

Determinants of Iranian Households' Expenditure on Domestic Trips

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Studying travel behavior is one of the fundamental necessities for the managers involved in strategic and marketing plans. Due to the scarcity of research on the Iranian tourism market, addressing the current status of the households' tourism expenditure and its determinants might contribute to increasing this expenditure. The present study thus explores the determinants of the Iranian households' total expenditure and expenditure per person/night on domestic trips, using a systematic approach at the microeconomic level. These determinants consist of economic, demographic, psychological, and trip-related factors that affect different sectors of the trip expenditure, including accommodation, transportation, food and beverages, shopping, recreation, and visiting tourist attractions. Using an electronic questionnaire, the information about the last trip before the outbreak of COVID-19 was collected from 629 Iranian households and analyzed by linear regression methods. The results demonstrated the effect of indicators such as income, age, education, type of occupation, the householder's conservativeness, the number of dependent and independent children, the household size traveling, duration of stay, the importance of recreational trips in the consumer basket of the family, use of personal vehicles, and stay in the relatives' houses, on total family expenditure and expenditure per person/night on the trip.

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1. Introduction

The study of travel behaviour patterns is one of the necessities for the managers involved in strategic and stable tourism plans (Vu et al., 2015). Influenced by various factors, tourists show different behaviours in tourism destinations. One of the most important topics in recent research is addressing tourism expenditure and identifying

its determinants. Demographic, economic, psychological, and trip-related factors can determine tourism expenditure (Lin et al., 2020). Overall, this expenditure at the destination can arise from food and beverages, recreation, sightseeing, transportation, accommodation, organized tours, communication services, municipal services, and so on.

Understanding tourism expenditure is important since tourism is a cost-based economic activity, and the concept of tourism consumption lies at the centre of the economic measurement of tourism and its effects (Mihalič, 2002). A realistic understanding of these determinants contributes to developing appropriate strategies to impact tourist behaviour (Fratu, 2011). The number of tourist arrivals to a destination may not be a good indicator of understanding tourism expenditure, while a proper understanding of tourism expenditure patterns helps policymakers, planners, and researchers to examine a tourist's economic interaction with the destination society (Wang and Davidson, 2010b), and also helps marketers to better target their market sector (Lin et al., 2020). It is important to understand and explain the characteristics of household consumption and its determinants so that tourism policies and marketing strategies are well adopted. Household consumption and expenditure patterns change over time, and this indicates the high importance of understanding the characteristics of household consumption in different periods (Sun et al., 2015). In general, the majority of Iranian families allocate a larger budget to recreation, shopping, and cultural affairs than to hotels and restaurants. Nevertheless, it should be noted that the upper social class, in contrast to the middle and lower classes of society, view tourism as an essential good in their consumer basket and therefore allocate a larger budget to it (Ghaderi et al., 2016).

Since tourism is generally a recreational activity, children are also expected to play an important role in household expenditure. It is noteworthy that factors such as age, gender, and the interests of children are influential in this regard. For instance, according to Dardis et al. (1994), as the number of children under 16 increases, active recreation increases. In contrast, having children under five leads to a decrease in recreational activities. Moreover, Carr (2011) states that the children of a household have a great impact on parents' decisions to go on holidays. Hence, there is a pressing need for research in this area.

In addition to investigating the role of some demographic, economic, psychological, and trip-related factors in Iranian households' expenditure on domestic trips, the present paper aims to study the effect of dependent and independent children of a family. What distinguishes this research from most studies in this field comes as follow:

- (a) Although many studies have been conducted on the determinants of tourism expenditure in the world, studies on the Iranian tourism market are very few in this regard;
- (b) Investigating the effect of the number of children of the household, using a personal vehicle to travel, and also staying at the relatives' houses at the destination; and
- (c) Although many studies have focused on only one indicator of total household expenditure on the trip or expenditure per person/per night, in this study, both indicators are examined.

In the following sections, after reviewing the related literature and categorizing the research on the influential determinants on individual and family tourism expenditure, the conceptual framework of the research is presented. Then, having introduced the research methodology, the findings, discussion, and conclusion are presented.

2. Literature Review

Anyone who is involved in the consumption process and buys for personal or family consumption is a consumer (Jisana, 2014). Consumer behaviour is a set of physical and psychological processes that are formed by an individual from before purchase to after consumption (Kotler and Caslione, 2009). In general, the determinants of tourist behaviour can be classified into three groups: The first group involves personal factors such as demographic, personality, perceptions, lifestyle, and attitudes; the second group, which includes social factors, consists of culture, family, social class, and reference groups; and the third group is related to situational and environmental factors (Fratu, 2011). For tourist expenditure behaviour, Lin et al. (2020) and Wang and Davidson (2010b) categorize the influential determinants as follows:

- Economic factors (e.g., household income; assets; home and vehicle ownership; prices of tourism products)
- Socio-demographic factors (e.g., personality; gender; age; marital status; level of education; occupation; the place of residence; nationality; language; ethnic background; household size and structure)
- Trip-related factors (e.g., group size; duration of the trip; the number of visits; entertainments at the destination; accommodation; transportation; travel experience)
- Psychological factors (e.g., how the tourist views the trip or destination; travel motivations; the importance of travel for the tourist)

Several studies have been conducted in Iran to investigate the determinants of individual tourist buying behaviour on trips and their shopping expenditure in Iranian

markets and stores (Tahmasbi and Roshanian, 2017; Zargham and Atrsaiy, 2006; Rahimi, 2015), or only accommodation sector (Badri and Tayebi, 2012). Studies that have examined the determinants of tourism expenditure in all travel sectors can be classified into two groups, namely studies on individual trips (Thrane, 2016; Wang et al., 2006; etc) and studies on family trips (Haq et al., 2019; Lin et al., 2020, etc).

On the individual level, depending on the type and destination of the trip, tourists show different behaviours in their expenditure patterns. In other words, the effect of trip-related factors on tourism expenditure is the subject of numerous studies. For instance, Thrane (2016) indicates that Norwegians spend more on foreign summer trips than domestic trips. He attributes the phenomenon to a variety of factors, including the use of aeroplanes and hotels instead of personal cars and relatives' houses. By examining the effect of the relationship between the type of travel chosen by American households in domestic trips and expenditure, Sung et al. (2001) conclude that, in general, recreational tourism increases expenditure in all parts of the trip. Having studied mountain tourists in Sweden who travelled for purposes such as skiing, hiking, and winter recreation, Fredman (2008) states that the income increase, distance from residence, and the importance of travel and tourism and recreational activities at the destination result in increased expenditure. Thrane (2002) examined the determinants of the visitors' expenditure on the Jazz Festival in Norway and concludes that the increased number of household members leads to a reduction in expenditure. In contrast, the level of interest in jazz music, distance from residence, income, age, duration of their stay at the festival site, male sex, and full-time job have a significant positive relationship with the visitors' expenditure. By examining the overnight tourism expenditure pattern in Cheddar, England. Downward and Lumsdon (2000) state that the increased number of travel group members and the duration of stay at the destination have a positive effect on visitor's expenditure. Thrane and Farstad (2011) consider the increased income, duration of stay, and age of people up to 52 years as a cumulative factor, and, in contrast, the age over 52 years and also the travel group size reduces the tourism expenditure. The results of a study by Agarwal and Yochum (1999) revealed a decrease in people's expenditure with an increase in the number of children in the travel group, while this amount increases with increasing income and the number of adults in the group. Moreover, according to Wang et al. (2006), an increase in American tourists' expenditure is affected by the income increase, distance from residence, and male sex, but as the age and the number of the travel group members increase, the expenditure decreases. Chiappa et al. (2020) believe that in addition to increased age and income, trip-related factors, as well as type of accommodation, travel group, and features of the flight also greatly affect tourism

expenditure. Furthermore, there is also evidence that there is a correlation between satisfaction with the trip or the visited place and the expenditure. If the services that tourists or visitors receive are more than they previously imagined, they will spend more (Perles-Ribes et al., 2020; Mortazavi, 2021). The results presented by D'urso et al. (2020) in northern Italy also show an increase in tourism expenditure on accommodation and shopping in exchange for greater satisfaction.

Extensive research has been conducted on the determinants of household expenditure and consumption and decision-making patterns to consume tourism products in the destination, some of which are briefly described in Table 1, separated by countries. However few of these studies have paid attention to the impact of children and the way they impact, using personal vehicles, and staying at relatives' houses.

Table 1. Several Existing Research on the Determinants of the Households' Tourism Expenditure

Researchers	Study Area	Results
Alegre et al. (2010)	Spain	As the level of household income and education improves, their participation in tourism activities also increases. In contrast, the ageing of the householder, the number of unemployed members, and the number of children under the age of sixteen lead to reduced participation in such activities.
Hung et al. (2013)	Taiwan	The income increase, age of the householder, car ownership, internet access, as well as the economic structure of the residential society have a positive effect. In contrast, increased medical expenditure and loans lead to lower expenditure.
Bernini and Cracolici (2015)	Italy	Ageing reduces the willingness to travel but, like economic factors, increases tourism expenditure. Changes in the willingness to travel are mainly affected by social and demographic factors, while expenditure is affected by economic factors.
Lin et al. (2020)	China	The increased number of children and infants in the household, as well as the ageing and employment of the householder, reduces the willingness to travel. Male sex, income increase, level of education, health condition, and living in the city instead of the countryside lead to increased tourism participation and expenditure.
Hong et al. (1996)	United States	The income increase, ageing of the householder, and being married lead to higher expenditure. Increased number of adults leads to higher expenditure in the food sector, but lower in the accommodation sector. Increased number of children under the age of 16 leads to a reduction in expenditure in all travel sectors.

Zheng and Zhang (2013)	United States	Increasing income, level of education and age of individuals, being white, being married, and living in the city instead of the countryside lead to an increase in the expenditure. Increasing the number of household members (children and adults) leads to lower expenditure.
Haq et al. (2019)	Pakistan	Increasing income, age, and education lead to increased tourism participation and expenditure. The increased number of family members (children and adults) leads to reduced tourism participation and expenditure. <i>They attribute this phenomenon to the family cohabitation system and the household crowding, followed by less financial affordance to travel.</i>
Alegre and Pou (2016)	US (during the Great Recession in 2009)	Improving education and economic status leads to higher household tourism expenditure. Increasing the number of children and health issues of family members have a reducing effect on expenditure.
Alegre and Pou (2013)	Spain (during the Great Recession in 2009)	Increasing the income, level of education, age of the householder up to 45 years, and the presence of children under 15 in the household leads to an increase in expenditure. Increasing household size, unemployment of members, or their fear of unemployment leads to lower expenditure.
Hong et al. (1999)	United States	There is no significant relationship between the number of children and household expenditure. However, the increased income and education, being married, being white, and better health lead to higher participation and expenditure.
Skuras et al. (2006)	Europe	Increasing the tourist's income and information about the destination and tourism products lead to increased expenditure in rural destinations. The most important indicator affecting the expenditure is the quality of the tourism experience, which itself is influenced by the expectations and previous information of tourists.
Cai (1998)	United States	The increased number of children reduces food expenditure.
Mora-Rivera and Garcia-Mora (2020)	Mexico	An increase in remittances to Mexico by international immigrants leads to increased willingness to travel as well as the increased household expenditure on domestic trips.
Park et al. (2019)	South Korea (2011-2014)	Self-employment, higher level of education, single-destination travel, and travelling with family or relatives are positively associated with increased travel expenditure. Trips for leisure or shopping purposes result in higher expenditure.

Noonan (2021)	Republic of Ireland	disposable income, aging between 55 and 64 and being located in the Midlands, Border, and Western region, positively impact on households domestic expenditure for holidays. Also non-manual, semi-skilled, manual skilled and unskilled workers and farmers and spend significantly less on domestic holidays.
Chen et al. (2021)	Thailand	Increasing income will positively impact tourism expenditure. In the upper economic deciles, tourism expenditure increases with age; While in the lower economic deciles of the society, upper agings spend less on the trips.

Having examined the effect of children on the behaviour of travel groups in the UK, Thornton et al. (1997) mentioned the importance of the presence of children under 16 in the group. They believe that the presence of younger children, although not able to negotiate with parents, has a greater impact than older children due to the need to schedule food and paying attention to them. Older children can influence parents' decisions by offering suggestions on the trip. Although the final decision is made by the parents, in most cases, parents prefer their children's satisfaction with the trip over their own. The family is a small social group but effective on individual characteristics. Like any other social group, members need to agree on their practices and goals to improve family functioning, which, of course, is achieved by negotiation because the goals of the family members are not usually the same. It seems that in the early stages of family formation by man and woman, the decisions are usually based on individual preferences, but, over time, the couple's buying decisions become more similar and more participatory (Cox III, 1975).

Another group of studies investigates tourism expenditure at the family life cycle stages. The family life cycle is a concept to describe consumer behaviour that shows how a family goes through different stages of need from the time of the first marriage to the death of the last partner (Neulinger and Simon, 2011). Sun et al. (2015) consider the family life cycle stages measurable with variables such as the age of the householder, marital status, number of children, and age of the youngest child, and classifies it into eight stages: single, childless couple, Full Nest I¹, Full Nest II², Full Nest III³, Empty Nest⁴, single parent, and widowed. Having studied Taiwanese

¹. When the youngest child in the family is below six.

². When the youngest child in the family is six or above.

³. When the children in the family are old enough to be independent and work but are still dependent on the family.

⁴. When the children in the family have gained independence and left home.

households, they state that the highest expenditure belongs to Full Nest II and III, while the lowest expenditure belongs to widowed households. In the United States, Hong et al. (2005) believe that the highest expenditure belongs to Full Nest II, childless couple, Empty Nest, and Full Nest I, respectively, and the lowest expenditure belongs to single people and widows. Another study by Lawson (1991) on international tourists from different countries in New Zealand indicates that the highest tourism expenditure is related to retired couples without dependent children (Empty Nest), and he believes that having children under 18 in the household highly leads to a reduction in the expenditure per person. Children usually do not pay attention to the type of services they receive during the trip (for example, the type of accommodation); rather, they often focus on recreational activities, games, playmates, and new adventures during the trip. The stage of returning from the journey is often viewed as the worst aspect of a vacation through children perspective (Rhoden et al., 2016). This can be a factor leading to their greater insistence on extending the trip. If the household agrees to stay longer, there will be more expenditure throughout the trip. In some cases, due to time constraints, parents may choose a substitute instead of staying longer on the trip, to calm their restless children; e.g. by buying a toy, which also leads to higher expenditure.

By reviewing the research literature, which shows a scientific gap in identifying the determinants of Iranian household expenditure on the trip, a conceptual framework with a systematic approach regarding the determinants and tourism expenditure sectors is presented (Figure 1). In this framework, four economic, demographic, trip-related, and psychological factors were identified as determinants of tourism expenditure (Lin et al., 2020; Wang and Davidson 2010b). This expenditure can be categorized into six main sectors, including accommodation, food and beverages, attractions and events, recreation, shopping, and transportation (Wang et al., 2006; Hong et al., 2005; Hong et al., 1996; Zheng and Zhang, 2013). Previous frameworks often referred only to the determinants of tourism expenditure (Lin et al., 2020: 3), or just identified expenditure sectors (D'urso et al., 2020; Park et al., 2019; Pellegrini et al., 2021). What is noteworthy in this framework is that each of these factors will have a different impact on each sector of tourism expenditure. For instance, psychological factors may increase the expenditure in the attraction and events sector, while in the accommodation sector, they may lead to a reduction in expenditure.

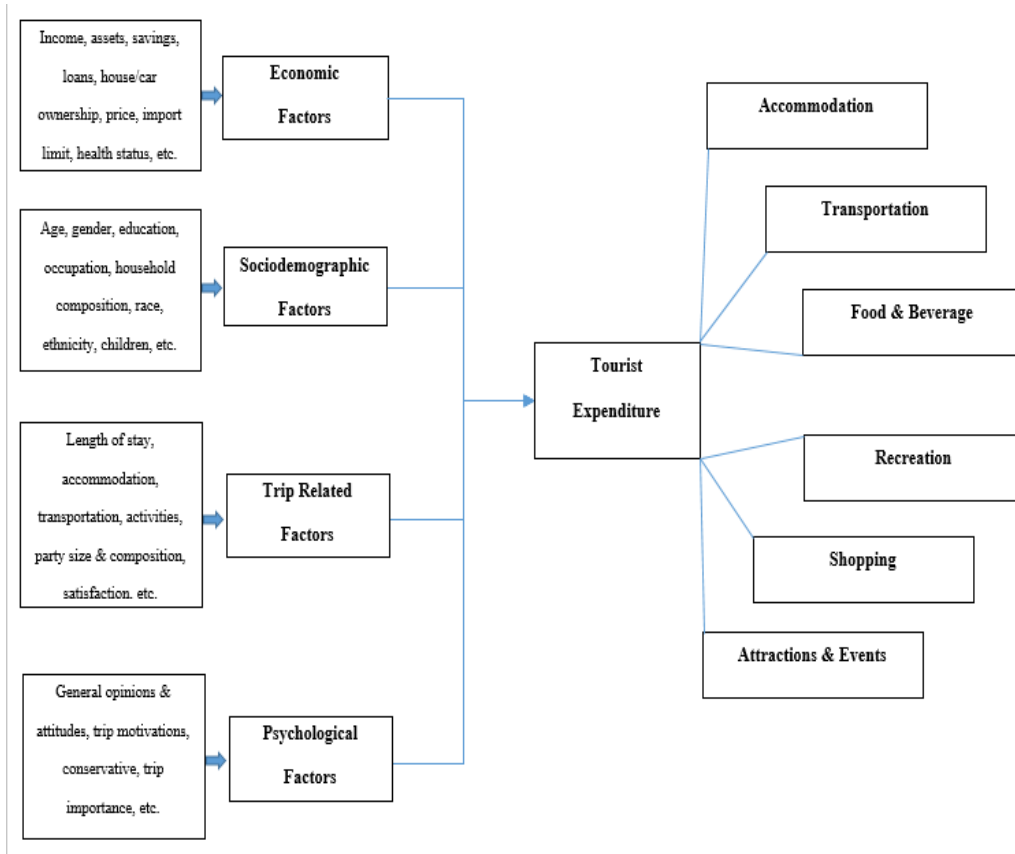


Figure 1. Theoretical Framework; Determinants Of Tourism Expenditure & Expenditure Sectors

Source: Lin et al., 2020; Wang and Davidson 2010b; Wang et al., 2006; Hong et al., 2005; Hong et al., 1996; Zheng and Zhang, 2013; D'urso et al., 2020; Park et al., 2019; Pellegrini et al., 2021.

3. Methodology

The present study employs a systematic approach at the microeconomic level to investigate the role of the determinants of Iranian households' expenditure in domestic trips and also prioritize the share of each expenditure sector. This type of research usually uses the family budget panel information available at the National Statistics Centre of each country to collect data. However, due to the lack of Iranian households' expenditure panel in the tourism sector when conducting this research, the questionnaires were inevitably distributed online with more limited sample size.

The statistical population of the study includes all Iranian households living in the metropolises of Tehran, Isfahan, Yazd, Shiraz, and Tabriz, and the method of conducting the research design is available non-randomly sampling. 629 questionnaires were received via social media that contained economic, demographic, psychological, information related to the last family trip in 2020 and before the official arrival of the COVID 19 in Iran.

Twelve independent variables were examined in this study, including monthly income (as an economic factor), age, level of education, type of job¹, the number of independent² and dependent³ children (as demographic factors), the number of travelling family members, the number of nights spent at the destination, the use of a personal vehicle and staying at friends' or relatives' (as trip-related factors), the householder's conservativeness⁴, and the importance of recreational trips in the household's consumer basket (as psychological factors). Among these indicators, the householder's conservativeness, the use of a personal vehicle, stay at an acquaintance's home, and the number of independent and dependent children are new and have not been addressed in many studies.

Furthermore, in this study, unlike most studies, the total household expenditure on the trip and household expenditure per person/per night were both examined as dependent variables, which is another distinguishing feature of this study. This is due to the importance of a more careful analysis of both variables in question for future planning to encourage households to increase tourism expenditure. These variables were selected based on the literature review and the conceptual framework of the study.

According to a review of 27 scientific studies by Wang and Davidson (2010b) on the determinants of tourism expenditure, the majority (17 studies) used multivariate

¹. The regular category of jobs in Iran includes governmental, non-governmental, retired, and student.

². Children who have left home.

³. Children who have not yet left home and need parental financial support, which, in Iran, sometimes they are up to 35 years old.

⁴. It means the willingness or unwillingness to participate in exciting and unplanned activities on the trip.

regression analysis methods, the advantage of which is the study of collective and separate effects of two or more independent variables on tourism expenditure. Few others employed methods such as simple linear analysis, the system of equations, and the Tobit regression model. To analyze the data of this study, linear regression methods were used via IBM SPSS 26 software; and since the data of the last trip of the households (i.e., the trip that really happened) is collected, there will be no zero expenditure error (Tobin, 1958); and also, it is not necessary to use two-stage or double-hurdle¹ models (Cragg, 1971).

4. Findings and Discussion

The sample of this study includes 629 Iranian households, which live in the metropolises of Tehran, Isfahan, Yazd, Shiraz, and Tabriz. 285 respondents (45%) were female, and 344 (55%) were male, 62% of whom acknowledged that they were the householders. However, the remaining 38% are expected to be aware of the economic and demographic information of the householder, as well as the information related to their last domestic trip, such as the expenditure. The majority of households (80%) are Persians, and the rest are Turks, Lurs, Kurds, Turkmens, Arabs, and Gilaks. 29% of the householders are retired, 16% are students, 23% have government jobs, and 32% work in the private sector. In terms of education, 44% of householders have bachelor's degrees, 33% have master's degrees, 16% have diplomas or less, and 7% have PhDs.

The age range of the householders varies from 19 to 68, and the average is 35 years. 40% of households have no dependent children (either they do not have children, or their children are independent), 23% have one, 29% have two, 6% have three, and 2% have four or more. 72% of households have used their own vehicle on the trip; also, about 41% of them did not pay for their accommodation. This indicates the low cost of travel for Iranian families, their preference for staying at the houses of friends and relatives or camping at the destination, and personal vehicles on domestic trips. Nonetheless, 28% of respondents have chosen accommodation, 27% transportation, 18% leisure, entertainment, and sightseeing, 14% shopping, and souvenirs, and 13% food and beverage as the most expenditure sector of their trip; While in terms of the lowest expenditure sector, 28% of respondents have chosen the shopping and souvenir sector, 28% accommodation, 25% recreation, entertainment, and sightseeing, 12% transportation, and only 7% chose food and beverage. According to the radar diagram

¹. The Double Hurdle (DH) or Cragg model assumes that a person must first want a product or service (the first hurdle); second, there are appropriate conditions for that person's expenditure (second hurdle). Therefore, zero values may result from not travelling or not consuming the product for any reason.

in Figure 2, it can be concluded that most of the respondents allocated the major share of their budget to the transportation sector, and, in contrast, the minimum budget was allocated to the shopping and souvenir sector.

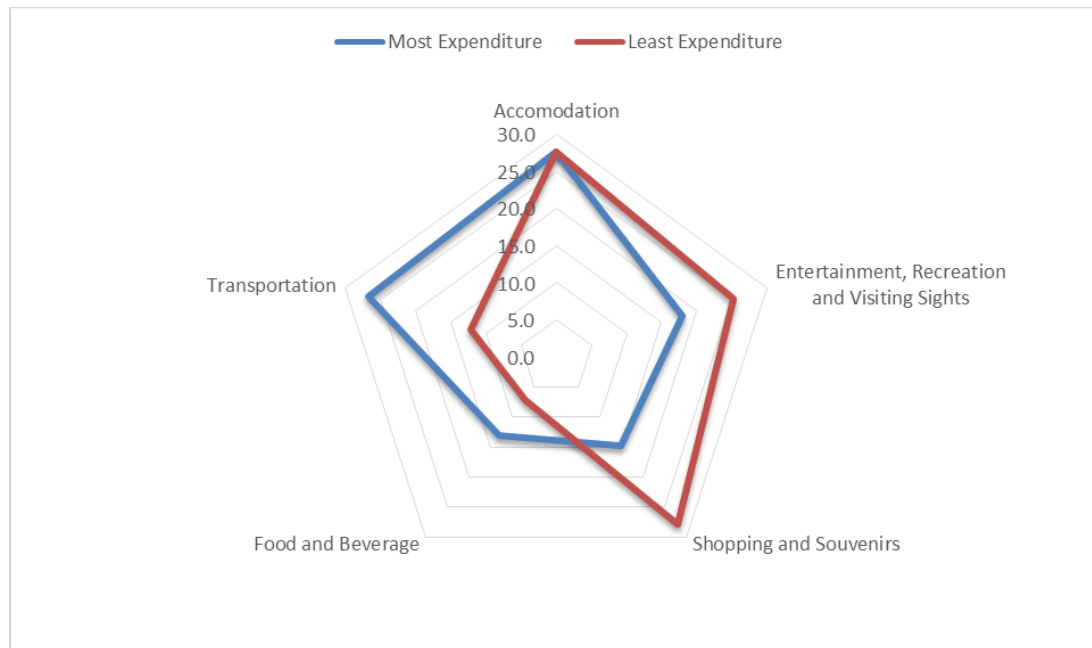


Figure 2. Distribution Radar Chart for the Most and the Least Expenditure Sector amongst the Households

Source: Research finding.

In response to the question "Do you think your expenditure per person is higher on family trips than single trips?", 43% of respondents believed that their expenditure per person was higher on family trips. 28% believed that the expenditure on single trips was higher, and 29% did not differentiate between the two.

The average number of family members present on the trip is 3.7 persons, and the average number of nights they stay is four nights. The total family tourism expenditure varies from 100,000 to 30,000,000 Tomans, with an average of 2,617,834 Tomans (approximately 174 USD). The average amount is 176,880 Tomans (approximately 11.8 USD) per person/per night.

In what follows, according to the p-value and impact factor of each independent variable, extracted from Tables 2 and 3, the impact of each factor are examined in order of p-values and the impact on two dependent variables, i.e., the total household expenditure during the trip (a) and the expenditure per person/per night (b).

Table 2. Multivariate Regression Analysis Results (Dependent Variable = Total Family Expenditure)

Model	Coefficients ^a		
	Standardized	t	Sig. ^a
	Coefficients Beta ^a		
(Constant)		-1.451	.147
Age	.165	3.407	.001**
Graduation Degree	.086	2.229	.026*
Number of Dependent Children	-.153	-3.909	.000***
Number of Independent Children	-.134	-3.160	.002**
Career Type	-.148	-4.091	.000***
Income	.305	8.639	.000***
Conservative	-.074	-2.068	.039*
Importance of Recreation Trips in Family	.084	2.333	.020*
Family Size on Trip	-.019	-.524	.600
Number of Nights Staying	.245	7.338	.000***
Not Using Their Own Vehicle	.282	8.267	.000***
Staying at Friends or Family House	-.238	-6.949	.000***

Source: Research finding.

Note: a. Dependent Variable: Family Expenditure

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Table 3. Multivariate Regression Analysis Results (Dependent Variable = Expenditure Per Person/Per Night)

Model	Coefficients ^b		
	Standardized Coefficients Beta ^a	t	Sig. ^b
(Constant)		1.622	.105
Age	.176	3.874	.000***
Education Level	.109	3.010	.003**
Number of Dependent Children	-.126	-3.416	.001**
Number of Independent Children	-.187	-4.667	.000***
Career Type	-.195	-5.713	.000***
Income	.243	7.318	.000***
Conservative	-.031	-.920	.358
Importance of Recreation Trips in Family	.163	4.820	.000***
Family Size on Trip	-.250	-7.369	.000***
Number of Nights Staying	.031	.981	.327
Not Using Their Own Vehicle	.278	8.668	.000***
Staying at Friends or Family House	-.289	-8.976	.000***

Source: Research finding.

Note: b. Dependent Variable: Expenditure Per Person/Per Night

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

The results of data analysis suggest the positive effect of the householder's income increase (with the p-value of 0.001) on the total household expenditure on the trip, which is consistent with the results of the studies by Hung et al. (2013), Alegre et al. (2010), Sun et al. (2015), Bernini and Cracolici (2015), Lin et al. (2020), Hong et al. (1996), Zheng and Zhang (2013), Haq et al. (2019), Hong et al. (2005), Alegre and Pou (2016), Alegre et al. (2013), Hong et al. (1999), Skuras et al. (2006), Chiappa et al. (2020), and Cai (1998). The same result is produced for the expenditure per person/per night variable. According to the impact factors (Beta^a=0.305 & Beta^b = 0.243), this indicator, among the measured ones, has the highest impact on total household expenditure.

After income, the use of the personal vehicle to travel with impact factors Beta^a = 0.282 & Beta^b = 0.278, and also staying at friends and relatives' homes instead of paid accommodations with impact factors Beta^a = -0.238 & Beta^b = -0.289, had a significant relationship (p-value < 0.001) with the total expenditure and expenditure per person/per night and led to a reduction in expenditure, similar to the results of Thrane's study (2016). Therefore, it can be concluded that if accommodation and

transportation expenditure are reduced, the expenditure in other parts of the trip would not necessarily increase.

Increasing the number of overnight stays on the trip by the household, whether staying in a hotel or a relative's house (and free of charge), is an effective factor ($\text{Beta}^a = 0.245$) and significant ($p\text{-value} < 0.001$) in increasing the total household expenditure, which is in line with the results of the studies carried out by Thrane (2002), Downward and Lumsdon (2000), and Thrane and Farstad (2011); but as expected, not affecting expenditure per person/per night.

