THE STUDY ON THE EFFECTS OF ENVIRONMENTAL QUALITY, FOOD AND RESTAURANT SERVICES ON MENTAL IMAGE OF THE RESTAURANT, CUSTOMER PERCEIVED VALUE, CUSTOMER SATISFACTION AND CUSTOMER BEHAVIORAL INTENTIONS: (CASE STUDY OF BOROUJERD'S RESTAURANTS)

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Abstract
The purpose of this study is to evaluate the impact of environmental quality, food and restaurant services on the mental image of the restaurant, customer perceived value, customer satisfaction and customer behavioral intention. This research is applied research. The research method is descriptive-survey and for obtaining purposes of this study, and for collecting data, a questionnaire was used. Information and data obtained through the questionnaire consisted of 29 questions that have been approved by the teacher advisors, statistic society consist of customers of Boroujerd’s restaurants. Structural equation has been processed through software (LISREL). Collected data in the form of two parts: descriptive statistics (frequency tables and graphs) and inferential statistics (using structural equation modeling techniques to confirm or reject hypotheses using Lisrel) reviewed and analyzed and present the final results. This study consisted of six hypotheses. Results for the six hypotheses restaurant quality (Physical environment, food and service) had a positive impact on the image of the restaurant and the hypothesis has been confirmed. Restaurant quality (physical environment, food and services) have a positive effect on customer perceived value and this hypothesis has been confirmed. Mental picture of the restaurant had a positive effect on perceived value and customer satisfaction, and this hypothesis has been confirmed. Customer perceived value had a positive effect on customer satisfaction and this hypothesis has been confirmed .Customer satisfaction has a positive impact on behavioral intention, and this hypothesis has been confirmed.

Keywords: Physical environment, mental Image, customer perceived value, customer satisfaction, perceived value, behavioral intentions

Introduction
Today, the focus of all service organizations including restaurants focused on what the future demands of the customer service, the customer service. Successful restaurants in the world have found that customer satisfaction depends on response to his demands so restaurants are trying to provide quality service in valuable level and at affordable prices to its customers. Service quality and customer satisfaction are the core marketing priorities because they are prerequisites for
consumer loyalty, such as repeat purchase and express positive point everywhere (Han and Ryu, 2009). In today's highly competitive market, the key to gain competitive advantage in providing high quality services, which in turn, will lead to customer satisfaction (Han and Ryu, 2007). In the restaurant industry, customer’s use of food, physical environment, services and staff as key components for evaluating service quality restaurant generally. Appropriate combination of these should lead to customer perception of restaurant service quality, which ultimately leads to increased customer satisfaction and loyalty. Therefore, this study attempts to examine the impact of various factors of restaurant's quality of service on variables such as, mental image of restaurant and customer's perceived value.

Problem Statement
According to research in the field, mental image impact of organization on customer behavior especially in customer loyalty in services sections show that Perceived quality of the physical environment or the quality of service can have a significant impact on the image of the organization. This mental image can influence the perceived value and customer satisfaction and affect customer loyalty ultimately. However, little research has done to identify influence factors and consequences of corporate image of organization, especially in restaurants.

This research intends to take a step forward to fill the vacuum in this area with development of an integrated model of effects of three factors, the physical environment, and food and service type on mental image of restaurant, customer's perceived value, customer satisfaction and behavioral attitudes in the restaurant. Finally, the researcher hoped to several insights concerning the importance role of main three factors in restaurant's quality on customer perception compared to the mental image of the restaurant, customer perceived value, customer satisfaction and his loyalty towards the restaurant.

The main objective of this study was to evaluate the effect of environmental quality, food and restaurant services on a mental picture of the restaurant, customer perceived value, customer satisfaction and customer behavioral intentions in Brojerd. Finally, this research will answer the following question: Is the quality of the environment, food and restaurant services impact on the image of the restaurant, customer perceived value, customer satisfaction and customer behavioral intentions?

