- Research Quarterly of Economy and Urban Management*, 2017; 5(20): 67- 82.
6. Mourato, M. M. Economic valuation of cultural heritage: evidence and prospects, in: M. de la Torre (Ed.), *Assessing the Values of Cultural Heritage*. Research Report, The Getty Conservation Institute, Los Angeles, 2002.
7. Noonan, D. S. Contingent Valuation and Cultural Resources: A Meta-Analytic Review of the Literature. *Journal of Cultural Economics*, 2003; 27: 159-176.
8. Rodriguez, J., Blanco, V. Optimal Pricing and Grant Policies for Museums, *Journal of Cultural Economics*, 2006; 30:169-181.
9. Froer, O. *Rationality concepts in environmental valuation* (Vol. 58). Peter Lang Pub Incorporated, 2007.
10. Suparmoko, M. Economic Valuation for Environmental Goods and Services (Market Price Method); *Regional Training Workshop on The Economic Valuation of The Goods and Services of Coastal Habitats*, 2008. Retrieved from <http://typecat.com/Economic-Valuation-For-Environmental-Goods-And-Services>
11. Lee, J. F. J., Springborn, M., Handy, S. L., Quinn, J. F., Shilling, F. M. Approach for economic valuation of environmental conditions and impacts. Prepared for Caltrans, University of California, Davis, CA, 2010.
12. King, N. A. Economic valuation of environmental goods and services in the context of good ecosystem governance; *Water Policy* 9 (Supplement, 2, 2007): 51–67.
13. Izadi, H., Barzegar, S. Study of Economic Valuation Methods in Analysis of Environmental Issues of Cities, 1st Urban Economic Conference of Iran, Mashhad, Ferdousi University of Mashhad, 2011.
14. Marta-Pedroso C, Freitas H, Domingos T. Testing for the survey mode effect on contingent valuation data quality: A case study of web based versus in-person interviews. *Ecological economics*. 2007 May 15;62(3-4):388-98.
15. Tuan, T. H., Xuan, M. V., Namb, D., Navrud, S. Valuing direct use values of wetlands: A case study of Tam Giang–CauHai lagoon wetland in Vietnam. *Ocean and Coastal Management*, 2008; 52: 102-11.
16. Permen, R; Ma, Y; McGill Ray, J. *Economy of environment and natural resources*, translated by Arbab, H; Net Publications, Tehran, 2nd pub, 2008.
17. Lee, Choong- Ki., Han, SangYol. Estimating the use and preservation values of national parks tourism, resources using a contingent valuation method, *Tourism Management*, 2002; No23: 531-540.

18. Farajzadeh, Z; Soltani, G; Roustayi, M. Evaluating Willingness to Pay of Visitors of the Historical place Pasargad and Analyzing Factors Effective on that by Using Contingent Valuation Method, *Economic Researches*, 2009; 1(9): 89- 111.
19. Heydari Chiyaneh, R; Raheli, H; Fekri, F. Evaluation of Urban Tourism Attraction by Using Contingent Valuation Method (CVM), *Case Study: Shorabil Lake of Ardabil, Urban Tourism*, 2017; 4(1): 57- 70.
20. Yeganeh, H; Yari, R; Sanayi Anvar, A; Yousefi, S. Evaluating Economic Value of Natural Recreation Areas and Determining Factors Effective on Tourists' Willingness to Pay (Case study: Chahar Bagh meadows in Gorgan), *Meadow*, 2017; 11 (1): 57- 72.
21. Adeli, O; Ansari Samani, H; Fereydouni, N; & Zare Ghal'e Seyedi, R. Evaluating Recreational Value of National Park Bemoo in Fars Province by Using Contingent Valuation Method, *Environmental Sciences Studies*, 2016; 2(1): 78- 100.
22. Karami, O; Saleh, I; Rafiei, H; Hosseinpour Taderi, M. Evaluating Recreational Value of Forest Park Nazhvan by Using Contingent Valuation Method, *Environmental Researches*, 2016; 7(31): 85- 92.
23. Rajabi, M., Mousavi, S. Economic and Tourism Valuation of Cultural Heritages, Case study: Jame Abbasi Mosque, Isfahan, *Scientific- Expertized Bi-quarterly of Economy, Development and Planning Researches*, 2015; 4(2): 1-18.
24. Khodaverdizadeh, S; Behboudi, D; Khodaverdizadeh, M; & Saremi, M. Evaluating Recreational Value of Shams Tabrizi Tomb by Using Contingent Valuation Method, *Quarterly of Rural Development Strategies*, 2015; 1(1): 1- 15.
25. Lorestani, B., Astani, S. Calculation of Tourists' Willingness to Pay for Using Lagoon (Case study: Shirin Sou Lagoon), *Proceedings in National Conference of Confronting Desertification and Stable Development of Desert Lagoons of Iran*, 2014: 265- 268.
26. Khaksar Astaneh, H; Kalaneh Arabi, V; & Sardar Shahraki, A. Evaluating Willingness to Pay of Visitors of Historical Place Shahr- e Sukhteh by Using Contingent Valuation Method (CVM), *Quarterly of Tourism Management Studies*, 2012; 7 (20): 176- 184.
27. Raei Jadidi, M., Sabouhi Sabouni, M. Evaluating Willingness to Pay of Visitors of Recreational Village Kordasht Located in East Azarbayjan, *Environmental Sciences*, 2011; 8(3): 47- 56.
28. Molayi, M., Ghahramanzadeh, M., Mehdizadeh, Y. Evaluating Recreational Value of Kakh Sardar of Makou and Determining Factors Effective on Visitors' Willingness to Pay, *Economic Modeling*, 2010; 8(3): 173- 193.
29. Torres-Ortega S, Pérez-Álvarez R, Díaz-Simal P, Luis-Ruiz D, Manuel J, Piña-García F. Economic Valuation of Cultural Heritage: Application of Travel Cost Method to the National Museum and Research Center of Altamira. *Sustainability*. 2018 Jul;10(7):2550.
30. Subanti S, Hakim AR, Irawan BB, Hakim IM. Determinant of willingness to pay and economic value for tourism object using contingent valuation method: The case of sangiran sites, Province of central Java, Indonesia. *Journal of Environmental Management & Tourism*. 2017 Jul 1;8(4 (20)):867-74.
31. Haefele, M., Loomis, J., Bilmes, L. Harvard Kennedy School. 2016: 1-48.
32. Nandagiri L. Evaluation of economic value of pilikula lake using travel cost and contingent valuation methods. *Aquatic Procedia*. 2015 Jan 1;4:1315-21.
33. Resende FM, Fernandes GW, Andrade DC, Néder HD. Economic valuation of the ecosystem services provided by a protected area in the Brazilian Cerrado: application of the contingent valuation method. *Brazilian Journal of Biology*. 2017 Nov;77(4):762-73.
34. Adams C, da Motta RS, Ortiz RA, Reid J, Aznar CE, de Almeida Sinisgalli PA. The use of contingent valuation for evaluating protected areas in the developing world: Economic valuation of Morro do Diabo State Park, Atlantic Rainforest, São Paulo State (Brazil). *Ecological Economics*. 2008 Jun 15;66(2-3):359-70.
35. Ojeda MI, Mayer AS, Solomon BD. Economic valuation of environmental services sustained by water flows in the Yaqui River Delta. *Ecological economics*. 2008 Mar 15;65(1):155-66.
36. Farzin, M; & Sharifi Tehrani, M. Evaluation of internal and external visitors' tendency to payment for entrance tecket of National Museum of Iran, *scientific-research quarterly of tourism management studies*, 2012; 7(18): 47-71.