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A Review on the Elements of Restaurant Physical Environment towards Customer Satisfaction

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Abstract

The physical environment of a restaurant is vital in building its image and attracting customers to visit and dine in. Attractive exterior and interior designs will entice the customers to visit the establishment and enjoy services provided. The purpose of this study is to identify atmospheric elements and figure out the most influential element of the restaurant physical environment towards customer satisfaction. Previous studies' literature can help fill a gap between research titles and existing studies. Most of the journals and articles are from reliable and trusted sources with sufficient information provided. Technological advancement has led to the vast amounts of data that have been collected, compiled, and archived, which are now easily accessible for research. As a result, utilising the existing data for research has become more prevalent, therefore, secondary-data analysis has been used in this study. The findings and analyses explore the environment of restaurants and the use of physical environment by restaurateurs through customers' reactions. The dimensions of facility aesthetic, ambience, lighting, layout, and table setting have been measured through customer satisfaction. It is found that lighting is the element that mostly and significantly influences customer satisfaction. Thus, restaurant operators should consider providing good lighting in their restaurants in order to gain their customers' satisfaction while they dine in and attract other potential customers to choose the respective restaurants as places for eating and socialising.

Keywords: Customer Satisfaction, Restaurant, Physical Environment, Atmospheric

Introduction

A physical environment of a restaurant has become one of the factors attracting potential customers while maintaining regular customers. When dining out at a restaurant, customers consciously or unconsciously experience the physical surroundings before, during, and after their meals. Moreover, while food and services provided meet the customers' expectations, the physical surroundings, such as décor, antiques, layout, and music, can influence overall customer satisfaction, the customers may respond to more than just the quality of the food and services provided when evaluating their experiences and building their attitudes towards the restaurant (Han & Ryu, 2009).

The influence of a physical environment has become significant over years for companies, marketing experts, and interior architects as it is a significant determinant for organisational differentiation and customers' experiences (Guzel & Dincer, 2018). The restaurant physical environment plays a crucial part in customer satisfaction and intention to return, which in turn leads to increased restaurant profitability. Nowadays, customers usually consume foods at home or as a dine-in at a restaurant. The practice of dining out has become a trend among workers, students, and even families (Ali & Abdullah, 2012). Customers having food at a restaurant are not only for savouring food but also enjoying memorable experiences (Han & Ryu, 2009). Having a meal in a good environment, spatial layout and functionality, signs, symbols, and artefacts is what customers expect (Githiri, 2016). The physical environment can determine and differentiate the type of restaurant a business operates and create a good perception in customers about the quality and services of the restaurant.

In this study, physical environments affecting respondents' satisfaction level when dining at a restaurant have been identified as a problem by (Tuzunkan and Albayrak, 2016). This is due to the fact that, if the environment and facilities provided are not up to date in terms of their trends, themes, layout, and outside view, the respondents will lose intention. They may experience a sense of dissatisfaction about food served and be uncomfortable with the environment (Han & Ryu, 2009), which impact food providers as they cannot generate income for their businesses. Besides, the change of season with good surroundings, such as a picturesque sea view from the restaurant, also has potential for the respondents to have a higher tendency to be satisfied by eating at the restaurant. Some restaurants, however, have not taken this matter as one of the opportunities to encourage more customers to dine in at their restaurants.

Today's restaurants have put on different layouts, themes, styles and designs, which affect customer satisfaction when visiting their premises. Previous studies on the restaurant's physical environment have highlighted the criteria of facility aesthetics (Han & Ryu, 2009), ambience (Ryu & Jang, 2007), lighting (Ariffin et al., 2017), layout (Han & Ryu, 2009), and table setting (Ryu & Jang, 2007) and pointed out that these elements may influence customer satisfaction. Therefore, this study has been conducted to review the vital elements of the physical environment in restaurants that affect customer satisfaction. Figure 1.0 highlights the proposed conceptual framework used in this study.