The significance of research
Steady increase in cultural and ethnic diversity in countries, causing a variety of different restaurants related to certain people in the food service market. Today, customers after finding restaurants with a special atmosphere are no longer willing to ignore weak service or bad environment of dining hall for good taste food. Have a great eating experience through a great atmosphere and excellent food and top quality content is created satisfaction. However it still has not empirically been assess whether customers in this field primarily care of food, restaurant environment or staff’s service. Since, understanding the role of subjectively perceived quality of service and mental image are important to customers in most cases that should be considered (Ryu and Lee, 2011, 202).

Despite the importance of quality food services, researchers and administrators have little information about how the combination of restaurant service quality (physical environment, food and service) that creates a mental image of the restaurant, the customer perceived value and customer satisfaction and customer behavior is also influenced. In general, as far as we are aware, previous studies of the relationship between the three dimensions of the resulting image quality restaurant services and restaurants are not reviewed. In addition, the combined effect of
these three prerequisites on customer perceived value has rarely been investigated although perceived customer value is a key element in customer satisfaction. However, little research has been done to examine the impact of various components of restaurant service quality on resulted variables, the mental image of the restaurant and customer perceived value.

**Research objectives**
Evaluation and analysis of: existing scientific theories on brand mental image, customer's perceived value, behavioral intentions and customer satisfaction and the factors influencing them.

**Practical purposes**
Identifying the type and extent of restaurant quality (physical environment, food and services) on the mental image of the restaurant;
Identifying the type and extent of restaurant quality (physical environment, food and services) to the customer's perceived value;
Identifying the type and extent of mental image effect of restaurant on customers perceived value;
Identifying the type and extent of mental image from restaurant on customer satisfaction;
Understanding the type and magnitude of the effect on customer perceived value on customer satisfaction;

**Research hypotheses**
First hypothesis: Quality Restaurant (physical environment, food and service) have a positive impact on the image of the restaurant.
Second hypothesis: Quality Restaurant (physical environment, food and service) has a positive effect on customer perceived value.
Third hypothesis: The mental image of the restaurant has a positive effect on customer perceived value.
Fourth hypothesis: The image of the restaurant has a positive impact on customer satisfaction.
Fifth hypothesis: Customer perceived value has positive effect on customer satisfaction.
Sixth hypothesis: Customer satisfaction has a positive effect on behavioral intention.
Conceptual model of research

Figure 1- Conceptual model of research, Source: (Roya, et al, 2012, 200)

Background of research

Recently, a number of researchers show that the food, the physical environment and service personnel should be considered as the main component of enjoy of restaurant in creating the perception of restaurant service quality in the restaurant industry (Han and Ryu, 2010). Chow et al. (2007) have analyzed the relationship between service quality, customer satisfaction and repetition purchase in the restaurants with full service. They have found three dimensions of service quality (i.e., quality of communication, physical quality, output quality). Namkung & Jang (2008) also conducted a study by use of medium to high scale restaurant to determine the key characteristics of quality customers are highly satisfied apart from unsatisfied customers significantly. They used of three quality factors (diet, physical space and services) to measure customer perceived quality in relation to the delight of the restaurant. In addition, Namkung & Jang improved Mehrabian and Rasel (1974) model by applying restaurant specific stimulus and specific emotion scale of restaurant. Also, Han and Ryu (2010) analyzed relationship between the three components of quality of behavioral (Food, service, and physical environment), cost, customer satisfaction and behavioral intention in typical restaurants. Affect the quality of the physical environment, food and service on mental image of restaurant, customer's perceived value, customer satisfaction and behavioral intentions (Ryu et al, 2012).

The purpose of this study is to provide an integrated model that analyze effect of dimension of quality of food services (physical environment, food and services) on the mental image of the restaurant, customer perceived value, customer satisfaction and behavioral intention in typical restaurants. Data have collected from customer’s reputable Chinese restaurant located in the southwestern United States of America through questionnaires. The two-step approach of Anderson and Garbing has used for evaluating structural models and measurement. Structural equation modeling showed that the quality of the physical environment, food and restaurant services is the main components of resturent mental image. The quality of the physical environment and food are main predictor of customer's perceived value. Furthermore, it was found that restaurant image is an original prerequisite of customer’s perceived value. The results showed that the customer’s perceived value is as the main component of customer satisfaction and customer satisfaction is main prerequisite of behavioral intentions (Ryu et al, 200.2012). New customers’ perception of personnel of contact, physical environment and the image trough intangible services (Nuyyan and lblans , 2002) The purpose of this study is to practical assess the impact of frontline employees and the physical environment on the mental image of the organization by new users and by use of hierarchical multiple regression analysis. The data are collected from users of two service
industries. Thus, the 272 new customers of a life insurance company and 238 passengers of a hotel have formed a population of statistical. Results showed there is a linear relationship exists between the images of organization and the front line staff, while there is a linear curve relationship with the physical environment. It also became clear that frontline employees and the physical environment interaction have significant effects on the image of the organization.

