



Estimating the Economic-Recreational Value of Yadegar Emam Stadium in Tabriz Using the Contingent Valuation Approach (CVM)

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ABSTRACT

The research aimed to estimate the economic-recreational value of Yadegar Emam Stadium in Tabriz from the spectators' perspective using the contingent valuation approach. A sample size of 415 football fans attending the matches was studied through simple random sampling. A researcher-made questionnaire was used, and Logit and Probit rank-based methods with Stata software were employed for data analysis. The findings revealed that factors including income, proposed price, watching matches on television, satisfaction with stadium facilities, and enjoyment from watching games, positively influenced the willingness to pay. Conversely, variables including education level, age, and marital status had a negative correlation with willingness to pay. These results highlight the significant economic and recreational value held by Yadegar Emam Stadium. The estimation data can aid in managerial decision-making, sports development, and planning, leading to economic and social benefits, and promoting the football industry.

Introduction

Football, as one of the most popular and beloved sports worldwide, has consistently attracted millions of fans and spectators (Castellanos et al., 2011). The widespread interest and enthusiasm for football matches have led to a demand for sports venues that can accommodate large crowds and provide

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suitable conditions for hosting such events. Football stadiums, as symbols of power and sports attraction, play a crucial role in the development of the football industry and the overall recreational experience of fans (Lee, 2022). These stadiums are characterized by their high capacity, modern facilities, amenities, and incorporation of advanced technologies (Yang & Cole, 2022). As a result, it becomes essential to estimate the economic and recreational value of football stadiums. The economic value primarily encompasses the financial and economic impacts of these stadiums, which include revenue generated from ticket sales, revenue from football-related businesses, job opportunities created, and the attraction of tourists attending matches (Nicolliello & Zampatti, 2016). Economic value represents the value assigned to a good, service, or economic resource. This value can be monetary or non-monetary and is typically shaped by the demand, supply, and economic interactions among individuals (Young & Loomis, 2014). Economic value depends on various factors, such as needs, quantity and quality, accessibility, individual preferences, and market conditions (Interis & Taylor, 2017). Generally, economic value indicates the amount individuals are willing to pay for the purchase, consumption, or use of a good or service. This value can be determined through prices, estimations, or based on empirical value. Assessing economic value can assist in various economic decision-making processes, including pricing, resource allocation, public policy-making, and evaluating the economic and social impacts of projects and policies. Furthermore, economic value helps better understand individuals' needs, preferences, and its impact on social well-being (Kraujalienė, 2019). Additionally, the recreational value of football stadiums should not be overlooked. Watching a football match in a beautiful stadium with proper amenities provides a unique and thrilling experience for fans and spectators (Bradbury et al., 2023). The social space of stadiums strengthens the sense of national identity, unity, and solidarity among fans. Additionally, football stadiums hold significance as places for recreation and entertainment for the general public on non-match days. Open spaces in stadiums offer various sports facilities that allow fans and enthusiasts to engage in physical activities in a suitable and supported environment (Edensor et al., 2021). In this regard, Yadegar Emam Stadium in Tabriz, with a capacity of over 70,000 people, located in the south of Tabriz city, and recognized as the third-largest football stadium in Iran, plays a significant role in providing entertainment for its football-loving community. Yadegar Emam Stadium is one of the few stadiums in Iran that has been able to host matches for Tractor Sazi football team, national team games of Iran, and also matches of the capital's club, Shahr-dari Tabriz. It's worth mentioning that the designer of this stadium received an international AFC award, and later, a similar stadium was constructed in the city of Hiroshima, Japan (www.varzesh3.com).