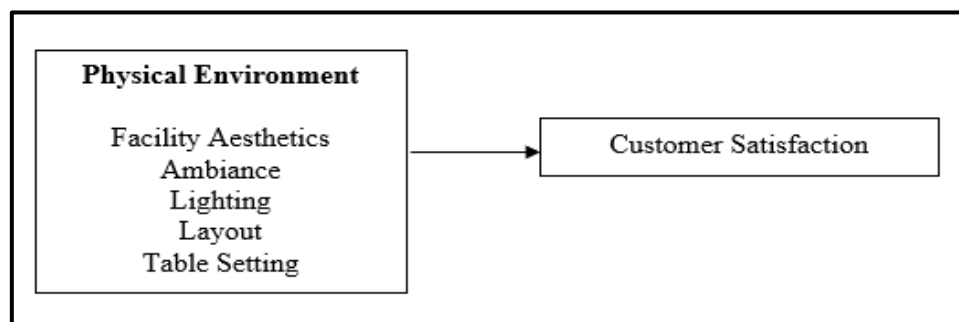


Figure 1: Conceptual Framework. Source: Adapted from Ryu and Jang (2008)

Literature Review

Every restaurant must find strategies to keep existing customers and attract new ones while remaining competitive and profitable. It is no surprise that, for various reasons, many

customers are increasingly resourceful in their search for restaurants that offer not only diverse amounts of distinctive cuisines at affordable prices but also provide tremendous experiences beneath their physical atmospheres.

Customer Satisfaction

Customer satisfaction can be defined as *“a judgement that a product, or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfilment, including levels of under or over fulfilment”* (Oliver, 1997, p. 13). In contrast, Day (1984, p. 497) has described satisfaction from a cognitive perspective as *“a post-choice evaluative judgement concerning a specific purchase selection”*.

Cetinsoz (2019) has added that consumer loyalty is an important marketing-strategy concept as it is necessary to satisfy customers' expectations and needs. Hence, the customers may not return to the same restaurant again if their expectations are not met as they are dissatisfied (Githiri, 2016). In the meantime, restaurants with atmospheric and environmental elements are found to have contributed significantly to customer behaviour. It has also been stated that the environmental factors observed have something to do with using sight, sound, scent, and touch. Furthermore, Hendriyani (2018) has mentioned that the physical atmosphere of a restaurant must offer several components of attraction to customers, which significantly impact their psychology and behaviour. In the same study, it has also been discussed that satisfied customers will tell their friends about their positive experiences, resulting in word-of-mouth advertising for the restaurant, which is proven to be an effective and trusted marketing strategy.

Physical Environment

For the restaurant's physical environment, the concept of DINESCAPE has been used by Ryu and Jang (2007), which focuses mainly on restaurant interiors but does not include external environments, such as parking lots and building designs, and does not include non-restaurant areas, such as toilets and customer waiting rooms. The DINESCAPE can be separated into six dimensions: facilities aesthetics, ambience, lighting, layout, table setting, and staff (Ryu & Jang, 2007).

In line with that, Bitner (1992) has stated that physical surroundings include all of the objective physical factors that restaurants can control to enhance their customers' (or employees') internal (e.g., cognition, emotion, and satisfaction) and external responses (e.g., staying, re-patronage, and approach). In her study, Bitner (1992, p. 58) has used the term 'servicescape' to describe *“the built environment or, more specifically the man-made, physical surroundings as opposed to the natural or social environment”*. In addition, Han and Ryu (2009, p. 489) have defined the physical environment as *“the man-made physical setting/conditions, which restaurateurs can control, as opposed to the natural environment”*.

Based on environmental-psychology studies, human behaviour is closely associated with a physical environment. From service providers' points of view, the physical environment and fair price are two essential factors that determine the degree of customer satisfaction and eventually increase customer loyalty (Ariffin et al., 2012). In the service sector, such as the restaurant industry, Bitner (1992) has demonstrated that the role of the physical environment is highly effective in influencing consumer tastes and creating the positive image of a

restaurant. Although food and services offered must be of the reasonably high quality, the degree of overall consumer loyalty and customer behaviour can eventually be determined by pleasant physical conditions, such as lighting, decoration, layout, and music (Han & Ryu, 2009).

Facility Aesthetics

Both architectural layout and interior decoration that contribute to a restaurant's neighbourhood appeal are included in facility aesthetics. The restaurant needs to have ideal paint, decor, and overall environment to create a good customer experience. Facility aesthetics includes different tables, drawings or paintings, plants or flowers, and ceiling and wall decorations, which may be the significant aspects of marketing relations affecting consumer reactions, such as attitudes, feelings, price perceptions, value perceptions, and customer satisfaction and behaviour (Ryu & Jang, 2007).

Similarly, the colour schemes of the walls of a dining area, ceiling and wall decorations, pictures and paintings, plants and flowers, tableware (e.g., glass and silverware), linens (e.g., table cloths and napkins), floor coverings, and quality furniture (e.g., dining tables and chairs) can all play an important role in delivering an good image and creating an overall aesthetic impression of a restaurant. Furthermore, these could also be the key environmental indicators for consumers to evaluate their overall experiences in the restaurant (Han & Ryu, 2009).