Dining environmental influences on behavioral intentions with respect to the perceived quality (Ha and Jang, 2012) the aim of this research understands the physical space in the local restaurants in order to study the impact of customer’s perception of the quality of services and the quality of the food. The study will also examine to adjust the perceived quality of the relationship between the perception of the physical environment and customer behavioral intentions. This study has used structural equation modeling for investigating the moderating effects of perceived quality and also analyzing of multiple regressions to determine the effects of specific environmental factors on perceived quality and behavioral intentions.

**The effect of customer satisfaction, customer trust on brand and special value of brand in loyalty behavioral and attitudinal of customer (Husseini and Ahmadinejad, 2008)**

In this study, Mr. Husseini and Mr. Ahmadinejad have examined the effects of customer satisfaction variables, customer trust on the brand and brand equity on the behavioral and attitudinal loyalty of customers in the financial services sector. The statistical population of this research is 162 people of Refah bank customers in different parts of Shiraz. Data were collected using questionnaires and variables correlation was tested by Pearson's correlation test and by multiple regressions. This research’s findings show there is a positive correlation between the variables of customer satisfaction, customer trust to the brand value and special value of brand with behavioral and attitudinal loyalty. (Hussein and Ahmadinejad, 42, 2008).

Prioritize service quality variables using Hysteresis model (Bidokhti et al, 2008). In this research we have tried to discuss the relationship between service quality and customer satisfaction in a comprehensive manner and for this purposes we have used of the Hysteresis model developed by Professor Galway in 1999. In this study has been studied the characteristics of banking services based on the model variables hysteresis cycle.

250 questionnaires were distributed among the clients of Melli Bank. This research is applied in terms of target and it is descriptive in terms of nature and it is a field study because survey was conducted as a Melli bank customers. Trustworthiness and maintain customer account information in banking, is the most important variable in this research findings.

Gilbert (2000) in his study examines customer satisfaction with regard to the team performance that is considered inner from the perspective of customer, it also stated that the team members indicators are considered better of the measures that the internal customers. Then effectiveness of team performance is measured with respect to this indicator. In the end, it is concluded that internal customer satisfaction measurement is a tool to measure the efficiency of the unit (Gilbert, 178, 2000).

A study of stimulus pledge and components of commitment and assessing the components of commitment on customer loyalty from the perspective of the customer in service sector companies in Eastern Europe and Central Europe has done by Cater & Zabkar (2008, 786).

Based on the findings of social psychology, in this study commitment is divided into three components of, affective commitment, and normative calculation. The findings of this study showed that the positive relationship is confirmed between trust and emotional and negative relationship between satisfaction and commitment calculation and positive relationship between satisfaction and normative commitment didn’t confirm. Based on the findings of this study, the
positive relationship between the emotional commitment and loyalty was confirmed and positive relationship between normative commitments with loyalty didn’t confirm and relationship between commitment calculations with loyalty wasn’t meaningful. Also, positive relationship between emotional commitments with normative commitments was confirming (The same source).

The research method
This research is applied for the purpose. The research method is a descriptive – correlation.

Methods of data collection
In the current research the library method is used for the formulation and organization of research literature and theoretical foundations and the field method is used to collect data needed to test the hypotheses.

Tools of collecting data
The data in this study were collected using a questionnaire. At the present study, questionnaire have been used in order to investigate the effect of environmental quality, food and restaurant services on the mental image of restaurant, perceived value, customer satisfaction and customer behavioral intentions (Roya al, 2012). The designed questionnaire is in two parts: descriptive, consist of 4 questions about investigation components (age, sex, education, marital status) and research questions, including 29 questions. Five-item Likert scale has been used for the measurement of indicators in which is the one of the most common scales that exists.

Samples
Statistical society of this research is consisting of customers dining restaurants in Borojerd that data needed for research is collected in this society.

Sample size and sampling method
In this research, the following formula is used as regards the structural equation techniques are used to analyze data:

\[ 5q \leq n \leq 15q \]
\[ 5 \times 29 \leq n \leq 15 \times 29 \]
\[ 145 \leq n \leq 435 \]

Due to the number question of questionnaires is 29 hence the minimum measure sample should be between the 145 and 435. So, for collecting data needed for research 300 questionnaires distributed that have been chosen according to 5 activated restaurants in Borojerd and 60 questionnaires have distributed with using sampling method (nonrandom). Finally, the numbers of questionnaires were completed and were 225 for using.

Data analysis method
In this research to examine relationships between the model component, structural equation modeling has used. Besides, investigator has benefited from structural equation model in order to analysis a confirmatory factor. Lisrel software has used for analysis hypothesis. Since, there are several independent in the present study variables which should be studied for their effect on the dependent variable, using structural equation modeling is necessary.

Goodness of fit tests
When a model has a good theoretical model, then it comes to be that this model fit be investigated with data that the researcher has collected so, some of the goodness of fit tests for this study data and used model is performed to assess the suitability.
A) Residual of square root mean (RMR)

The values obtained for these parameters using LISREL software is:

Root Mean Square Residual (RMR) = 0.056

It can be seen that RMR value for this research is 0.056 that is suitable. As regards value of this index is lesser than 0.08, it shows acceptable fit based on this index.

B) Normed Fit Index (NFI), Non-Normed Fit Index (NNFI)

According to Lai et al. (2009) thesis, values greater than 0.9 for the indices represents a very good fit of the model (Lai et al, 2009, 500).

Obtained values for these parameters are equal:

Normed Fit Index (NFI) = 0.89
Non-Normed Fit Index (NNFI) = 0.90

As regards Normed Fit Index is close to the standard value and Non-Normed Fit Index is accordance with the standard rates, it can be concluded that the fit of these two indexes that relative fit indices are compared are at an acceptable level.

C) Comparative Fit Index (CFI) and Incremental Fit Index (IFI).

According to Lai et al. (2009) values greater than 0.9 for the indices represents a very good fit of the model. Obtained values for these parameters are:

Comparative Fit Index (CFI) = 0.92
Incremental Fit Index (IFI) = 0.92

As regards both comparative fit index and incremental fit index are consistent with the standard value, it can be concluded that the fit of these two indices that compare relative fit indices are within acceptable limits.

D) Goodness of Fit Index (GFI)

According to Lai et al. (2009) values greater than 0.8 for the indices represents a good fit of the model (Lai et al, 2009, 500).

Goodness of Fit Index (GFI) = 0.79

As regards Goodness of Fit Index is consistent with the standard value, it can be concluded that research model has relatively acceptable fit.

**Data analysis and hypothesis testing**

The research hypotheses test has been done by use of structural equation modeling.

Figure 2 shows "t" coefficients for the measurement model (coefficient "t" for questions related variables) and the structural model ("t" coefficients, for the considered path in variables model).

Figure 2- t-statistics for the structural model and measurement
Figure 3 shows standardized coefficients for the measurement model (standardized coefficients for questions and related variables) and the structural model (path coefficients for the paths between the variables considered in the model).

**Figure 3- Standardized coefficients for the structural model and measurement**

**Research findings**
Based on the results of the first hypothesis test, proposed route by the data is supported and it is positive and significant \( (t = 4.87, \gamma = 0.35) \). So restaurant quality (physical environment, food
and services) have a positive impact on the image of the restaurant and the hypothesis has been confirmed. This research findings show that quality of food as the biggest factor is the mental picture of the restaurant, more than three components. Good food usually is as an essential component of customer satisfaction and repeat decisions of use of the restaurant industry that is consistent with result of the investigation of Ryu et al, (2012).

Based on the results of the second hypothesis, proposed route supported by the data, is positive and significant ($t = 4.08, \gamma = 0.41$). So restaurant quality (physical environment, food and services) have a positive effect on customer's perceived value and this hypothesis has been confirmed. The quality of the food in the restaurant that is in turn the most important factor affecting the mental image of restaurant has a positive impact on customer's perceived value, customer satisfaction, and behavioral intentions such as intention to return and oral promoting that is consistent with result of the investigation Ryu et al, (2012).

Based on the results of the third hypothesis, proposed route supported by the data and is positive and significant. ($t = 2.92, \beta = 0.28$). So mental picture of the restaurant had a positive effect on customer's perceived value and this hypothesis has been confirmed. Mental picture of the restaurant is not only good food but pleasant physical environment and good service affects it. Today, a mere gastronomic experience may not be enough to attract and retain customers in a restaurant. The findings show that a good environment and good service have a positive impact on customer perception of restaurant mental image. That is consistent with result of the investigation Ryu et al, (2012).

Based on the results of the fourth hypothesis, proposed route supported by the data and is positive and significant. ($t = 8.10, \beta = 0.88$). So mental picture of the restaurant had a positive effect on customer's perceived value and this hypothesis has been confirmed. Only good food is not leads to a customer’s perception of value a restaurant. Thus, the relationship between restaurant image and customer satisfaction is what the restaurant has a tendency to increase and it is consistent with previous studies conducted by Ryu et al, (2012) , Liu and War (2009 , Han and Ryu ( 2009).

Based on the results of the fifth hypothesis, proposed route supported by the data and is positive and significant ($t = 3.00, \beta = 0.16$). So customer’s perceived value has a positive effect on, customer satisfaction, and this hypothesis has been confirmed. In relation to the role of balancing customer's perceived value indicates that achieve customer satisfaction not only depend on restaurant ability for provide perceived value, but create a favorable image of the restaurant. So the relationship between perceived value and customer satisfaction is what the restaurant has a tendency to increase. That is consistent with result of the investigation Ryu et al, (2012).

Based on the results of the sixth hypothesis, proposed route supported by the data and is positive and significant ($t = 8.36, \beta = 1.11$).Therefore, customer satisfaction has a positive impact on behavioral intention, and this hypothesis has been confirmed. Good food usually is as an essential component of customer satisfaction and decision for use of restaurant again. That food quality is as the most important factor in customer satisfaction and behavioral intentions such as intention to return. That is consistent with result of the investigation Ryu et al, (2012).

**Conclusions and recommendations**
All three components (ie food, physical environment, service) restaurants as significant factors in the mental image of restaurant are important in prestigious restaurant of Brojerd. Restaurant manager needs to know the relative importance of each of these elements according to the image of the restaurant to better understand the distinct role of each individual component. Managers of restaurants, priority must be to maintain and improve food quality rather than cost savings to create a favorable image of the restaurant to make it stand out from the competition.

Restaurant managers must attention to effect of dining area and service for create a desired mental picture in customers. Specifically, this research shows that the physical environment is the second most important factor for creating a good mental picture of the restaurant. This finding suggests that the atmosphere of the restaurant is another highlight is a dining area. Therefore, restaurant managers must continuously plan, create, modify, and monitor physical environments to create a picture of the restaurant to create a distinct image of its competitors. For example, a restaurant can use a decoration in different style or music to communicate with their customers.

The findings of the present study indicate that managers need to pay more attention to their food that is the most crucial restaurant experience and influencing on customer perceived value and consequently customer satisfaction. Restaurants for meet customer needs should face customers with an exceptional blend of good taste, menu variety, and nutritional value, attractiveness of presentation, freshness, and fragrance. However, a nice and favorable atmosphere, good service has an important impact on the perceived customer value of a restaurant.

The findings show that beneficial consequences for restaurants to accomplish a balance or focus are three components of service quality restaurant. The results can be used in prioritization of limited resources in raising have restaurant experience and creating a pleasant environment for customers, would be very useful. Especially, restaurant must act in order to create a favorable image of the restaurants and in turn on customer's perceived value and three components of service quality of restaurant (the food, the physical environment, and services).

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