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A Research Proposal: The Effects of Restaurant Environment on  
Consumer Behavior

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**Abstract**

The purpose of this research proposal is to investigate the effects of restaurant environment on consumer behavior. Five journals that are relevant to the relationship between restaurant environment and the behavioral intentions of consumers are delved into this paper. The self-administered questionnaires will be distributed to patrons in ten selected middle and upscale full-service restaurants. Data collection will be constructed through tables and charts that are useful in obtaining a more comprehensive result. Restaurants will be able to use this research proposal to find the appropriate ways to improve consumers' satisfaction and also to increase profits.

*Keywords:* restaurant environment, atmospherics, consumer behavior, effects

### **Statement of Problem**

What appeals to consumers' preferences are not only food and beverages, an enjoyable dining environment also matters. Increasing attention is being paid not only to pricing and the merchandise itself, but also to the provision of a pleasant and possibly exciting, shopping atmosphere (Baker, 1986; Baker et al., 1992; Dawson et al., 1990; Sherman et al., 1997; Sherman & Smith, 1986; Tai & Fung, 1997). Further, academic interest in how atmospherics influence consumer behavior has grown following the Kotler's article (1973).

There are a large number of studies which focus on the influences of store environment on consumer behavior in the retail world, but only a few studies explore the influences of atmospherics on consumer behavior and satisfaction in the hospitality industry, especially that of the restaurant business. Although some researchers have conducted surveys to investigate the effects of some dimensions of atmospherics, the number of studies that summarize all the influences of dimensions on consumers' behavior are insufficient. The present study just summarizes those influences, so restaurant owners and managers can find this study meaningful.

#### *Research questions*

What effects does restaurant environment have on consumer behavior?

Will different consumers' behavioral intentions be influenced by different dimensions of atmospherics in restaurants?

## **Literature Review**

### **Environment and Atmospherics**

According to Kotler (1973) the influence of atmospherics in marketing contexts is based on the premise that the design of an environment through a variety of means, including lighting, layout, sounds, colors and temperature could stimulate perceptual and emotional responses in consumers and affect their behavior. Bitner (1992) distinguished three dimensions of atmospherics that she called the SERVICESCAPE: ambient conditions, spatial layout and functionality, and signs, symbols, and artifacts.

Ambient conditions are the intangible background characteristics that tend to affect the non-visual senses and may have a subconscious effect on consumer. Bitner (1992) stated that ambient conditions refer to the background characteristics of the environment, such as temperature, lighting, noise, music, and scent. As for music, Milliman (1986) reported that the tempo of music in a restaurant affected the time that people spend there, such as individuals dining under the fast music condition spent less time at their tables than individuals dining under the slow tempo condition. Furthermore, an appropriate music can increase sales (Mattila & Wirtz, 2001; North & Hargreaves, 1998). Milliman carried out a research and found that groups dining under the slow music condition spent on average, 40% more on drinks than groups dining under the fast tempo condition. As for lighting, Baron (1990) showed that the subjects had a more positive effect on conditions of low levels of lighting compared to high levels of lighting. A relatively low levels of light had the high level of comfort, while the high levels of light had the low one.

Bitner (1992) stated that spatial layout refers to the ways in which machinery, equipment, and furnishings are arranged, the size and shape of those items, and the spatial relationships

among them, with functionality indicating the ability of those items to facilitate performance and the accomplishment of goals. A layout may have a direct effect on consumer's quality perceptions, pleasure, and excitement levels, and an indirect effect on the desire to return (Wakefield & Blodgett, 1999). For example, the locations of tables in restaurants have a tremendous influence on the overall experience of a customer. Table placement has the ability to transmit a sense of privacy, portray the functionality desired, and operate as boundary for the customer (Lin, 2004). Moreover, signs, symbols, and artifacts, which include signage, personal artifacts, decor, and other physical elements that serve as explicit or implicit signals that communicate with users (Biter, 1992).

However, Berman and Evans (1995) divided atmospheric stimuli into four categories: the store exterior, the general interior, layout and design variables, and point-of-purchase and decoration variables. According to their categorization, the exterior dimension comprises such elements as the storefront, the marquee, the entrance, the display window, and the building architecture. In addition, the effects of human variables on atmospheric perceptions also should be considered (Turley & Milliman, 2000).

Turley and Milliman (2000) reported that the human variable category comprises the consumer (customer characteristics and customer crowding and density), the employee (personnel characteristics and employee uniform), and privacy. The human variables generally could be divided into two areas: the influence of other consumers and the influence of employees on shopping behavior.

Nevertheless, it is difficult to control physical appearance of other consumers in the restaurant industry, only employee appearance as well as number and gender was used to assess the human variables. Meanwhile, the interactions between employees and consumers are not the

attributes of the tangible quality, so they are not considered as the elements of human variables in this study.