In the field of quantitative economics, quantifying and determining the willingness to pay for the economic and intangible values produced by sports facilities, such as football stadiums, can play a crucial role in the integrated management of human and physical sports facilities (Roberts et al., 2016). Contingent valuation is a preference-based approach widely used to evaluate public modifications through the creation of willingness-to-pay values (Hoyos & Mariel, 2010). This method is a hypothetical approach that obtains information about individual preferences and determines how much individuals are willing to pay for their favorite recreational activities, watching matches, the success of players and teams, and enjoying public and intangible benefits at the respective stadium (Funahashi et al., 2020). In summary, de Boer et al. (2022) emphasized that estimating the economic and recreational value of football stadiums provides a better understanding of their importance and role in attracting fans, developing the football industry, creating economic opportunities, and enhancing the recreational and entertainment aspects of society. Roberts (2017) examined and evaluated the value of sports stadiums in Poland using the contingent valuation method, showing that intangible goods produced in sports stadiums have high values, and respondents are willing to pay a considerable amount for them. However, the financial costs do not fully compensate for the public benefits, meaning that the estimated value and annual profit derived from intangible and public goods are relatively lower than the costs of stadiums. Their findings demonstrated a positive and significant relationship between willingness to pay and income levels. Roberts (2016) conducted a study on the willingness to pay of professional cyclists using the willingness-to-pay (WTP) method, demonstrating that spectators' willingness to pay was higher in areas where the event took place. Furthermore, pre- and post-event surveys showed a significant increase in WTP after the event, and variables such as income, proposed price, interest, and enjoyment had a meaningful impact on spectators' willingness

to pay (Roberts et al., 2016). In their research on estimating the value of athletes' success, Vickery and colleagues (2017) revealed that successful athletes garnered higher willingness to pay among fans. They also found that age, education, income, proposed price, and years of participation had significant effects on WTP in 21 sports clubs. Whitehead et al. (2019) assessed the contingent valuation of public goods produced in two stadiums in the United States and found that neither of the stadiums had financial justification for the produced public goods. In other words, the estimated value of public goods was lower than the cost of equipping and constructing the stadiums. However, the audience had a high willingness to pay, and income level and stadium attendance had a positive and significant impact on their willingness to pay. Bidram and colleagues (2018) estimated the economic value of Sepahan Football Club for the city of Esfahan and found that the average annual willingness to pay of citizens to attend the team's matches in the Premier League was 16,480,000 Tomans, and for purchasing match tickets in the stadium, it was 4,433,000 Tomans. They also demonstrated that age, education, income, and stadium attendance had a significant impact on willingness to pay (Bidram et al., 2018). Sarlab and Khodadadi (2022) conducted research on the willingness to pay of people and estimated the economic value of sports facilities in Tabriz. They found that the average willingness to pay of individuals for sports facilities in Baghshomal, Manzarieh, and Mirdamad regions was 4,744,910, 5,234,043, and 4,215,000 Tomans, respectively, during one year. Furthermore, the total economic value of team and individual sports in the three areas of Tabriz was estimated to be 103,402,848 and 111,417,684 Tomans, respectively (Sarlab, 2022). Khodaverdizadeh and colleagues (2011) estimated the annual ecotourism value of Sohoolan Cave to be 847,000,000 Rials. They also demonstrated that variables such as education, cave attractiveness, proposed price, and income had a significant impact on the likelihood of individuals' willingness to pay. Furthermore, the results indicated that over 88% of visitors were willing to pay an amount to utilize the cave (Khodaverdizadeh et al., 2011). In their study titled "Estimating the Economic Value of Persepolis Football Club," Hoseini et al. (2022) demonstrated that 77.3% of fans were willing to contribute to the budget for the participation of Persepolis FC in competitive levels. The willingness to pay of Persepolis fans for the team's presence and championship in the Premier League was 70.3% and 72.3% respectively, for championship in the Cup and AFC Champions League competitions was 71.9% and 78.1% respectively, for purchasing match tickets from the stadium was 89.9%, for watching Persepolis matches on television was 83.8%, and for purchasing club merchandise was 43.5%.

Estimating the economic and recreational value of Yadegar Emam Stadium in Tabriz is raised as an important and beneficial topic. Due to the various advantages it offers, such research holds significant importance. The economic and commercial value of a stadium is not only crucial as a venue for important sports competitions, but it can also have a considerable impact on the regional and city economy in which it is located. Economic studies can assess both the direct and indirect economic value of the stadium, considering its effects on the tourism industry, commercial sales, employment, and related income. Stadiums act as recreational and sports centers for the local community and foreign visitors alike. Analyzing the recreational value of the stadium and its role in promoting the culture and reputation of the region can enhance the quality of life for people, attract tourists, and contribute to the realization of cultural and sports-related goals (Edensor et al., 2021). Valuing stadiums is of great importance for urban planning and development. Scientific research can help cities identify the need for revitalization and improvement of stadiums, determine their optimal use, and devise appropriate plans to increase profitability and ease of use of these facilities. Managers and policymakers require accurate assessments of the economic and recreational value to make better decisions regarding investments, operations, development, or renovation of stadiums. Credible and well-documented research can aid them in making decisions that benefit society and cities.

In summary, research on estimating the economic and recreational value of Yadegar Emam Stadium in Tabriz leads to a better understanding of the role of these facilities in the region's economy, sports and recreational culture, and optimal planning for their use. Such research can be valuable and beneficial to the community, policymakers, and decision-makers. In this research, since recreation is a non-consumable good, contingent valuation is considered one of the best methods for determining its value. This method is generally recognized as a standard and flexible tool for measuring non-

consumable or non-market values. The term "contingent" in CVM is used because this method creates a hypothetical market and estimates the payment amounts in response to predetermined hypothetical market scenarios (Nielsen et al., 2019). Based on researchers' investigations, no study has been conducted on estimating the recreational economic value of sports venues in Iran. Considering the significant interest in events held at Yadegar Emam Tabriz Stadium in hosting Tractor Sazi matches and the limited domestic research in this area, as well as the unique position of this stadium in providing recreation in terms of the number of spectators in the Iran and Asia, the researchers are trying to address the following questions:

What is the economic and recreational value of Yadegar Emam Tabriz Stadium?

Which variables significantly affect the willingness to pay of users of Yadegar Emam Tabriz Stadium?

Methodology

The current research is analytical-descriptive and, in terms of its purpose, falls under the category of applied research. The statistical population consists of fans who attended matches at Yadegar Emam Stadium in Tabriz during the year 2022. The sample size was determined using the Mishel and Carson table, resulting in 430 participants, of which 415 questionnaires were returned with complete answers. The sampling method was random, and the questionnaires were distributed both manually at Yadegar Emam Stadium and online.

The measurement tool used was a standard questionnaire consisting of 29 questions. The first part covered demographic, social, and economic questions, the second and third parts included questions related to stadium attendance and satisfaction, and the fourth part presented a hypothetical scenario asking respondents to express their willingness to pay for attending a particular match at Yadegar Emam Stadium.

To validate the questionnaire, the opinions of experts and specialists were sought. Initially, 80 questionnaires were distributed as a pilot test among respondents, and using stata and shazam software, the Cronbach's alpha coefficient of 0.80 was obtained, indicating good internal consistency. The main purpose of the pilot test was to determine the proposed amounts for attendance at Yadegar Emam Stadium in the final questionnaire. Since the pilot test version of the questionnaire was open-ended, and no prices were suggested, it was reused for the final version.

The contingent valuation method was employed, and several approaches, including the double-bounded dichotomous choice (DC) or one-dimensional method, were considered. In the double-bounded dichotomous choice, respondents select only one proposal from a set of predetermined options. When faced with a hypothetical market situation and a proposed price, respondents can only choose "yes" or "no" (Bidram and colleagues, 2016). This method was used in the current study.

Based on the mean and standard deviation obtained from the pilot test, six proposed prices (35000; 40000; 45000; 55000; 60000; 80000 Toman) were determined using the Boyle method. These proposed prices represent the amounts respondents would be willing to pay for attending matches at Yadegar Emam Stadium in Tabriz. Data analysis was performed using Stata and SPSS software, employing the logit and probit rank-order methods. The study presented the following scenario and question:

Yadegar Emam Stadium in Tabriz provides an opportunity for recreation and spending leisure time for you, considering the current condition of the stadium and your preferred sports teams that hold their matches at this venue, along with their increasing expenses. Furthermore, as a stadium user and attendee for recreational purposes, are you willing to pay an amount of X Toman as an entrance fee to Yadegar Emam Stadium in Tabriz for the purpose of recreation and watching the matches of your desired club?

Results

According to Table 1, the average age of individuals is 29 years, the average household size is 4 people, and the average proposed entrance fee is 55000 Toman. Furthermore, the oldest and youngest

individuals are 60 and 16 years old, respectively. The highest and lowest number of family members are 8 and 2, respectively. Finally, the maximum and minimum proposed entrance fees are 100,000 and 35000 Toman, respectively.

Table 1. Descriptive statistics of variables

Variables	Mean	Maximum	Minimum	Standard deviation
Age of respondents (years)	29	60	16	9.7
Size of each household (persons)	4	8	2	1.3
Proposed entrance fee (Toman)	55000	100000	35000	21352

Additionally, the results showed that 36% of respondents had a high school diploma or lower education, 11% had an associate's degree, 34% had a bachelor's degree, and 19% had a master's or doctoral degree. In terms of occupation, 15% were government employees, and 85% were self-employed. Therefore, it can be observed that self-employed individuals accounted for the highest frequency in the sample under investigation.

22% of respondents were married, while 78% were single. Income level was categorized into six groups: 0-4 million, 5-9 million, 10-14 million, and above 15 million tomans. The results showed that the income group of 6-8 million tomans had the highest frequency with 140 samples and 34% among the different income groups.

According to the results in Table 2, different proposed amounts for watching a football match at Yadegar Emam Stadium were obtained through the pilot test. Then, using the Cooper method and the Gauss software, the frequencies corresponding to each proposed amount (35000, 40000, 45000, 55000, 60000, and 80000 Toman) were determined based on 415 samples.

Table 2. Status of respondents regarding proposed prices

Proposed price (Toman)	Frequency (Percentage)	
	Yes	No
35000	68 (80)54	(20)14
40000	70 (75)52	(25)18
45000	68 (65)45	(35)23
55000	69 (57)40	(43)29
60000	70 (48)34	(52)36
80000	70 (24)18	(76)52
Total	415	

*The numbers inside the parentheses show the percentage of frequency among 70 samples.

According to Table 3, it is observed that 13% of individuals were willing to pay 35000 Toman, 12.5% for 40000 Toman, 11% for 45000 Toman, 9.5% for 55000 Toman, 8% for 60000 Toman, and 4% for 80000 Toman. In other words, 58% of individuals were willing to accept the proposed price, while 42% of individuals did not accept the proposed price.

Table 3. Frequency Distribution of Individuals' Willingness to Pay for Watching a Football Match at Yadegar Emam Stadium

Proposed Amount (Toman)	35000	40000	45000	55000	60000	80000	Total
Frequency	54	52	46	40	34	17	243 (415)
Percentage	13	12.5	11	9.5	8	4	58 (100)

Additionally, the results showed that 70% of respondents are dissatisfied with the quantity and quality of the current stadium facilities. Only 30% of individuals are satisfied with the condition of the facilities inside the stadium.

Logistic Regression Results: In order to estimate the logistic regression model, the presence of linearity among the explanatory variables of interest was examined. For this purpose, an analysis of variance test was conducted. According to Table 6, since there is no pair of elements greater than 0.05 for each specified root in each row of the table, it can be claimed that there is no linearity among the examined explanatory variables. Therefore, the results of the logistic model can be analyzed.

Table 4. Linear Pattern Results: Logistic Regression Model

Descriptive Variables	Price	Income	Education Level	Age	Television Watching	Satisfaction with Stadium Facilities	Satisfaction with Access Route	Number of Stadium Attendance.
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.01	0.00	0.01	0.01	0.01	0.64	0.02	0.00
3	0.00	0.00	0.00	0.00	0.00	0.05	0.92	0.00
4	0.08	0.58	0.01	0.02	0.00	0.13	0.00	0.00
5	0.02	0.03	0.63	0.01	0.03	0.11	0.02	0.05
6	0.25	0.22	0.07	0.05	0.03	0.04	0.01	0.37
7	0.30	0.06	0.04	0.13	0.39	0.00	0.02	0.23
8	0.24	0.02	0.18	0.52	.25	0.02	0.02	0.1
9	0.08	0.02	0.05	0.27	0.31	0.00	0.00	0.24

In this study, the logistic regression model was used to examine the factors influencing the likelihood of accepting the proposed amount for watching football matches at Yadegar Emam Stadium. The results of the logistic model are presented in Table 6. To assess the overall significance of the estimated regression, the likelihood ratio test statistic was used. The value of the likelihood ratio test statistic at 9 degrees of freedom is 4.286, indicating that the overall estimated model is statistically significant at the 1% level. The coefficient of determination is 52%, which is desirable for the estimated logistic model considering the number of dependent variable observations. In other words, the explanatory variables explain 52% of the variation in the dependent variable.

The results showed that income, television viewing, satisfaction with stadium facilities, satisfaction with access routes to the stadium, and the number of stadium visits have a positive and significant effect, while age, education level, and proposed price have a negative and significant effect on the probability of individuals' willingness to pay for watching football matches at Yadegar Emam Stadium .

The results in Table 7 indicate that the proposed price variable is significant at the 1% level and has a negative sign. This means that as the proposed price increases from 30000 to 80000 Toman, the likelihood of individuals' willingness to pay for watching football matches at Yadegar Emam Stadium decreases. The income variable has a significant positive coefficient at the 1% level, indicating that individuals with higher incomes have a higher capacity to pay compared to those with lower incomes. In other words, as the income level of individuals increases, their probability of willingness to pay for watching football matches at Yadegar Emam Stadium also increases.

The education level variable has a negative and significant effect on the probability of individuals' willingness to pay for watching football matches at Yadegar Emam Stadium. This means that individuals with lower education levels have a higher likelihood of willingness to pay for watching football matches at the stadium. The age variable of respondents is significant at the 1% level and has a negative sign. In other words, younger individuals are more willing to pay higher amounts for watching football matches at Yadegar Emam Stadium .

The variable representing the number of football matches attended at Yadegar Emam Stadium has a positive and significant effect on the probability of individuals' willingness to pay. The variable representing satisfaction with the quantity and quality of current stadium facilities has a positive and significant effect at the 10% level. In other words, the probability of individuals' willingness to pay is higher if they are satisfied with the current stadium facilities. Therefore, as the satisfaction of individuals with the quantity and quality of current stadium facilities increases, their likelihood of willingness to pay for watching football matches at Yadegar Emam Stadium also increases. The variable representing satisfaction with the quality of the route to the stadium and bus services has a significant positive effect at the 10% level. This means that individuals who are satisfied with the quality of the route to Yadegar Emam Stadium and bus services have a higher willingness to pay for watching football matches at the stadium. The variable representing the number of stadium visits for watching football matches has a positive and significant effect on the probability of individuals' willingness to pay. In other words, as the number of individuals' stadium visits increases, their probability of willingness to pay also increases.

Table 6. Results of the Logit Model

Variables	Coefficients	Z	p> z
Proposed price	***-0/00	-3.87	0.000
Income	***0.56	4.69	0.000
Education level	*** - 0.42	-2.75	0.006
Age	*** - 0.095	-4.77	0.000
TV watching	***1.007	4.04	0.000
Satisfaction with sports facilities	*0.67	1.81	0.07
Enjoyment of watching football matches	*0.55	1.67	0.095
Marital status	***0.84	3.96	0.000
Distance from origin	^{ns} -0.27	-0.22	0.12
pseudo R2=0.52	(LR) = 361.79		number of observations =415
	PValue = 0.000		

***, **, and * have significant meanings at levels of 1%, 5%, and 10%.

Given that the coefficients of the variables in the logistic model are not easily interpretable from a quantitative perspective, the final effects of the variables are estimated. The final effects of the variables are shown in Table 7. The final effect of the proposed price indicates that with a one-unit increase in the average proposed price, the probability of individuals' willingness to pay for watching football matches at Yadegar Emam Stadium in Tabriz decreases by 0.001%.

The final effect of income variable shows that with a one-unit increase in the average income of individuals, the probability of their willingness to pay for watching football matches at Yadegar Emam Stadium in Tabriz increases by 13.0% or 13 percentage points.

The final effect of the education level variable is -0.99%. This means that with a one-unit increase in the education level, the probability of individuals' willingness to pay decreases by 9.9%.

The final effect of the age variable indicates that with a one-unit increase in the average age of individuals, the probability of their willingness to pay decreases by 0.022 units (2.2%). Alternatively, it can be said that with a one-unit decrease in age, the probability of willingness to pay for watching football matches at Yadegar Emam Stadium in Tabriz increases by 0.022 units (2.2%). This means that young people have a higher tendency to pay for watching football matches at Yadegar Emam Stadium in Tabriz.

The final effect of the TV watching variable shows that with a one-unit increase in the number of football matches watched on television, the probability of individuals' willingness to pay for watching football matches at Yadegar Emam Stadium in Tabriz increases by 0.23 units (23%). The final effect of satisfaction with the quantity and quality of facilities at Yadegar Emam Stadium in Tabriz is 0.15. In other words, the willingness to pay of individuals who are satisfied with the quantity and quality of the stadium facilities is 15% higher than those who are dissatisfied.

Similarly, the final effect of satisfaction with the accessibility route to Yadegar Emam Stadium in Tabriz is 1.26. In other words, the willingness to pay of individuals who are satisfied with the accessibility route is 12.6% higher than those who are dissatisfied.

The final effect of the number of stadium visits indicates that if the number of individuals' visits to the stadium increases by one unit, the probability of their willingness to pay for watching football matches increases by 0.197 units (19.7%).

Please note that the numbers provided in the translation are approximate and may vary slightly depending on the exact calculations and context of the study.

Table 7. Results of the final effect of the logistic model.

Variables	Coefficients	Z	p> z
Proposed price	***-0.000	-3.87	0.000
Income	***0.13	4.65	0.000
Education level	***-0.099	-2.76	0.006
Age	***-0.022	-4.58	0.000
TV watching	***0.23	4.01	0.000
Satisfaction with sports facilities	**0.15	1.92	0.055
Satisfaction with accessibility	*0.126	1.71	0.087
Number of stadium visits	***0.197	3.97	0.000

After estimating the logistic regression model, the average willingness to pay is calculated. According to Table 8, the average willingness to pay is calculated to be 62800 Toman. In other words, individuals are willing to pay an average of 62800 Toman for each football match watched at Yadegar Emam Stadium in Tabriz. This value is statistically significant at a 1% level. It means that the null

hypothesis (H0) of zero willingness to pay has been rejected at a 1% level, and the willingness to pay for individuals to watch football matches at Yadegar Emam Stadium in Tabriz is greater than zero.

Table 8. Calculation of Average Willingness to Pay

Value	Willingness to Pay	Upper Bound	Lower Bound	ASL
Mean	62826	78000	55000	0.000

Based on the willingness to pay of individuals for watching a football match at Yadegar Emam Stadium in Tabriz, the recreational economic value of watching a football match at Yadegar Emam Stadium in Tabriz is calculated as follows:

Economic recreational value of one game = Average willingness to pay * Average number of spectators per game

Economic recreational value of one game = 25,000 * 62800 = 1.57 Billion Toman

Annual economic recreational value = 1.57 * 20 = 31.4 Billion Toman

Therefore, the recreational value of watching one football match at Yadegar Emam Stadium in Tabriz amounts to 1.57 billion Toman. The annual recreational value of watching a football match at Yadegar Emam Stadium in Tabriz is calculated to be 31.4 billion Toman.

Discussion and Conclusion

In this study, using the contingent valuation method and logistic regression model, the average willingness to pay of football fans for watching matches at Yadegar Emam Tabriz Stadium was calculated, and based on that, the annual economic and recreational value was estimated. Since the overall benefits generated by Yadegar Emam Tabriz Stadium for fans are non-consumptive and not traded in the market, non-market valuation methods can be used. Therefore, the contingent valuation method was employed in this study. In response to the main research questions, the economic and recreational value of Yadegar Emam Tabriz Stadium, from the perspective of spectators, was estimated to be 31.4 billion Toman per year, considering the average attendance of 25,000 spectators per game at Yadegar Emam Tabriz Stadium and an average of 20 games held in it.

Considering the average ticket price for top league matches, which was 50000 Toman at the time of data collection for this study, the price difference over a season or year between the willingness to pay or preferences of spectators and the approved ticket price set by the federation, with the same number of spectators, amounts to approximately 6.4 billion Toman. This amount can be utilized for the development and improvement of the stadium, in which case both the willingness to pay and satisfaction with the stadium would increase.

Regarding the second research question, variables such as income, education level, age, marital status, proposed price, television viewership, satisfaction with stadium facilities, and enjoyment of watching matches had a significant impact on willingness to pay. Income variable showed a significant negative effect at a 1% level, indicating that as the proposed price increased from 30000 Toman to 80000 Toman, the probability of individuals' willingness to pay for watching football matches at Yadegar Emam Tabriz Stadium decreased. These findings are consistent with the findings of de Boer et al. (2022), Wicker (2012), Whitehead et al. (2000), and Khodadadi and Sarlab (2022), who also demonstrated in their research that willingness to pay decreases with increasing proposed price.

The income variable also showed a significant positive effect at a 1% level, indicating that individuals with higher income have a higher ability to pay compared to those with lower income. In other words, as individuals' income level increases, the probability of their willingness to pay for watching football matches at Yadegar Emam Tabriz Stadium increases. Research studies by Robert (2017), de Boer et al. (2022), Wicker (2012), Whitehead et al. (2000), Bideram (2018), Hosseini et al. (2022), Khodaverdi-Zadeh et al. (2011), and Khodadadi and Sarlab (2022) have also provided similar results, indicating that having a higher income and suitable job can increase the level of willingness to pay.

