Impacts of economic, cultural, social, individual and environmental factors on demands for cinema: Case study of Tehran

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This article seeks to identify the various factors affecting the demand for cinema and effectiveness degree of each factor. In this paper we seek to answer the main question that how much economic, cultural, social, individual and environmental factors affect demand of going to the cinema. In order to find the answer to the aforesaid question through survey, information about a sample of 800 who go to cinema in Tehran is collected. These people are selected through simple random sampling. The collected data have been analyzed via factor analysis and path analysis method. The results show: demand for going to cinema follows economic, cultural, social, individual and environmental factors and with consideration to amount of standard coefficient, it should be said that economical factors and environmental factors respectively have the highest and lowest impact on demand for going to cinema.

Key words: demand for cinema, economic factors, social factors, cultural factors, environmental factors, Individual factors, factor analysis.

INTRODUCTION

Nowadays, on one hand, cinema is considered as a modern industry and on the other hand as the cultural need in our country and undoubtedly it is one of the most fundamental and effective media which plays an active role in continuing the expansion and survival of real art and culture of a society. It can be said that cinema is a polyhedral phenomenon which is affected by human culture and influences more cultures. Cinema and watching movie in theaters or in another word going to cinema is one of the most important options for passing leisure time in the societies in which politicians of public culture section encourage and strengthen cinema by relaying on different and diverse legal process and other effective tools. Due to the fact that passing free time in group besides being safe and sound brings about individual and group joy, thinking, and interacting more closely with parents, relatives, friends, and even other participants in this joy and enthusiasm. Aside from that
cinema plays a constructive and pioneer role in culture and behavior of people. Therefore undoubtedly improving the quality of the film has a great impact on the development of intellectual, cultural, social, and economic and trade dimensions of community. In other words, cinema influences social, economic and cultural variables and mutually it will be affected by development of these areas.

Considering the constant development in science and technology, and enhancement of different entertainment means and industries in the last recent decades, movie production and capacity of theaters have lately had an increasing trend throughout the world and based on the given statistics and estimations of professional centers, this trend will be continuing and in the upcoming years its average growth in production and show will be more than 30 percent (Mousai and Shiani, 2007). On the other hand, according to the published international news in 2005, number of people who went to cinema all over the world was 3 billion and amount of money spent for going to cinema was 15 billion. Besides, average current capital in film industry and cinema all over the world is approximately 80 billion dollars (Hoseinnejad, 2005). Despite the film industry is growing in the world and especially in some of the neighboring countries of Iran and a gradual increase in the number of theaters and audiences in Iran especially in Tehran city, this trend has been decreasing. While in some countries like South Korea, Malaysia and Indonesia and even the United Arabic Emirate, number of constructed theatre during the last decade has been more than existing theatres in Iran (Mosai and Shiani, 2007).

It seems that decreasing trend of cinema audiences in Iran is not only due to development of ways of communication and people’s access to internet and possibility of getting and watching the movies at the same time or people’s access to all movies in form of CD whether legally or illegally, but also this matter is affected by some other significant matters that have to be investigated and studied more seriously. Therefore, studying economical factors such as ticket price, income of people who want to go to cinema, price of supplementary or substitute goods of cinema and also cultural factors like (interests, tastes, customs and general behavior, advertisements, expectations, religious beliefs, free time, numbers of used programs, training and...) cultural factors (Education, age, status and social position, etc.) and individual factors (including gender, individual income, household expenses, job type, distance between people’s houses to cinema) can help us to be able to answer the main question and unknown and vague aspects of this research. Considering these conditions, it seems that without getting to know the influential factors on demand for cinema in Iran through development programs, appropriate and adequate planning and required investment in film industry is not possible.

Cinema industry in Iran

It seems that, cinema has come to life in Iran concurrent with beginning of modernism process and before its appearance in other neighboring countries. Rapid and ever increasing progress of different kinds of audio-visual technologies and development of television and satellite channels, have improved film industry and cinema greatly all around the world while demand for cinema in Iran especially Tehran has had a decreasing trend in the last two decades. The documented statistics in this regard shows that at least in the last 25 years, number of all movies audiences in cinema’s of Iran from 80 million persons in 1989 has reached to less than 10 million in 2010 (Iranian Ministry of Culture and Islamic Guidance, 2011) (Figure 1). This decreasing trend has also been true in Tehran’s cinemas (Figure 2).

Currently, less than half of audiences of movies belong to Tehran and that is because most of the facilities and large number of theatres are located in Tehran, capital of Iran.

The aforesaid statistics represents that since 2001 because of reduction of people’s willingness for going to cinema, in another word, due to drastic reduction in number of people who like to go to cinema, number of active theaters has gradually decreased in Iran. In a way that, number of active cinemas in Iran from 320 in 2001 has decreased to 236 in 2000 (Figure 3). Also the decreasing trend of capacity of cinemas in Tehran has been continuing so that capacity of active cinemas in Tehran from approximately around 50 thousand seats in 1368 reached to less than 38 thousand seats in 2000 (Statistical Center of Iran, 2011) (Figure 4).