In terms of the employees, the more social cues (number/ friendliness/ appearance of employees) appear in the restaurant environment, the higher the consumers' arousal (Baker et al., 1992). Tombs and McColl- Kennedy (2003) argued that employees are related to the desired social density, which influences consumer affective and cognitive responses as well as repurchase intentions.

### **The Effects of Environment on Consumer Behavior**

In order to deal with the interaction between the environment and individual responses to environment stimuli, Mehrabian and Russell (1974) presented a well-recognized model in the field of environmental psychology. The M-R model was not initially used for consumer behavior studies, but it has been proved to be an appropriate way to analyze the influences of atmospherics on consumer behavior in different consumption settings (Donovan & Rossiter, 1982; North & Hargreaves, 1996; Ryu & Jang, 2007).

M-R showed that responses to an environment can be categorized as either "approach" or "avoidance" behavior. Favorable environments are stated to cause approach behavior, it includes the enhancement of satisfaction with task performed and the desire to stay, explore and communicate with others. Besides, spending and repeat purchase are also regarded as examples of the approach behavior (Chang, 2000; Donovan & Rossiter, 1982). However, unfavorable environment are stated to cause avoidance behavior, which is the opposite of approach behavior.

Furthermore, some researchers found that atmospherics directly affect the consumer behavior. The influence of a restaurant atmospherics on behavior intentions is mediated by emotions and perceived value (Liu & Jang, 2009). Nevertheless, the other researchers found that

physical environment did not affect the consumer behavior directly. Chang (2000) reported that physical environment had no significant on return intentions in a direct way; rather, its influence was found to be mediated through consumer satisfaction.

## **Methodology**

### **Design**

The purpose of the present study is to find out the effects of restaurant environment on consumer behavior. To obtain the primary data, the self-administered questionnaires will be distributed to patrons in selected restaurants as they are waiting for their checks or as they are getting ready to leave after meals. This method ensures that the patrons will give responses which can accurately reflect their evaluation of the dining experience. The questionnaire will measure participants' perceptions of the restaurant environment and their behavioral intentions.

### **Instrumentation**

In order to make sure most of the region's restaurant consumers can read and understand the questionnaire, it will be designed in English version. The content of the questionnaire will be divided into four different parts. The first part will measure participants' perceptions of the restaurant environment and atmospherics. It contains 10 attributes which reflect the dimensions of restaurant atmospherics. Furthermore, these attributes will be described as the statements that reflect patrons' perceptions of the environment and atmospherics. Then, there will be a five-point Likert scale range from 1 (strongly disagree) to 5 (strongly agree) to be selected as their responses.

The second part will be four questions that measure participants' dining satisfaction level. The sample questions would be: How satisfied are you with the ambient conditions in this

restaurant? How satisfied are you with the spatial layout in this restaurant? How satisfied are you with the service in this restaurant? In general, how satisfied are you with the dining experience in this restaurant? Then, there will also be a five-point Likert scale range from 1 (very dissatisfied) to 5 (very satisfied) to be selected as their responses to each question.

The third part will be three questions which measure participants' behavioral intentions. The sample problems would be: How likely will you return to this restaurant in the future? How likely will you recommend this restaurant to other people? How likely will you want to pay more next time? Each behavioral intention will be measured by one item, from 1 = "very unlikely" to 5 = "very likely". As for the last part, it will elicit relevant personal information, such as participants' age, gender, educational level, job, income and nationality.

### **Sampling and Data Collection**

In order to use a convenient sampling approach, the sample will consist of ten middle and upscale full-service restaurants which are chosen according to the "Yelp", an application used for finding nearby popular restaurants. All of the selected restaurants are located in Rhode Island, and the average check for each consumer dining ranges from \$23 to \$65. These restaurants will provide a range of cuisines, including Western-style dishes, authentic Vietnamese cuisine, contemporary Japanese cuisine, and innovative Chinese fusion foods. Participants are voluntary and will be selected from all the consumers in selected restaurants. The same questionnaires will be distributed to them after obtaining informed consent from them. Meanwhile, survey will be conducted as consumers are waiting for their checks or as they are getting ready to leave after meals.

### **Data Analysis**

After finishing the survey, the frequency of each response will be computed and summarized. There will be several tables and charts constructed to assess the responses from participants. All the statistics tests will use the standard alpha level ( $\alpha = .05$ ). The analysis of the data will provide a general idea about consumers' attitudes to the restaurant environment. It would be fruitful for owners and managers of the restaurants to find appropriate ways to improve consumers' satisfaction and to increase profits.

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