In conclusion, this study provides valuable insights into the economic and recreational value of watching football matches at Yadegar Emam Tabriz Stadium from the perspective of spectators. The findings highlight the importance of considering factors such as proposed price, income, and satisfaction with stadium facilities in understanding and predicting individuals' willingness to pay. The estimated economic and recreational value can be used as a reference for decision-making regarding stadium development and pricing strategies.

The negative and significant effect of the variable "education level" indicates that the lower the education level of football spectators, the more likely they are to be willing to pay for watching football matches at Yadegar Emam Tabriz Stadium. The negative and significant effect of the "age" variable suggests that younger individuals with lower age are more willing to pay higher amounts to watch football matches at Yadegar Emam Tabriz Stadium. The variable "number of watched football matches at Yadegar Emam Tabriz Stadium from television" has a positive and significant effect on the likelihood of individuals' willingness to pay. According to the results obtained from the studies by Bidram (2018), Hosseini et al. (2022), watching matches of the desired clubs on television can increase the willingness to pay of the audience.

The positive and significant effect of the "satisfaction with the quantity and quality of current facilities inside Yadegar Emam Tabriz Stadium" variable indicates that the likelihood of individuals' willingness to pay is higher for those who are satisfied with the current facilities. Therefore, the higher the satisfaction of individuals with the quantity and quality of the current facilities inside Yadegar Emam Tabriz Stadium, the higher their likelihood of willingness to pay for watching football matches at the stadium. The variable "enjoyment of watching football matches at Yadegar Emam Tabriz Stadium" has a positive and significant effect on the likelihood of individuals' willingness to pay. In other words, the higher the enjoyment of watching football matches at Yadegar Emam Tabriz Stadium, the higher the likelihood of individuals' willingness to pay. The negative and significant effect of the "marital status" variable indicates that married individuals have a lower willingness to pay for watching football matches at Yadegar Emam Tabriz Stadium. Hosting important football events brings excitement, joy, and potential entertainment to the community, as stadiums are filled with spectators who spend their leisure time there.

Estimating the economic value of Yadegar Emam Tabriz Stadium helps managers and relevant organizations better understand its economic impacts. They can examine the positive or negative effects created by the stadium on employment, income, local economic growth, and attracting tourists by using this estimate. Additionally, this estimation can be useful in planning and investing in the development and improvement of stadiums. Yadegar Emam Tabriz Stadium can also play a significant role in regional development. Estimating the recreational value of this stadium can demonstrate the positive effects it has on local communities and attracting tourists. Improving sports facilities can help attract new tourists and travelers, thereby increasing income and employment in the region.

Estimating the recreational value of Yadegar Emam Tabriz Stadium can assist stadium managers in providing a better experience for spectators. By understanding this value of the stadium, they can make better decisions regarding facility improvements, service upgrades, traffic optimization, and other amenities. This estimation can serve as a basis for assessing the needs and preferences of spectators and help managers make the game-watching experience more exciting and comfortable for them. It can also play a role in attracting investments, supporting local teams, developing sports infrastructure, and creating economic opportunities and employment.

Considering that football stadiums are recognized as cultural and social symbols in communities, estimating the recreational value of Yadegar Emam Tabriz Stadium can help people establish a deeper connection with local teams and other fans and enhance the experience of football as a recreational and cultural activity.

Overall, estimating the economic and recreational value of Yadegar Emam Tabriz Stadium can contribute to monitoring and evaluating its performance in economic and recreational aspects. This estimation can provide useful information to managers about financial performance, revenue generation, costs, and profitability of the stadium. By obtaining this information, managers can identify strategies for improving financial performance and efficiency and make appropriate decisions regarding stadium management. In general, estimating the economic and recreational value of

Yadegar Emam Tabriz Stadium can assist in managerial decision-making, planning, sports development, and achieving economic and social benefits, as well as promoting the sports industry. Given the high recreational value of Yadegar Emam Tabriz Stadium and its potential for attracting spectators through the matches and events held there, planners, officials, and relevant institutions should pay more attention to its development and increasing the number of spectators, as it is one of the most important recreational and popular venues in the region.

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