Ambiance

The invisible environmental factors, such as smell, sound, and temperature, are the elements that may affect senses and 'touch' customers unconsciously (Ryu & Han, 2011). In addition, Ryu and Jang (2007) have found that ambience significantly impacts customer satisfaction. Further studies by Kim and Moon (2009) have shown that environmental conditions correlate with the highest perceived level of service and the second highest association with satisfaction. Pleasant scent, pleasing music, comfortable temperature, low noise level, and adequate lighting, all harmonising with other elements in a restaurant, may result in customers having more favourable perceptions on the restaurant operation and evaluating their experiences more positively (Han & Ryu, 2009).

Lighting

Visual features, such as ambient and varied lighting colours, influence customers' perceptions of a restaurant (Shah, 2018). Ariffin et al (2017) have found that customer perceptions on the ambience, environment, and satisfaction can be affected by lighting in combination with other atmospheric elements. Lighting configurations and colours play a role in stimulating consumers' reactions and evoking their emotional responses. In addition, Shah (2018) has also mentioned that appropriate lighting could influence the customers' revisiting intentions. In the meantime, Ryu and Han (2011) have demonstrated a connection between lighting levels, human psychological responses, and approach-avoidance behaviours.

Meanwhile, Baron (1990) has shown that subjects have a more favourable impact in low lighting conditions than the high degrees of lighting. Ryu and Han (2011) have discovered that, at a relatively low level of light, the comfort level grows; however, the level of comfort declines as the level of light increases. Kurtich and Eakin (1993) have found that the type of lighting can affect one's understanding of the concept of an environment, change one's awareness of the physical, emotional, and psychological characteristics of the area, thereby impact one's

behavioural intention (Ryu & Han, 2011). Canny (2014) has also unveiled that improving the layout of interior decorating and using suitable lighting and colours may help develop customers' excellent dining experiences, induce their satisfaction, and positively affect their behavioural intentions post-purchase stage.

Layout

In service settings, a physical environment is an intentional environment that exists to meet customers' specific needs and wants, hence, the effective spatial layout of the physical surroundings is especially crucial (Bitner, 1992). Spatial layout refers to the way objects are positioned within that environment (e.g., machines, appliances, and furnishings).

A spatial layout that makes customers feel constrained may significantly affect the expectations of consumer satisfaction, levels of excitement, and their willingness to return (Ryu & Han, 2011). In a restaurant where adequate space is required for moving around and sitting comfortably, the spatial layout of the surroundings (e.g., tables and seating arrangements) would be extremely important to customers as they do not feel crowded because of the well-designed physical environment (Han & Ryu, 2009).

Table Settings

Table setting is a table design that looks elegant, high-quality, and prestigious, affecting customers. This is especially important in the design of luxury restaurant establishments as it affects the development of a concept of quality (Özdemir Güzel & Dinçer, 2018). For this reason, table materials used, such as glass, porcelain, silver, and tablecloth, should be of high quality (Ryu & Jang, 2007). Besides, the texture of curtains, tables, and floors, which encourages creativity, designs, and patterns, are essential elements for the restaurant physical environment. (Tuzunkan & Albayrak, 2016).

Methods

This study utilized secondary data collection with the primary goal to define the components of a restaurant's physical atmosphere for customer satisfaction. For this secondary data analysis, researchers reviewed past articles from 2007 till 2018 with regards to the area of interest from several sources such as journal articles, dissertations, and books. According to Johnston (2017), secondary data analysis is flexible and can be utilized in several ways. This is also supported by Doolan & Froelicher (2009) emphasized that secondary data is an empirical evidence with procedural and evaluative steps just as there are in collecting and evaluating primary data.

The data have been analyzed by using the content-analysis method. Content analysis is a research tool used within any given qualitative data to determine certain terms, themes, or concepts. The content analysis, however, does not involve the collection of people's data. Instead, the researchers have quantified and analyzed the presence, definitions, and relationships of the specific terms, themes, and concepts by using content analysis. Thus, all the information gathered for this analysis has been highlighted while the sources were revised and written as references as the data were being generated.

Listed below are the details of the articles reviewed in this study.

Table 1

Self compiled by researchers

Themes	Sources	Authors/Year
Physical Environment		
Facility Aesthetics	<i>Journal of Hospitality & Tourism Research,</i>	Ryu & Jang, 2007; Han & Ryu, 2009
Ambience	<i>International Journal of Hospitality Management, Advances in Economics, Business and Management Research (AEBMR),</i>	Ryu & