The study of the formation of consumer attitudes and intentions towards internal and external characteristics of fast food restaurants

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ABSTRACT: Nowadays, with the progress in science, technology, and industry, changes have taken place in people's lifestyles and the consumption of fast food has become common for different reasons. Owing to this, the present research was carried out in Tehran with the aim of understanding the consumption pattern of adolescents and adults and studying the differences in attitude between these two consumer groups. This research is a descriptive study carried out in Tehran using the clustering method with 384 participants. The data regarding the attitude of adolescents and adults were collected by a questionnaire, the validity and reliability of which were determined. The data were then analyzed using SPSS software, with Levene's test, T-Test and Pearson correlation coefficient. 49.5% of the participants were adolescents and the rest were adults. The findings showed that there is no significant difference between the adolescent and adult groups with regard to the internal and external characteristics of fast food, except for public brand image; however, there is a significant difference between the two age groups regarding attitude toward fast food. Moreover, the positive relation between customer satisfaction and internal and external characteristics of fast food and word-of-mouth intention was proved.

Key Words: Attitude; Competitive advantage; Customer satisfaction; Fast food; Social recognition; Word-of-mouth intention.

INTRODUCTION

One of the most effective factors on food patterns is collection of nutritious and cultural food habits of society members. These habits are formed at birth and in childhood by the parents of children, which consequently relate to circumstances that society provides. Therefore nutritious habits from one side are responsive to instinctual needs and physiologic desires and the other side is a cultural behavior. Nowadays along with scientific and technological development, life style has changed and we are witnessing that these cultural behaviors including those in nutrition has faded in society replacing with fast food. Fast food is defined as food which is prepared and served quickly. The term is usually referred to food which is sold in restaurants including sandwiches, hamburgers, cheeseburgers, chicken, fried fish and shrimp, hot dogs, French fries, chicken nuggets, all types of pizza, sausages and cold cuts.

For this reason we conducted a study to consider attitudes differences between adolescents and adults toward fast food restaurants.

Fast food spread and inclination of people to choose fast food, is now turned into important challenge between owners of fast food restaurants and health and nutrition experts specifically in industrial society. From one side point of view the expansion of the industry leads to the development of the country. However, The opponent side believes that the nowadays our lifestyle causes many problems and ends up with the feeling of having lack of time and making haste to do works, Problems that we are facing nowadays such as people with multiple part jobs, attraction of fast food productions are all reasons making people to eat fast foods. Hence eating fast foods is somehow inevitable among nutrition programs of families. On the other hand, widespread advertisement of fast food restaurant around city, attract every one toward these restaurants which resulting in changing Iranian taste from traditional foods to using fast foods. There is an increased inclination to eat fast foods between two age
groups of adolescents and adults, increasing problems like obesity for two groups especially adolescents. Aim of this research as mentioned above is to compare attitudes of adults and adolescents regarding eating fast foods. We also consider factors like brand, social recognition and competitive advantage which are failed to notice in previous researches.

**Research Goals**

Goal of this research is to identify consumption patterns of adolescents and adults toward internal and external features of fast food restaurants. We have also tried to identify behavior and attitude of consumers (adolescents and adults) toward fast food restaurants and through this we can help them to overcome their potential vulnerability against attractive factors of fast food. Furthermore such information can help fast food restaurants managers to better understand and meet the customers' desires that may lead to increase the long term profits of the restaurants.

**Theoretical Bases**

Fast food denotes food which is prepared and served quickly including all kinds of sandwiches, pizza, burgers and French fries. Fast food has come into the life circle of us since 1912 from America and ever since human beings was exposed to its negative health effects. After popularity of fast food among people along with increasing some diseases, researchers found out that the adolescents who eat fast food at least once a week, are exposing to diseases such as overweight and obesity. More comprehensive studies indicates that youngsters who got used to eating fast food are more vulnerable to obesity complications such as cardiovascular diseases (Ahmadzade, 2010).

Most of studies carried out regarding fast food inside Iran and especially overseas, fail to notice that using fast foods is inevitable in nowadays society; they just focus on fast food health complications and pay less attention on different attitudes among fast food consumers. One of such researches which consider attitude differences of fast food consumers carried out by Frank in Germany. The results of the research are as follow: Adolescents evaluate fast food more positively than adults. Competitive advantage on customer satisfaction and word of mouth intention of fast food restaurants is less effective among adolescents than adults. Fast food perceived price is more effective on customer satisfaction in adolescents than adults. Social recognition of fast food restaurants and word of mouth intention among adolescents is more effective than adults (Frank, 2012).