It seems that in field of culture economy, different TV programs can be used as appropriate substitutes for filling people’s free time specially by showing movies and popular series due to the fact that at the same time that number of people who go to cinema is decreasing, gradually number of audiences and length of TV programs rises. This important matter is shown in Figure 5. Therefore, this considerable process of presentation of TV programs indicates that probably TV programs can at least be presented in Iran as proper substitute for cinema. It is clear that for testing whether this claim is correct or not we should examine and test this idea in the present study in the society being studied.

Influencing factors on cinema demands

Although based on demand theory, there are many unlimited effective factors on demand for cinema in one society, after conducting extensive researches and by considering exploratory studies of researchers and researches, effective factors on cinema demand can be categorized into five main groups: economical, social,
Figure 1. Number of movie audiences in Iran (1985-2010).

Figure 2. Number of movie audiences in Tehran (1985-2010).

Figure 3. Number of active cinemas in Iran (1985-2010).
cultural, individual and environmental factors. All of these factors will be explained later.

1- Economical factor: Economical factors include series of variables and economical issues that exist in the society and affect the demand of people for going to cinema. The conducted researches on effective elements on demand for cinema have pointed out variables such as income, ticket price or comparative prices, extra expenses for going to cinema and related goods (supplementary or substitutionary) (Colins and Hand, 2005; Walls, 2005; Redondo and Holbrook, 2010; Kim, 2009; Yamamura, 2008). Definitions of these variables are as follows:

a. Demand for cinema: Conceptually, demand for going to cinema means people’s desire for going to cinema with purpose of watching movies by considering income limitation, free time, ticket price and etc. (Mousai, 2000).

b. Ticket price or comparative price: Conceptually, it means ratio of price of one particular good to other good or other goods by modifying them according to inflation index. Operationally, it includes ratio of average annual ticket price to consumer price index.

c. Price of related goods: It means the price of related goods and services to cinema that have supplementary or substitutionary relation with demand for cinema. In many studies, cultural goods or other services such as TV programs, video, satellite, theaters, opera and the same programs have been declared as substitutes for cinema. Among the researches in this regard, we can name Macmillan and Smith (2001), Cameron (2005), Blunko and Pino (1997), Dewenter and Westermann (2005) Kim (2009) and many other researchers that have done similar researches.

d. The side costs of cinema: the amount of money that people spend for watching TV such as transportation, gasoline, food, snacks and the things alike. Obviously, as the side costs of going to cinema increases people will be more cost-sensitive. Therefore, side costs will be considered as one of the independent variables in economic factors.
e. **TV programs show time**: It involves times that IRIB (Islamic republic of Iran 2011) officially broadcasts different TV programs through TV channels. As this variable is considered as a substitution or competitor of cinema, it can affect people's demand for going to cinema.

2- **Social factors**: Conceptually, social factors are the number of variables being studied in the society such as: parents' age, parents' job and the level of their education, their income and finally housing ownership status. The above mentioned factors are the social factors being considered in different projects. These factors have been pointed out in many studies such as: Garboua and Montmarquette (2002), Kim (2009), Yamamora (2008), Redondo and Holbrook (2010).

**a. Parents' age**: age variable is effective in demand for going to cinema especially for elderly (parents). It seems that as the parents are other, they have less desire for going to the cinema. Studies conducted by Collins and Hand (2005) show that young people go to cinema more than the other age groups. Also Yamamora (2009) in his study has categorized the people who go to cinema from the age of 20 to more than 60 and has investigated this matter. Also other researchers such as Redondo and Montmarquette (2002), Kim (2009), Yamamora (2008), Redondo and Holbrook (2010).

**b. Parents' job**: Another variable that affects the demand for going to cinema is people's occupation. It is clear that many people who have social prestige and have more occupational prestige, encourage the family members to go to cinema more than the parents who have less occupational prestige. Social and occupational prestige means the average prestige that people of the society consider for one person or one group because of the characteristics that they think those people have. People's or group's prestige can be due to their job in the society. Therefore, people's job is one of the effective social factors on demand for going to cinema. (Alibabai, 2008)

**c. Parents' educational level**: It is obvious that socially educated parents have better understanding of social, economical, political and on the whole daily issues compared to illiterate or less educated parents and moreover they make decision based on updated information. As a result, this matter is effective in demand for going to cinema in literate and illiterate families.

**d. Income levels**: Households income can also affect the family's demand for going to cinema due to the fact that income of one family is effective on life style of that family and type of their demand for goods and services. Therefore, it is important to study and consider this variable.

**e. Housing status**: This is another variable that also can have effect on demand for cinema. Housing ownership status will be studied in this research.

3-**Cultural factors**: These factors include number of variables being studied in the society such as: free time, values, beliefs, advertisements and cultural trainings (Duwas, 2007). These factors have been pointed out in many projects such as: Collins and Hand (2005), Walls (2005), Redondo and Helbrook (2010), Kim (2009), Yamamora (2008).

**a. Media**: Media is explained as any toll that transfers a message. Therefore, radio, TV, cinema, books, magazines and mass Media can all be considered as media (Mousai, 2011). Many studies that have been conducted in this regard; have considered the aforesaid media as suitable and very close substitutes for cinema so that in the conducted researches regarding this matter by Yamamora (2009) in Japan, it has been shown that video and satellite programs are substitutes for cinema. Besides, Macmillan and Smith (2001) have introduced TV as a substitute media for cinema in his study in England. Also Collins and Hand (2005) and Kim (2009), in similar researches, have considered TV and video as a very appropriate substitute for cinema as it is so close to cinema.

**b. Free time**: It is the amount of time that clients of cinema allocate to watching movies aside from their time for working, sleeping, eating, relaxing and entertaining themselves. Free time is also one of the independent and effective variables on people who watch films in cinema. Grainejad et al. (2010), in their studies in Iran have used the time and days that people go to cinema as their free time. Also Agheli (2009) has used expenses index of entertainment and education in analyzing its solidarity in national level.

**c. Values**: As value has an extensive concept, in this research we just study the variable of lifestyle which is operationally measured based on consumption level and combination of the goods consumed in households.

**d. Beliefs**: People's belief differs with each other based on culture and traditions of that society. For example, it is possible that in one society and its culture consumption of one particular good or even thing have value while in another society based on their cultural, religious and the things alike consumption of those goods be against the values of that society and even use of those goods can be considered as a crime according to their law.

**e. Habits**: Many products and services are used based on people's habits. Many people go to cinema regularly and they are considered as professional audiences due to the facts that they have got used to going to cinema and consequently this habit of them affects the demand for going to cinema. Sisto and Zanola's studies (2004) about cinema in 13 European countries have proposed a hypothesis of logical addiction to cinema and have investigated around this matter. Its result indicated that there was a very strong reason that approved the hypothesis of logical addiction about use of cultural
products like cinema in Europe. Also Kim and Park’s studies (2010) which were done in South Korea show that demand for going to cinema is recognized firstly based on addictive behavior for cinema products. Secondly, their studies show that this behavior is logical and thirdly habit is one of the most essential issues for specifying the amount of demand for cinema.

f. Advertisement and cultural trainings: Studies of Grainejad et al. (2010) on the advertisement variable show that use of appropriate advertisement is one of the effective factors on demand for cinema. On the whole, checking this matter needs enquiring cinema's address and seeing about the effect of advertisement and cultural trainings on the frequency that they go to cinema.

4- Individual factors: Individual factors mean number of variables being studied in the society such as age, gender, job, individual education and monthly income. These are variables that have been proposed in researches of Garboua and Montmarquette (2002), Macmillan and Smith (2001), Redondo and Helbrook (2010). Such variables are as follows:

a. People’s age: In this part by age we mean searching for audiences' age and it is different from the parents' age that was discussed in social factors section. Many researchers such as Redondo and Helbrook (2010), Yamamura (2009), Collins and Hand (2005), Macmillan and Smith (2001) etc. have pointed to age in their studies as an independent variable.

b. Gender: Gender is one of the major variables in formation of demand for cinema. Among the studies being done in this regard, researches of two Spanish researchers called Redondo and Helbrook (2010) can be noted. These studies have been done in form of correlation analysis of several strains two-variable. Also studies and considerations that have been done by "The Supreme Council of Youth (1996)" indicate that men go to cinema more than women.

c. Job: Type of people's job can affect their demand for going to cinema to some extent. Jobs differ from each other based on their free time. One reason for considering job as an important variable is whether that job provides free time for its doer or not and if yea how much time. Azma (2007) has shown in a study that people who are self employed, clerks, students and university students go to cinema more than people who have another jobs. According to the researches that have been done in America (Lin, 1976) and also in Iran, Kazemipour (1996) and Abdolahian and Nayeri (2003) people's job has been considered as an effective variable on demand for cinema.

d. Education: this variable has been used in the researches of Garboua and Montmarquette (2002) and Redondo and Helbrook (2010). Also Fardrou and Sedaghatzadegan (2000) have proved the existence of a relationship between education and consumption of cultural products. As cinema is considered as one of the cultural products, this matter can be generalized to cinema as well.

e. Monthly Income: studies being done by different researches show that there is a direct relation between people's income and their demand for going to cinema. For example, outcome of studies of Cameron (2005) shows positive effect of income on demand for cinema. Moreover, some other researches such as researches of Dewenter and Westermann (2005), Yamamora (2008) and Collins and Hand (2005) approve this matter.

f. Household expenses or consumption costs: It refers to the minimum amount of money that individuals or households spend for buying goods and services that they need daily, weekly, monthly or annually. Studies of Bianco and Pino (1997) show that cultural products such as cinema are not considered as necessary good rather it is considered as luxurious products; therefore, in these researchers' opinion, as long as people's necessary needs are not supplied, there will not be any demand for luxurious products. If the expenses of one household be so high, the demand for cinema will decrease in that family. Consequently, this variable should be considered as an independent variable in cinema demand function.

5-Environmental factors: The variables that are being studied in statistical society such as existence of cinema in one neighborhood, academy in the region, type of cinema regarding its facilities, the distance between people's place and cinema and the extent of development of one neighborhood have been considered in studies of Walls (2005), Ravid et al. (2006) and Yamamora (2009). Each of these variables will be explained as follows:

a. Type of cinema regarding its facilities: It is an environmental variable that affects the demand for cinema. Studies of Walls (2005) and Yamamora (2009) show that if the cinemas have additional facilities and many saloons, people's desire for going to these cinemas will increase.

b. Degree of community development: As people live in different urban areas and theses regions are different from each other regarding their urban life style and the region's modernity, their demand are also different. In this regard, two researchers called Redondo and Helbrook (2010) in their case study in Spain have looked at urban area as one of the variable function of demand for cinema. Existence of cinema or academy in neighborhood and region: It is clear that as more urban facilities and equipment be available for citizens, their participation in activities and their use of urban services will be more; therefore, existence of cinema or academy in one region or neighborhood will affect people's
demand for cinema or similar facilities as people can have easier access to them.

Research background

Regarding cinema and films, significant studies have been done on available films, from economic, social, cultural aspects, process of film production and film industry in different countries around the world. In this regard, many models of supply and demand for cinema in form of different econometric function have been extracted. Some of the studies done in this regard include researches, such as: the relationship between cinema and other mass media including television, movies and culture of consumerism and the role that cinema has on the policy (Doherty, 2004), using well-known actors movie stars and the impact on production costs (Pokorny and Sedgwick, 2001), social aspects of movies (Aitken, 1990), identity, culture, and policy in cinema issues in some Asian and European countries (Lee, 2001; Everett, 2005), Economy of media market: review of literature (Dewenter, 2003), domestic demand for cinema in Spain (Vegas, 2009), the distribution and predictability of cinema audiences (Hand, 2002), promote demand for the arts (Zakaras and Lowell, 2008), small mythology and cultural issues in cinema (Martin, 2001), new developments in cinema (McCrisken, 2005), marketing in film industry (Kerrigan, 2010), studying the demand for three-dimensional movies (Sluis, 2010), economy of cinema (McKenzie, 2009), the growth of Bollywood (lorenzen, 2009), addictive behavior in film demand (Kim and Park, 2010), critics of cinema and studying their effect on the audience (Nielsen, 2010), and demand for going to cinema in Iran (Mousai, 2011) and many other similar studies in Europe and Asia. Some of the most important researches about demand for cinema have been briefly summarized in Table 1. External studies been done in verifying research literature can be divided into two groups as follows: first, a group of researchers that have allocated their studies to only economical aspects of cinema in form of dependent and independent variables that are measurable and in this regard they have estimated demand for cinema function by relying on only economic variables. The researchers of the second group have researched beyond the mere operation of economic factors and in addition to economic variables; they have also considered some other social and cultural variables affecting the demand for some of the movies and they have designed and proposed the relevant model.

Verification of the studies done regarding function of demand for cinema shows that in the world majority of studies about demand for going to cinema has just been done based on variables and current centralized economic variables in different societies. Also in Iran all of the related studies have been done solely on demand for cinema and economic variables and the rest of factors have been ignored. Therefore, in this article besides economic variables, social, cultural, individual and environmental variables have also been analyzed and have been elicited based on conceptive research model. On the whole among the aforesaid conducted researches, studies done by Kim (2009) and Yamamura (2008) are closer to Iran's condition in regard to Iran's regional, population and to some extent social and other conditions; therefore, many variables that are related to their studies can be localized for Iran. Consequently, it can be seen that the demand for cinema in the statistical society that was being studied depends on some major elements.

Conceptual model

Our conceptual model in this study is designed based on generalized theory of demand in which besides economical variables other factors involving social, cultural, environmental and individual factors have been considered. In this model the demand for going to cinema in statistical society of our study depends on some important factors. These factors have been categorized into five basic factors i.e. economical, cultural, social, environmental and individual factors; these five factors and other relevant variables to each of them are Figure 6. As the figure shows economical factors in this research are set of variables and economical phenomenon that occur inside society and will influence on the demand for going to cinema which in this research would involve the variables such as income, ticket price or the relative prices, the side expenses of cinema and price of the relevant goods (complementary or substitute) and time of broadcasting TV programs. Also social factors means are a set of variables under research in society like: age, job and educational level of parents, income class, and status of home ownership and.... cultural factors are variables like the used media, amount of free times, values, beliefs, advertisement and cultural education. By Individual factors it means a set of variables under study in society such as age, gender, job, individual’s education, monthly income and .... And environmental factors also are variables like existence of cinema in a province, existence of academy in a region, the class of cinema with regard to its possibilities, individual’s distance from cinema, degree of province’s development.

Hypotheses of research

Based on the rendered theoretical frameworks hypotheses of this study are as follows:

Hypothesis 1: economical factors have significant effect on demand for cinema.
Table 1. Summary of researches about demand for cinema in the world.

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Year</th>
<th>Countries for Study</th>
<th>Method</th>
<th>Factors and Variables for Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambaro and Orietta</td>
<td>2009</td>
<td>15 European Countries</td>
<td>OLS</td>
<td>Demand for ticket, Price, Income, Cinema screen, Number of chair, Citizens</td>
</tr>
<tr>
<td>Sisto and Zanola</td>
<td>2004</td>
<td>13 European Countries</td>
<td>Panel-Data</td>
<td>Cinema attendance, Price, Per capita income, Screen, Number of Film, Demand for passed period</td>
</tr>
<tr>
<td>Macmillan and Smith</td>
<td>2001</td>
<td>England</td>
<td>VAR</td>
<td>Demand for Cinema, Real Price, Income, TV, Number of cinema, Age</td>
</tr>
<tr>
<td>Cameron</td>
<td>2005</td>
<td>England</td>
<td>GLS</td>
<td>Sold tickets, Real Price, Income, Number of TV, Number of cinema, Ticket price, Population, Inflation</td>
</tr>
<tr>
<td>Dewenter and</td>
<td>2005</td>
<td>Germany</td>
<td>2SLS</td>
<td>Demand for Cinema per capita, Ticket price , Income, Price of relative goods, Other effective variables</td>
</tr>
<tr>
<td>Westermann</td>
<td></td>
<td></td>
<td></td>
<td>Cinema consumers, Income, TV watching, Number of Cinema films, Video, Age groups</td>
</tr>
<tr>
<td>Collins and Hand</td>
<td>2005</td>
<td>England</td>
<td>Panel Data</td>
<td>Main Variables: Demand for Cinema per capita, Ticket price , Income, Price of relative goods, , Price of Cultural goods, Domestic films, Import and export films, Number of TV, Population, Sells, Dummy Variables: Video product, TV import, Cable TV and…</td>
</tr>
<tr>
<td>Sungo Kim</td>
<td>2009</td>
<td>South Korea</td>
<td>GMM and 3SLS</td>
<td>Cinema per capita, Ticket price, Per capita income, Price of Substitution goods, Demand for passed period</td>
</tr>
<tr>
<td>Kim and Park</td>
<td>2010</td>
<td>South Korea</td>
<td>OLS,2SLS</td>
<td>Number of attendance, Real price, Income, Number of multiplex, Number of Cinema, Population, Cable TV, Age</td>
</tr>
<tr>
<td>Yamamura</td>
<td>2008</td>
<td>Japan</td>
<td>2SLS</td>
<td>Box-office returns, Negative costs, Cinema screens, Film stars and Others variables( as dummy)</td>
</tr>
<tr>
<td>Walls</td>
<td>2005</td>
<td>Canada and US</td>
<td>Conditional stable distribution Analysis</td>
<td>Demand for Art, Consumers taste, Price of art, Consumers education, Usage, Experience, Emotion, Income, Price of relative goods, Other effective variables</td>
</tr>
<tr>
<td>Garboua, and Montmarquette Claude</td>
<td>2002</td>
<td>Canada</td>
<td>Utility Function</td>
<td>Case study about criticisms on 172 films in US based on random sampling</td>
</tr>
<tr>
<td>Ravid and Others</td>
<td>2006</td>
<td>US</td>
<td>Hypothesis</td>
<td>Number of attendance, Sex, Infants attendance, Education, Social classification, Urban zone, Age</td>
</tr>
<tr>
<td>Redondo and Holbrook</td>
<td>2010</td>
<td>Spain</td>
<td>canonical correlation analysis</td>
<td>Hypothesis 4: individual factors have significant effect on demand for cinema.</td>
</tr>
<tr>
<td>Mousai</td>
<td>2011</td>
<td>Iran</td>
<td>Almost Ideal Demand System</td>
<td>Hypothesis 5: environmental factors have significant effect on demand for cinema.</td>
</tr>
</tbody>
</table>

Hypothesis 2: social factors have significant effect on demand for cinema.
Hypothesis 3: cultural factors have significant effect on demand for cinema.
Hypothesis 4: individual factors have significant effect on demand for cinema.
Hypothesis 5: environmental factors have significant effect on demand for cinema.

**METHOD**

Society and statistical sample

This study has been done with measurement method and
for gathering the required information we used questionnaire. Since the community under the current research is the whole cinema goers in Tehran city for estimating the number of sample society we used Cochran method. We got 800 people of the inhabitants of Tehran city; based on random sampling method the questionnaire was distributed among them. This research was done in May of 2011 and among 800 distributed questionnaire in the statistical society, 200 questionnaires were incomplete and at the end 600 questionnaires were entered into the SPSS software.

Research Instrument

On the basis of theoretical literature and conceptual model of
research, a questionnaire containing 76 speeches and in level of five basic elements i.e. including: economical factors (15 items), social factors (12 items), cultural factors (17 items), individual factors (14 items) and environmental factors (12 items) was designed and collected. The marking method of this mean is on the basis of five degree spectrum of Likert and for assigning the admissibility of this questionnaire the method of conceptual admissibility was used based on the experts’ view. To assign the stability of this mean we used Kronbach’s alpha test where the amount of the resulted Kronbach’s alpha is respectively 0.72, 0.71, 0.82, 0.71, 0.75 and 0.7 which shows the proper stability of the measuring means. And this subject shows the inner coherence among the variables for measuring the concepts. For practical test of conceptual model of research the method of confirmatory factor analysis and the Lisrel structural equations model software was used. The method of confirmatory after distinguishing pre-practical factors, by assigning the pre-appointed fitness factor model the proper coincidence is seen and theoretical factor is structured to test the set of data. In this research for assessing confirmatory factor analysis model the characters $X^2/df$, RMSEA, GFI and AGFI was used.

### RESEARCH FINDINGS

The findings in Table 2 show that 55% of answerers of this research were women and 45% were men. Besides, 53.7% of answerers were single and 44.8% were married and 1.5% was other cases. The other findings of the table show that 1.7% answerers were under 15 years old and 67.8% were between the age of 16 to 30 and 19.8% of them were between 31 to 45 and 9.8% were between 46 to 60 and 8% were above 61 years old. As it is clear, majority of answerers are between 16 to 30 years old. Moreover, 6.7% of answerers do not have university degree while 93.3% of them have university degree. The findings about occupation of answerers also show that 76.3% of them have jobs while 7.23% of them are unemployed. The average of five major factors of research including economical, social, individual, cultural and environmental factors is respectively 25.98, 21.19, 29.4, 45.72, and 28.80.

The results related to LISREL outcome (Table 3 and Figure 7) show that the variables of income, ticket price, price of relevant goods, other expenses of cinema and TV programs broadcasting time with load factor 0.53, 0.72, 0.74, 0.69, 0.17 respectively have significant effect on economic factor and the achieved t marks for each one shows that these load factors are significant at alpha level 0.01. On the other side, the findings showed that parents’ age, parents’ job, parents’ education, income class and status of home have significant load factor on economic factor and these load factors are significant with regard to statistics ($p<0.01$). Variables related to media, free times, values, beliefs, habits, advertisements and cultural training also respectively with load factors 0.65, 0.77, 0.22, 0.37, 0.67, 0.37 and 0.54 on significant level ($p<0.01$) are of significant variables subset of cultural effect. In addition, findings of effective analysis showed that variables of age, gender, job, education, monthly income and household expenditure are part of significant variables of individual effect and load factors of these variables based on mark t related to each one of these loads at level $p <0.01$ is significant.

At last, the findings showed that existence of cinema in precinct, existence of academy at region, kind of cinema with regard to possibilities and range of development in order with load factors 0.72, 0.64, 0.80 and 0.76 are of significant variables of environmental effect that influences demands for cinema. Besides, findings related to Figure 7 show that economical factors with coefficient effect of 0.55 and with mark $t=11.55$ on alpha level 0.01 is significant; so first theory of research is acceptable. To inspect second theory of research with respect to Figure 7 we can say that coefficient effect of cultural factors on demands for cinema was 0.39 and this coefficient effect with mark $t=4.8$ on alpha level 0.01 is significant; so the second theory of research is also acceptable. Coefficient effect of cultural

### Table 2. Descriptive findings including: Research variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
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<tr>
<td><strong>Gender</strong></td>
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<td><strong>Age</strong></td>
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<tr>
<td>Female</td>
<td>330</td>
<td>55</td>
<td>Under 15 years</td>
<td>10</td>
<td>1.7</td>
</tr>
<tr>
<td>Male</td>
<td>270</td>
<td>45</td>
<td>16-30 years</td>
<td>407</td>
<td>67.8</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td>31-45 years</td>
<td>119</td>
<td>19.8</td>
</tr>
<tr>
<td>None academic degree</td>
<td>40</td>
<td>6.7</td>
<td>46-60 years</td>
<td>59</td>
<td>9.8</td>
</tr>
<tr>
<td>Academic degree</td>
<td>560</td>
<td>93.3</td>
<td>Upper than 61</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td><strong>Five main variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>458</td>
<td>76.3</td>
<td>Economic factor</td>
<td>25.98</td>
<td>32.40</td>
</tr>
<tr>
<td>Unemployed</td>
<td>142</td>
<td>23.7</td>
<td>Social factor</td>
<td>21.19</td>
<td>19.62</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td><strong>Individual factor</strong></td>
<td>29.4</td>
<td>50.49</td>
</tr>
<tr>
<td>Single</td>
<td>322</td>
<td>53.7</td>
<td>Cultural factor</td>
<td>45.72</td>
<td>46.79</td>
</tr>
<tr>
<td>Married</td>
<td>269</td>
<td>44.8</td>
<td>Environmental factor</td>
<td>28.80</td>
<td>51.18</td>
</tr>
</tbody>
</table>
Table 3. Coefficient and significant levels of variables and tested research model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Load and Amount of t</th>
<th>Variables</th>
<th>Load and Amount of t</th>
<th>Variables</th>
<th>Load and Amount of t</th>
<th>Variables</th>
<th>Load and Amount of t</th>
<th>Variables</th>
<th>Load and Amount of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of related goods</td>
<td>.74</td>
<td>.84</td>
<td>Leisure time</td>
<td>.77</td>
<td>Monthly income</td>
<td>.81</td>
<td>Type of cinema</td>
<td>.70</td>
<td>Type of cinema</td>
</tr>
<tr>
<td></td>
<td>12.12</td>
<td>18.73</td>
<td></td>
<td></td>
<td>Income</td>
<td>13.8</td>
<td>regarding its facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly costs of cinema</td>
<td>.69</td>
<td>.81</td>
<td>Habits</td>
<td>.67</td>
<td>Household expenditure</td>
<td>.77</td>
<td>Degree of community</td>
<td>.76</td>
<td>Degree of community</td>
</tr>
<tr>
<td></td>
<td>11.33</td>
<td>16.85</td>
<td></td>
<td></td>
<td></td>
<td>15.6</td>
<td>development</td>
<td>15.4</td>
<td>development</td>
</tr>
<tr>
<td>Income</td>
<td>.53</td>
<td>.57</td>
<td>Medias</td>
<td>.65</td>
<td>Occupation</td>
<td>.57</td>
<td>Existence of Cinema in the</td>
<td>.72</td>
<td>Existence of Cinema in the</td>
</tr>
<tr>
<td></td>
<td>7.37</td>
<td>8.22</td>
<td></td>
<td></td>
<td></td>
<td>8.74</td>
<td>neighbourhood</td>
<td>13.3</td>
<td>neighbourhood</td>
</tr>
<tr>
<td>Ticket price of cinema</td>
<td>.72</td>
<td>.47</td>
<td>Cultural Training</td>
<td>.54</td>
<td>Education</td>
<td>.44</td>
<td>Existence of Academy in the</td>
<td>.64</td>
<td>Existence of Academy in the</td>
</tr>
<tr>
<td></td>
<td>11.62</td>
<td>8.20</td>
<td></td>
<td></td>
<td></td>
<td>6.33</td>
<td>region</td>
<td>10.4</td>
<td>region</td>
</tr>
<tr>
<td>TV program show time</td>
<td>.17</td>
<td>.46</td>
<td>Advertisement</td>
<td>.37</td>
<td>Age</td>
<td>5.82</td>
<td>Income classes</td>
<td>.82</td>
<td>Income classes</td>
</tr>
<tr>
<td></td>
<td>2.48</td>
<td>8.19</td>
<td>s</td>
<td></td>
<td></td>
<td>8.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents job</td>
<td>.84</td>
<td>.37</td>
<td>Belief</td>
<td>4.13</td>
<td>Gender</td>
<td>.10</td>
<td>Education</td>
<td>6.33</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>17.19</td>
<td>15.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Income classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance level</td>
<td>.000</td>
<td>Significance level</td>
<td>.000</td>
<td>Significance level</td>
<td>.000</td>
<td>Significance level</td>
<td>.000</td>
<td>Significance level</td>
<td>.000</td>
</tr>
</tbody>
</table>

factors on demands for cinema is also 0.40 with accounting mark t = 6.36; one can say that this amount of effect at level 0.01 is significant, so the third theory of the research is also acceptable. In addition to this coefficient effect of individual factors on demand for cinema is equal to 0.27 with coefficient effect mark t = 3.96; it is significant at alpha level 0.01. In this way the forth theory is also acceptable. Finally, all the findings show that coefficient effect of environmental factors on demands for cinema is 0.18; this amount of coefficient effect at level 0.01 is significant. So the fifth theory of the research is acceptable.

We can thoroughly say that all factors (economical, social, cultural, individual and environmental) are of effective factors on amount of demand for going to cinema, and with regard to amount of standard coefficients we should say that economical factors have the most and environmental factors the least influence on demand for going to cinema. With respect to LISREL outcome rendered on the table above, value $x^2/df$ is 1.19, $x^2/df$ smaller than 5 shows the suitable fitting of the model; also root of mean error of approximation square mean should be less than 0.1; in the rendered model this amount is equal to 0.01. Amount of elements GFI, AGFI, NFI and CFI should be more than 0.9 that in model under consideration is 0.93, 0.9, 0.93 and 0.92. Also the amount of RMR should be less than 0.05 which in the model under consideration is 0.025 with respect to indexes and outcomes of the LISREL software. One can say that the given data relatively coincide with the model and the given indexes show that the given model is totally
suitable and the experimental data coincide well with it. Results of research findings are shown in Figure 7 and Table 3.

**DISCUSSION AND CONCLUSION**

Findings of the research show that economical effects have great influence on demands for going to cinema. Research findings of Gambaro and Orietta (2009), Sisto and Zanola (2004), in this field show that there is a direct relationship between index of Individual income and their demand for cinema which is an increasing process. It means that if individual's income increases or decreases one unit, their demand for going to cinema at that direction with increasing coefficient also changes.
findings of Gambaro and Orietta (2009), Kim and Park (2010) have been in the direction of recent research and show that the ticket price and price of relevant goods have negative relationship with demand for going to cinema. Such that if ticket price changes, changes in demand for going to cinema would be in opposite direction and decreasing coefficient. Findings show that social factors also have significant effect on demand for going to cinema. Some of the researchers in this field emphasize on age as a social variable in demand for going to cinema. For example, Yamamora (2009) in his research has categorized people who demand for cinema between 20 to 60 years old. Other researchers also involved individual's age and job at their research. Findings of the research show that cultural factors have significant effect on demand for going to cinema. In this field Dewenter and Westermann (2005), Cameron (1988), believe that existence of rival media is a cultural factor that has influence on demand to go to cinema. Besides, in Iran also Azma (2007) and Fardrou and Sedaghat (2000) believe that free time has influence on demand for cinema. From scientists' point of view one of the most important reasons that people go to cinema is for fun and entertainment. Basically most scholars and cinema activists put more emphasis on entertainment as the most important role of cinema: cinema and watching movies is one of the most important choices for leisure times in modern societies that the lawmakers of public opinion with respect to all kinds of laws and possibilities encourage it. Passing free time in groups would bring health, individual and group happiness, thinking together, relationship with parents, relatives, friends, even other participants in this group happiness. On the other side, one of the effective factors in people's concern to cinema is the effect of watching video movies, lawful or unlawful. In other words, the problem is that Iranian cinema is confronted with the serious problem of rivalry with video that in this confrontation mostly video has been the winner. In addition this finding shows that individual factor also has significant effect on demand for cinema. In this field, findings of Gambaro and Orietta (2009), Kim and Park (2010) and many of researchers show that education and monthly income which are of Individual effects are influential on demands for cinema. One of the important environmental factors influencing demand for cinema is development of the region. In this field we can say that people living in regions which economically are stronger than others, have more possibilities for entertainment and coming and going to cinema; so they go to cinema more than others.

MANAGERIAL IMPLICATIONS AND SUGGESTIONS

According to the findings of this article, standard index for five major factors of demand for cinema indicate that among all of the factors, economical and cultural factors are of much more importance; therefore, officials and policy makers are advised that in their long term planning and developmental plans in cinema industry, to give priority to economical and cultural factors that have influence on demand for cinema. According to the research findings, among economical variables, comparative prices (price of the related goods) and the income related of the clients of cinema respectively are of more importance; consequently, any type of sudden and intense alternation in these factors can evoke audiences' sensitivity. Therefore, policy makers are advised that if they want to increase the price of ticket, this increase should be gradually and invisibly so that it does not lead to sharp and sudden decrease in demand for cinema. Among effective cultural variables on cinema demand, free time is of the most important ones, so having enough free time greatly influences the increase of demand for cinema. Therefore, if the governments try to provide more free time for people especially for the employees, the demand for cinema will be increased. As a result, policy makers by use of different types of media such as radio, TV, newspaper and things alike, can have constant and long term program in their work plan so that they can enhance the culture of going to cinema.

According to the findings of this research there is a meaningful relationship between media (such as satellite, internet and etc.) and demand for cinema; therefore, media-cultural policy making in Tehran by the related organs should be in the way that their movies can compete with programs of TV, satellite, video, home cinema and cinema industry should not be weakened by these programs. Otherwise, in long term cinema industry will be hurt. As the expenses of going to cinema such as ticket price and other additional expenses are of the effective factors of demand for cinema, it is recommended the governments to seriously support movie producers by giving some part of ticket expense and as a result due to social, cultural and educational aspects of this kind of movies they can help to control and decrease some social problems more actively. Confrontation of cinema with media (especially different international satellite channels) and also extreme production of visual productions in the last two decades has lead to reduction of demand for cinema. It is suggested that in order to motivate more audiences to use cinema productions, ask the producers to improve their products not only regarding their quantity but also their quality. According to the findings of the current finding the ongoing advertisement has no significant effect on demand for cinema. Therefore, considering the development of the recent propa-gatory technologies around the world, it is recommended that producers of cinema products use new and modern propagatory methods and beside traditional ways of advertising like on TV or Billboards around the city use modern ways of advertising in order to motivate the
audiences and increase their demand for cinema. Another finding of this research indicates that in the less developed areas of the city lack of enough development has decreased the demand for cinema in those areas. Therefore, it is suggested to the cinema investors to establish some mobile cinemas in some highly populated areas that do not have easy access to cinemas whether contemporarily or permanently, so that in this way they can answer to demand of these people for cinema and besides enjoy the great deal of financial benefit from the areas that are so profitable for investment. Also for the future researchers there are some other recommendations that will be proposed as follows: It is suggested to the researchers to study the effective factors on demand for cinema based on conceptual model of this research in other cities or countries and compare their results with the outcome of this project. In this project five major effective factors on demand for cinema have been specified. As some other factors such as political, behavioral and psychological factors may have potential impacts on demand for cinema, it is suggested to search about these factors and also the other unknown factors in the next researches. Due to the fact that additional expenses such as transportation and food expenses are of very effective factors on demand for cinema, it is advised to search about the way that these expenses affect the demand for cinema through some special researches. It is suggested that a similar research based on conceptual model be conducted throughout the country or big cities and its outcome be studied.

Research limitations

There are several limitations that should be considered when interpreting these results. First, survey data based on self-reports may be subject to social desirability biases, common method variance and response distortion due to ego defense tendencies were a concern. Second, the data were cross-sectional in nature and this limitation prevents the inference of causality. This allows us to analyze only a specific situation in time of the individuals, not their overall conduct over time; thus, future research should focus on a longitudinal study. Third, the sampling of the study imposed limitations as to the generalizability of the obtained results. We concentrated only on cinema audiences in Tehran city. Audiences from other province may supply different results. Furthermore, cautions should be taken while using the results in different cultures. It is important to note that readers should be cautious when generalizing the results to different cultural contexts.

Conflict of Interests

The authors have not declared any conflict of interests.

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