The number of family members present on the trip has no significant relationship with the total household expenditure on the trip, but increasing this number has a decreasing effect on the expenditure per person/per night with a relatively high impact factor ($\text{Beta}^b = -0.250$) and $p\text{-value}$ of 0.001. This is in line with the results achieved by Zheng and Zhang (2013), Haq et al. (2019), and Alegre et al. (2013), and contrary to the results obtained in research conducted by Sun et al. (2015) and Hong et al. (2005). It is expected that the main reason for this phenomenon is that the total household expenditure is prorated over the family members on the trip. It can also be concluded that the householders might have set a fixed budget for the trip, regardless of the number of family members present on the trip.

Furthermore, the householder's occupation has a significant relationship with the total household expenditure and expenditure per person/per night with a relatively high impact factor ($\text{Beta}^a = -0.148$ & $\text{Beta}^b = -0.195$) and $p\text{-value}$ of 0.001. After examining this indicator, those with non-governmental jobs turned out to have the highest average total expenditure (3,383,578 Tomans = 225 USD) and expenditure per person/per night (265,977 Tomans = 18 USD) on the trips. After that, the highest expenditure per person/per night belongs to the groups of retirees (192,381 Tomans = 13 USD), government employees (179,955 Tomans = 12 USD), and students (147,607 Tomans=10 USD), respectively. As Park et al. (2019) mention the increased expenditure if the householder is self-employed, Lin et al. (2020) point to a reduction in expenditure if the householder is employed, and Fredman (2008) refers to a reduction in expenditure if the householder is a student.

It was revealed that with an increase in the number of dependent children ($\text{Beta}^a = -0.153$ & $\text{Beta}^b = -0.126$) and also independent children ($\text{Beta}^a = -0.134$ & $\text{Beta}^b = -0.187$) (with the $p\text{-values}$ of 0.001 and 0.01 respectively) in the household, the total household expenditure and expenditure per person/per night decreases. This phenomenon is similar to the results of the studies by Hong et al. (1996), Zheng and Zhang (2013), Haq et al. (2019), Alegre and Pou (2016), Lawson (1991), and Cai

(1998), and contrary to the results obtained by Alegre et al. (2013) and Wang and Davidson (2010a).

Addressing the householder's age indicator ($\text{Beta}^a = 0.165$ & $\text{Beta}^b = 0.176$) indicates that if it increases, the total household expenditure (p-value < 0.01) and the expenditure per person/per night (p-value < 0.001) increases. Moreover, Hung et al. (2013), Bernini and Cracolici (2015), Hong et al. (1996), Zheng and Zhang (2013), Chiappa et al. (2020), and Haq et al. (2019) obtained similar results, and Alegre et al. (2010) and Lin et al. (2020) achieved the opposite results. This phenomenon might result from the changes in individuals' income in different periods of life, that is, the amount of income and consequently expenditure until retirement increases with age (see also Raghfar and Babapoor, 2014). In this study, using ANOVA analysis, it was revealed that the age of the householders is correlated with their income, with a relatively high impact factor ($F = 16.036$) and p-value of 0.001.

A rise in the education level of the householder has a significant relationship with the total household expenditure (p-value < 0.05) and the expenditure per person/per night (p-value < 0.01). Thus, people with higher education will have higher expenditures. However, due to the p-value and correlation coefficients ($\text{Beta}^a = 0.086$ & $\text{Beta}^b = 0.109$), the impact of this indicator is much less than other indicators. This correlation has been proved in the studies by Alegre et al. (2010), Sun et al. (2015), Lin et al. (2020), Zheng and Zhang (2013), Haq et al. (2019), Park et al. (2019), Hong et al. (2005), Alegre and Pou (2016), Hong et al. (1999), and Cai (1998).

Among the psychological indicators, it was discovered that the householders who were less conservative and more in search of exciting activities on the trip had a higher total expenditure ($\text{Beta}^a = -0.074$) with a p-value of 0.05. Nevertheless, the relationship between this indicator and the expenditure per person/per night variable is not significant (it should be noted that this indicator has often been studied in research conducted in one area and on individuals [instead of household]). Finally, after examining the importance of recreational trips in the household consumer basket, this factor revealed to have a positive relationship with the total household expenditure (p-value < 0.05 & $\text{Beta}^a = 0.084$) and the expenditure per person/per night (p-value < 0.001 & $\text{Beta}^b = 0.163$) which is similar to the results obtained by Fredman (2008) and Thrane (2002). Considering the p-values of psychological indicators, it can be concluded that these factors have the minimum impact on household expenditure on the trip.

5. Conclusion

Influenced by different factors, tourists show various behaviours in tourism

destinations. One of the important topics in recent research is to study tourism expenditure and identify its determinants which allows policymakers, marketers, and researchers to examine the economic interaction of tourists with the destination society. Families are the main consumers of tourism products; hence, it is important to understand and illustrate the characteristics of household consumption and its determinants so that tourism policies and marketing strategies are well-adopted.

Findings of this study include determinants of Iranian households' total expenditure and expenditure per person/per night on domestic trips, the results of which can be utilized to increase the budget of Iranian households for domestic trips, maintain the circular flow of money and inject it into Iranian tourist destinations, and increase the income of domestic tourism stakeholders.

The present research aimed to investigate and illustrate the role of different factors in Iranian households' expenditure on domestic trips, using a microeconomic analysis and a systematic approach. The data were gathered through electronic questionnaires and analyzed according to the existing concepts of the accomplishments of earlier studies. The results of this type of research differ in different societies due to the variety in demographic, economic, and psychological characteristics. Nevertheless, the majority of researchers believe that if the economic and academic status of an individual is improved, he/she tends to increase expenditure on the trip, which highlights the importance of targeting the elite and wealthy markets, especially in less-developed or developing countries. Limitations that caused difficulties for researchers in the research process include the lack of studies on tourism expenditure in Iran, lack of access to some of the previous studies due to financial constraints, and lack of tourism share of household budgets in the Statistical Centre of Iran.

According to the results of this study the determinants of Iranian households' expenditure, in order of importance and impact, can be introduced as economic, trip-related, demographic, and finally, psychological factors. Based on the findings, most of the households used personal vehicles to travel, and about half of them did not pay for their stay at the destination. This indicates the low cost of travel for Iranian households as well as the preference for personal vehicles over other modes of transportation. Therefore, it is suggested that further studies address the causes of this phenomenon. The findings of this study indicate that the variables such as income, age, and education of the householder have a positive correlation with the total household expenditure and the expenditure per person/per night on the trip. Another variable studied is the occupation of the householder. People with non-governmental jobs had the highest average tourism expenditure. It was also revealed that in case of using a personal vehicle, staying in relatives' houses, reducing the number of nights

the family stays on the trip, and the householder's conservativeness, the total household tourism expenditure will decrease. As the importance of recreational travel in the household consumer basket increases, the household tourism expenditure also increases. An increase in the number of household members present on the trip is not correlated with the total household expenditure, but it leads to a decrease in the expenditure per person/per night. The number of dependent and independent children is inversely related to the total household expenditure and the expenditure per person/per night. According to the results revealed by Cai (1998), one of the reasons for this phenomenon may be the choice of fast food (which is cheaper) for meals or choosing cheap restaurants when being with children. However, the researchers consider this phenomenon to be more affected by the lack of recreational superstructures and tourism activities to the children's tastes in tourism destinations in Iran; however, this issue deserves more research in the future.

The following suggestions can be a useful guide for researchers, policymakers, and marketers of domestic destinations to increase turnover and benefit the supply chain in the tourism sector in Iran by tourists:

- Increasing studies on the determinants of tourism expenditure in Iran;
- Determining deadlines for preparing the share of tourism budget of Iranian households in the Statistics Centre of Iran for future research;
- Creation of recreational facilities, leisure activities, and tourism experience to the tastes of kids and children of the household in domestic tourism destinations;
- Content marketing to promote recreational trips and its' importance for the households, and also targeting those who are educated and have non-governmental occupations, given the higher income of these individuals; and
- Encouraging the households and providing facilities for using hotels and paid accommodations and not using personal vehicles on domestic trips.

References

Agarwal, V. B., & Yochum, G. R. (1999). Tourist Spending and Race of Visitors. *Journal of Travel Research*, 38(2), 173-176.

Alegre, J., Mateo, S., & Pou, L. (2013). Tourism Participation and Expenditure by Spanish Households: The Effects of the Economic Crisis and Unemployment. *Tourism Management*, 39, 37-49.

- Alegre, J., Mateo, S., & Pou, L. (2010). An Analysis of Households' Appraisal of Their Budget Constraints for Potential Participation in Tourism. *Tourism Management, 31*(1), 45-56.
- Alegre, J., & Pou, L. (2016). US Household Tourism Expenditure and the Great Recession: an Analysis with the Consumer Expenditure Survey. *Tourism Economics, 22*(3), 608-620.
- Badri, S. A., & Tayebi, S. (2012). Investigating the Factors Affecting the Costs of Religious Tourism Case Study: Holy Mashhad. *Journal of Tourism Planning and Development, 1*(1), 153-177.
- Bernini, C., & Cracolici, M. F. (2015). Demographic Change, Tourism Expenditure and Life Cycle Behavior. *Tourism Management, 47*, 191-205.
- Cai, L. A. (1998). Analyzing Household Food Expenditure Patterns on Trips and Vacations: a Tobit Model. *Journal of Hospitality & Tourism Research, 22*(4), 338-358.
- Carr, N. (2011). *Children's and Families' Holiday Experience* (22). Oxfordshire: Routledge.
- Chen, T. S., Hwang, M. S., & Chang, Y. J. (2021). The Effect of Wealth Effect and Population Aging on Tourism Expenditure. *Current Issues in Tourism, 25*(11), 1-14.
- Chiappa, G., Loriga, S., & Meleddu, M. (2020). Determinants of Travellers' Expenditures at Airports. *European Journal of Tourism Research, 26*, 2605-2605.
- Cox III, E. P. (1975). Family Purchase Decision Making and the Process of Adjustment. *Journal of Marketing Research, 12*(2), 189-195.
- Cragg, J. G. (1971). Some Statistical Models for Limited Dependent Variables with Application to the Demand for Durable Goods. *Econometrica: Journal of the Econometric Society, 39*(5), 829-844.
- Dardis, R., Soberon-Ferrer, H., & Patro, D. (1994). Analysis of Leisure Expenditures in the United States. *Journal of Leisure Research, 26*(4), 309-321.

- Downward, P., & Lumsdon, L. (2000). The Demand for Day-Visits: an Analysis of Visitor Spending. *Tourism Economics*, 6(3), 251-261.
- D'urso, P., Disegna, M., & Massari, R. (2020). Satisfaction and Tourism Expenditure Behavior. *Social Indicators Research*, 149, 1081-1106.
- Fratu, D. (2011). Factors of Influence and Changes in the Tourism Consumer Behavior. *Bulletin of the Transilvania University of Brasov, Economic Sciences. Series V*, 4(1), 119-126.
- Fredman, P. (2008). Determinants of Visitor Expenditures in Mountain Tourism. *Tourism Economics*, 14(2), 297-311.
- Ghaderi, E., Hosseinjani, F., & Moradi Gheshlaghi, F. (2016). Investigating the Pattern of Tourism Expenditure among Social Classes. *Journal of Heritage and Tourism*, 1(3), 13-35.
- Haq, Z. U., Ullah, Z., & Sajjad. (2019). Households' Participation in and Expenditure on Recreation and tourism in Pakistan. *Asia Pacific Journal of Tourism Research*, 24(3), 206-218.
- Hong, G. -S., Fan, J. X., Palmer, L., & Bhargava, V. (2005). Leisure Travel Expenditure Patterns by Family Life Cycle Stages. *Journal of Travel & Tourism Marketing*, 18(2), 15-30.
- Hong, G.-S., Kim, S. Y., & Lee, J. (1999). Travel Expenditure Patterns of Elderly Households in the US. *Tourism Recreation Research*, 24(1), 43-52.
- Hong, G.-S., Morrison, A. M., & Cai, L. A. (1996). Household Expenditure Patterns for Tourism Products and Services. *Journal of Travel & Tourism Marketing*, 4(4), 15-40.
- Hung, W. -T., Shang, J. -K., & Wang, F. -C. (2013). A Multilevel Analysis on the Determinants of Household Tourism Expenditure. *Current Issues in Tourism*, 16(6), 612-617.

Jisana, T. (2014). Consumer Behavior Models: An Overview. *Sai Om Journal of Commerce & Management*, 1(5), 34-43.

Kotler, P., & Caslione, J. A. (2009). How Marketers can Respond to Recession and Turbulence. *Journal of Customer Behavior*, 8(2), 187-191.

Lawson, R. (1991). Patterns of Tourist Expenditure and Types of Vacation across the Family Life Cycle. *Journal of Travel Research*, 29(4), 12-18.

Lin, VS., Qin, Y., Li, G., & Wu, J. (2020). Determinants of Chinese Households' Tourism Consumption: Evidence from China Family Panel Studies. *International Journal of Tourism Research*, 23(4), 1-13.

Mihalič, T. A. N. J. A. (2002). *Tourism and Economic Development Issues*. Ljubljana: Channel View Publications.

Mora-Rivera, J., & García-Mora, F. (2020). International Remittances as a Driver of Domestic Tourism Expenditure: Evidence from Mexico. *Journal of Travel Research*, 60(8), 1752-1770.

Mortazavi, R. (2021). The Relationship between Visitor Satisfaction, Expectation and Spending in a Sport Event. *European Research on Management and Business Economics*, 27(1), 100-132.

Neulinger, A., & Simon, J. (2011). Food Consumption Patterns and Healthy Eating across the Household Life Cycle in Hungary. *International Journal of Consumer Studies*, 35(5), 538-544.

Noonan, L. (2021). An Analysis of the Micro-determinants of Domestic Holiday Expenditure by Households in the Republic of Ireland. *Irish Business Journal*, 13(1), 2-18.

Park, S., Woo, M., & Nicolau, J. L. (2019). Determinant Factors of Tourist Expenses. *Journal of Travel Research*, 59(2), 267-280.

Pellegrini, A., Sarman, I., & Maggi, R. (2021). Understanding Tourists' Expenditure Patterns: A Stochastic Frontier Approach within the Framework of Multiple Discrete-Continuous Choices. *Transportation*, 48(2), 931-951.

Perles-Ribes, J. F., Moreno-Izquierdo, L., Torregrosa-Marí, M. T., & Such-Devesa, M. J. (2020). The Relationship between Satisfaction and Tourism Expenditure in 'Sun and Beach' Destinations: A Structural Equation Modelling Approach. *Current Issues in Tourism*, 24(18), 1-15.

Raghfar, H., & Babapoor, M. (2014). The Intergenerational Analysis of Urban Household Expenditure by Using The Pseudo Panel. *Journal of Applied Economics Studies, Iran*, 3(10), 177-199.

Rahimi, E. (2015). *Product characteristics and environmental factors affecting the purchase of tourists; Case study: Isfahan* (Unpublished Master's Thesis). Tehran University of Science and Culture, Iran.

Rhoden, S., Hunter-Jones, P., & Miller, A. (2016). Tourism Experiences through the Eyes of a Child. *Annals of Leisure Research*, 19(4), 424-443.

Skuras, D., Petrou, A., & Clark, G. (2006). Demand for Rural Tourism: The Effects of Quality and Information. *Agricultural Economics*, 35(2), 183-192.

Sun, P. C., Lee, H. S., & Chen, T. S. (2015). Analysis of the Relationship between Household Life Cycle and Tourism Expenditure in Taiwan: An Application of the Infrequency of Purchase Model. *Tourism Economics*, 21(5), 1015-1033.

Sung, H. H., Morrison, A. M., Hong, G. S., & O'Leary, J. T. (2001). The Effects of Household and Trip Characteristics on Trip Types: a Consumer Behavioral Approach for Segmenting the US Domestic Leisure Travel Market. *Journal of Hospitality & Tourism Research*, 25(1), 46-68.

Tahmasbi, A., & Roshanian, S. (2017). Characteristics and Shopping Behavior of Tourists in Baneh. *Quarterly Journal of Tourism Management Studies*, 11(36), 31-59.

- Thornton, P. R., Shaw, G., & Williams, A. M. (1997). Tourist Group Holiday Decision-Making and Behavior: The Influence of Children. *Tourism Management, 18*(5), 287-297.
- Thrane, C. (2016). The Determinants of Norwegians' Summer Tourism Expenditure: Foreign and Domestic Trips. *Tourism Economics, 22*(1), 31-46.
- Thrane, C., & Farstad, E. (2011). Domestic Tourism Expenditures: The Non-Linear Effects of Length of Stay and Travel Party Size. *Tourism Management, 32*(1), 46-52.
- Thrane, C. (2002). Jazz Festival Visitors and their Expenditures: Linking Spending Patterns to Musical Interest. *Journal of Travel Research, 40*(3), 281-286.
- Tobin, J. (1958). Estimation of Relationships for Limited Dependent Variables. *Econometrica, 26*(1), 24-36.
- Vu, H. Q., Li, G., Law, R., & Ye, B. H. (2015). Exploring the Travel Behaviors of Inbound Tourists to Hong Kong using Geotagged Photos. *Tourism Management, 46*, 222-232.
- Wang, Y., & Davidson, M. C. (2010a). Chinese Holiday Makers' Expenditure: Implications for Marketing and Management. *Journal of Hospitality Marketing & Management, 19*(4), 373-396.
- (2010b). A Review of Micro-Analyses of Tourist Expenditure. *Current Issues in Tourism, 13*(6), 507-524.
- Wang, Y., Rompf, P., Severt, D., & Peerapatdit, N. (2006). Examining and Identifying the Determinants of Travel Expenditure Patterns. *International Journal of Tourism Research, 8*(5), 333-346.
- Zargham, H., & Atrsaiy, B. (2006). Relationship between Demographic Factors and Buying Behavior of European Tourists' Handicrafts in Isfahan. *Quarterly Journal of Tourism Management Studies, 4*(11.12), 81-100.
- Zheng, B., & Zhang, Y. (2013). Household Expenditures for Leisure Tourism in the USA, 1996 and 2006. *International Journal of Tourism Research, 15*(2), 197-208.