Another research is carried out by paeratakul et al., on the fast food consumption among US adults and children. In this research 37% of adults and 42% of US children eat fast food. According to this research, adults and children who ate fast food consume more amount of sodium, saturated fat and coke and less vitamin A, C, milk, fruits and vegetables than those who didn’t eat fast food (paeratakul et al., 2003).

Driskell et al. examine food habits among college men and women attitudes toward fast food restaurants. Sample size of this research was 226 people, in which 113 questionnaires were completed by men and the other 113 questionnaires were completed by women. Results of this research are as follow: Men consume fast food more than women. Men order coke more than women while women order more diet coke (in this research it was found out that women care more about their health than men). Women often go to fast food restaurants with family or friends to spend good time.

Numerous behavior factors in food habits of men and women students observed in this research which were changing in relation with gender (Driskell et al., 2006).

Another research has been carried out on the effect of fast food restaurants on overweight and obesity. In this research geographical positions of fast food restaurants were considered which indicates that there is a direct relation between student’s obesity and approximation of fast food restaurants to schools. Hence, policy to delimit access to fast food restaurants near schools can be effective on preventing student’s overweight (Currie et al., 2010). Another research carried out by Ozcelik & Ucar in Turkey shows that men prefer to go to traditional restaurants while women choose fast food restaurants. According to this research men and women prefer to choose fast food restaurants, because of appropriate price of food in such restaurants quick service and offering delicious food (Ozcelik & Ucar, 2008).

Some other researchers examined health complications of over consuming fast food in childhood. The results of the studies indicated that obesity is the most common complication among children with over consumption of fast food (Anderson & Butcher, 2006).
Other researchers examine attitudes and different opinions toward known brands of fast food (Priester et al., 2004; Parker et al., 2006).

Many studies have been conducted in recent years regarding the importance of fast food brands and way of introducing them to customers (Chimboza & Mutandwa, 2007; Suh, 2009). Importance of word-of-mouth intention among adolescents has been attracted the attention of researchers (Ennew et al., 2000; Gremler et al., 2001; Wirtz & Chew, 2002).

Saeed Mirshahi (2008) has conducted a research in applying the process of marketing studies in fast food businesses. He examined and evaluated the conflicting issues between customer and seller. He studied increase of fast food consumption and widespread advertisement of fast food restaurants during recent years in largest cities of Iran, warnings of health and nutrition experts regarding health complications of fast food in the form of marketing studies as an objective applied example.

**Hypotheses And Conceptual Model**

We have used of Frank framework (2012) in this research to develop hypotheses. This framework consists of a combination of 1ECSI model, which is the most comprehensive customer satisfaction model around the world, and additional model that is related to fast food restaurants. Figure 1 demonstrates this framework.

![Conceptual framework](image)

**Hypothesis 1:** there is a difference to evaluate productions and services between adolescents and adults.

Sub hypothesis 1-1: there is a difference between adolescents and adults regarding quality of food.

Sub hypothesis 1-2: there is a difference between adolescents and adults regarding nutritional value of food.

Sub hypothesis 1-3: there is a difference between adolescents and adults regarding quality of services.

**Hypothesis 2:** there is a difference between adolescents and adults regarding evaluating external features of fast food.

Sub hypothesis 2-1: there is a difference between adolescents and adults regarding public brand image.

Sub hypothesis 2-2: there is a difference between adolescents and adults regarding social recognition.

Sub hypothesis 2-3: there is a difference between adolescents and adults regarding competitive advantage.

**Hypothesis 3:** there is a positive relation between evaluating products and services and customer satisfaction.

Sub hypothesis 3-1: there is a positive relation between food quality and customer satisfaction.

Sub hypothesis 3-2: there is a positive relation between food validity and customer satisfaction.

Sub hypothesis 3-3: there is a positive relation between service quality and customer satisfaction.

**Hypothesis 4:** there is a positive relation between evaluating external features of fast food and word-of-mouth intention.

Sub hypothesis 4-1: there is a positive relation between public brand image and customer satisfaction.

Sub hypothesis 4-2: there is a positive relation between social recognition and customer satisfaction.

Sub hypothesis 4-3: there is a positive relation between competitive advantage and customer satisfaction.

**Hypothesis 5:** there is a positive relation between external features of fast food and word-of-mouth intention.

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1. European Customer Satisfaction Index
Hypothesis 6: there is a difference between adolescents and adults attitudes toward fast food restaurants.

**Collecting Information Tools**

Data of this research is collected by the use of questionnaire from fast food customers all around Tehran city. This questionnaire consists of two parts, the first part includes the related questions of research variables and the second part includes individual features of respondents. The questionnaire includes 32 items in order to evaluate determined variables of this research. In this questionnaire we used the Likert scale.

**Validity of questionnaire**

This study is performed with the aim of determining effective factors on attitude formation of consumers (adolescents and adults) in Tehran city. In order to achieve this goal, we have used the questionnaire which is designed by Frank framework. However, due to the lack of numbers of questions as each variable should be evaluated at least with three questions, the questionnaire is designed and validated by some management experts, in which CVR$^2$ coefficient is calculated according to replies of these experts for each question. Therefore, related questionnaire as a research data collecting tool has content validity.

**Reliability of questionnaire**

The questionnaire reliability of this research was calculated by Cronbach’s alpha which was 0.79 indicating the reliability of the questionnaire.

**SAMPLING METHOD**

Sampling method of this research is cluster sampling. In order to have customers with cultural and economic features in selected sample, first we divided Tehran city into 5 zones (East, North, West, South and Center) and in each zone we selected some fast food restaurants and conducted sampling. Then with the use of information gained from fast food restaurants managers, we estimated sample size. The estimated sample size then divided by sample size yielding number which resulted in a number that was the base for choosing sample members in random-systematic sampling method. This means that for every numbers of individuals (number equals to number yielded above) entered to the fast food restaurant we gave one of them a questionnaire.

**Analyzing Data**

Results gained from descriptive statistics shows that 50 percent (192 individuals) of respondents were male and 50 percent were women among which 49.5 percent were adolescents and 50.5 percent were adults.

**CONCLUSION**

First we examined the homogeneity and heterogeneity of variances by the use of Leven’s test, regarding adolescents and adults comments. If the level of meaningfulness is greater than error amounts of 0.05, we conclude the homogeneity of variance and while the level of meaningfulness is less than error amount of 0.05 we conclude the heterogeneity of variance. As you can see in table 1, in hypotheses of 1,1-1, 1-3, 2, 2-3 and 6 the meaningfulness level is greater than error amount of 0.05, thus we conclude the null hypothesis and homogeneity of variance, meaning that there is a homogeneity variance between adolescent comments and adults comments. Then we used the comparison of mean relating to homogeneity of variance. For this purpose we used two independent samples of T-test for comparing the mean of adolescents and adults comments (results are shown in table 2). According to T-test if the level of meaningfulness is greater than error amount of 0.05 we conclude equality of means and if amount of meaningfulness level is less than error amount of 0.05 we conclude inequality of means (if absolute of T statistic is greater than 1.96 we conclude the inequality of means) in hypotheses of 1, 1-1, 1-3, 2 and 2-3, the amount of meaningfulness level is greater than error amount of 0.05 (amount of T statistic is less than 1.96), therefore, we conclude null hypothesis meaning equality of the means, which means that there is no meaningful difference between adolescents and adults comments regarding the evaluating productions and services, food quality, service quality, evaluating external features and competitive advantage. As a result, the hypotheses 1, 1-1, 1-3, 2 and 2-3 are validated, but in hypothesis 6, the level of meaningfulness is less than error

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2. Content validity ratio
amount (absolute amount of T statistic is greater than 1.96) and therefore the hypothesis meaning inequality of the means is concluded which means that there is meaningful difference between adolescents and adults comments regarding attitude. That means the hypothesis 6 is validated. In hypotheses 1-2, 2-1 and 2-2, the level of meaningfulness is less than error amount of 0.05, then the hypothesis meaning inequality of variances is concluded and thus we use the mean comparison relating to heterogeneity of variances. In hypotheses 2-1 and 2-2, according to T-test the level of meaningfulness is greater than error amount of 0.05 (absolute amount of T statistic is less than 1.96) then null hypothesis meaning equality of the means is concluded, meaning that there is no meaningful difference between adolescents and adults comments regarding production value and social recognition. Sub hypotheses of 2-1 and 2-2 are not validated, however, in 1-2 hypothesis according to T-test the level of meaningfulness is less than error amount of 0.05. Thus, the hypothesis meaning inequality of the means is concluded which means that there is meaningful difference between adolescents and adults comments regarding the public brand image. Therefore, sub hypothesis 1-2 is validated.

<table>
<thead>
<tr>
<th>Conclusion</th>
<th>Hypothesis confirmation</th>
<th>Meaningfulness level</th>
<th>Variable</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\sigma_1^2 = \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/116</td>
<td>Evaluation of products &amp; services</td>
<td>1</td>
</tr>
<tr>
<td>$\sigma_1^2 = \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/134</td>
<td>Food quality</td>
<td>1-1</td>
</tr>
<tr>
<td>$\sigma_1^2 \neq \sigma_2^2$</td>
<td>$H_1$</td>
<td>0/017</td>
<td>Food value</td>
<td>1-2</td>
</tr>
<tr>
<td>$\sigma_1^2 = \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/433</td>
<td>Service quality</td>
<td>1-3</td>
</tr>
<tr>
<td>$\sigma_1^2 \neq \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/129</td>
<td>Evaluation of external features of fast food</td>
<td>2</td>
</tr>
<tr>
<td>$\sigma_1^2 \neq \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/030</td>
<td>Public brand image</td>
<td>2-1</td>
</tr>
<tr>
<td>$\sigma_1^2 \neq \sigma_2^2$</td>
<td>$H_0$</td>
<td>0</td>
<td>Social recognition</td>
<td>2-2</td>
</tr>
<tr>
<td>$\sigma_1^2 = \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/603</td>
<td>Competitive advantage</td>
<td>2-3</td>
</tr>
<tr>
<td>$\sigma_1^2 = \sigma_2^2$</td>
<td>$H_0$</td>
<td>0/284</td>
<td>Attitude</td>
<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Conclusion</th>
<th>Hypothesis confirmation</th>
<th>T-Test</th>
<th>Meaningfulness level</th>
<th>Variable</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
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<td>0/790</td>
<td>Evaluation of products &amp; services</td>
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</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
<td>$H_0$</td>
<td>-1/431</td>
<td>0/154</td>
<td>Food quality</td>
<td>1-1</td>
</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
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<td>0/766</td>
<td>0/445</td>
<td>Food value</td>
<td>1-2</td>
</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
<td>$H_0$</td>
<td>0/965</td>
<td>0/336</td>
<td>Service quality</td>
<td>1-3</td>
</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
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<td>0/476</td>
<td>0/635</td>
<td>Evaluation of external features of fast food</td>
<td>2</td>
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<tr>
<td>$\mu_1 \neq \mu_2$</td>
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<td>2/126</td>
<td>0/035</td>
<td>Public brand image</td>
<td>2-1</td>
</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
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<td>-0/949</td>
<td>0/344</td>
<td>Social recognition</td>
<td>2-2</td>
</tr>
<tr>
<td>$\mu_1 = \mu_2$</td>
<td>$H_0$</td>
<td>-0/695</td>
<td>0/488</td>
<td>Competitive advantage</td>
<td>2-3</td>
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<tr>
<td>$\mu_1 \neq \mu_2$</td>
<td>$H_1$</td>
<td>2/370</td>
<td>0/019</td>
<td>Attitude</td>
<td>6</td>
</tr>
</tbody>
</table>

Hypothesis (1) along with its sub hypotheses and also hypothesis 2 along with its sub hypotheses, except 1-2, are not validated. These results are inconsistent with results of Frank research in Germany which is carried out in 2012, although in Frank research it was mentioned that the obtained results may be varied from country to country and cultural differences was introduced as the main reason for this variation.
In Frank research it was determined that there is a considerable difference between adolescents and adults toward fast food restaurants. In this research it was reported that all researches on fast food concentrated on internal features of fast food and the effects of external features were ignored. Frank explains this difference from educational viewpoint: adults have more knowledge and information in comparison to adolescents and adolescents regarding the acceptance and ignorance of health complications of fast food, who are usually deceived by visual and taste advertisements. Adolescents don’t realize false advertisement of fast food, because cognition gained in short time but learning takes longer time. In some extent this difference relates to the long development of executive function skills of brain which continues to develop during adolescence that enables an individual to use the existing knowledge. As cognitive development of adolescents are still not completed (especially executive function skills), cognitive processes and decisions are less inclined to be logical than adults. Hence, even if adolescents are aware of negative features of fast food, their evaluation may result in choosing short term joys of fast food instead of considering negative health complications.

However, the reasons of these hypotheses are not validated in Iran and that is most likely due to the differences in food patterns of society which includes set of habitual and cultural nutrition among Iranian people. Traditional food is still common among Iranian families. It is obvious that adolescents are more inclined to eat fast food than adults. Besides, adolescents are not dependent in our society and therefore variable price is not important for them. Since price relates to quality of production and services, thus, there is no meaningful difference in their opinion comparing to that of adults. Although, based on Frank research adolescents paid more attention to price than adults.

In order to evaluate relation between variables we used pearson correlation coefficient. If meaningful level was greater than error amount of 0.05 we concluded null hypothesis and if meaningful level was less than error amount of 0.05 we concluded one hypothesis. In hypotheses 3, 3-1, 3-3, 4, 4-1 and 5 meaningful level was less than error amount of 0.05 therefore we concluded one hypothesis meaning that there is a meaningful relation between variables. Also the amount of correlation coefficient indicates the positive correlation between variables. As you can see in table 3, these hypotheses are validated and they are consistent with ESCI model. ESCI model is the most comprehensive model of customer satisfaction, in which the perception of quality production, quality services, value, pre-buy expectations and public brand image are necessary for customer satisfaction. These hypotheses are also consistent with Frank research. However, in hypotheses 2-3, 2-4 and 3-4 meaningfulness level is greater than error amount of 0.05 and therefore null hypothesis is concluded that there is not meaningful relation between variables. Therefore, we conclude that there is not positive meaningful relation between these variables, and as a result, these hypotheses are not validated. These hypotheses are inconsistent with ESCI model and Frank research.

<table>
<thead>
<tr>
<th>Correlations coefficient</th>
<th>Hypothesis confirmation</th>
<th>Conclusion</th>
<th>Error amount</th>
<th>Meaningfulness level</th>
<th>Hypotheses</th>
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</thead>
<tbody>
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<tr>
<td>0.350</td>
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<td>0.05</td>
<td>0</td>
<td>3-1</td>
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<tr>
<td>0.045</td>
<td>H₀</td>
<td>Non positive relation</td>
<td>0.05</td>
<td>0/529</td>
<td>3-2</td>
</tr>
<tr>
<td>0.637</td>
<td>H₁</td>
<td>Positive relation</td>
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<td>0</td>
<td>3-3</td>
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<tr>
<td>0.146</td>
<td>H₁</td>
<td>Positive relation</td>
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<td>0/042</td>
<td>4</td>
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<tr>
<td>0.224</td>
<td>H₁</td>
<td>Positive relation</td>
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<td>0/002</td>
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<tr>
<td>-0.119</td>
<td>H₀</td>
<td>Non positive relation</td>
<td>0.05</td>
<td>0/096</td>
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<td>0.128</td>
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<td>0.05</td>
<td>0/074</td>
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<tr>
<td>0.319</td>
<td>H₁</td>
<td>Positive relation</td>
<td>0.05</td>
<td>0</td>
<td>5</td>
</tr>
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</table>

**Suggestions**

Mind theory explains that adolescents have full cognitive ability, but on the other hand, executive function theory explains that adolescents still have problems in using abilities to do especial works, because the developing of executive abilities of brain still continues during adolescence. Therefore politicians should understand that education alone will not be sufficient. There are other additional actions that should be considered, such as pressure on fast food restaurants and parents.

There is also cultural preventive actions regarding health issues of fast food and many experts believe that cultural domination practices have deepest effect. It is better to do culture building via national media, emphasizing decrease in eating fast food especially in programs for adolescents. Message from such programs may encourage adolescents not to eat fast food more than once a week.
As it is proved through aforesaid hypothesis, brand has great importance for adolescents. Therefore, we have to consider building brand in this zone in which branding is management, longitudinal and continuous action that should be followed correctly in order to succeed. Branding is not an easy task and it requires time and strategies. Strategies which are used in branding include consistency in advertisements, presenting services to customers and public relations.

This research is conducted over Tehran city, it will be useful to carry out in other counties and provinces of Iran and compare results obtained.

REFERENCES


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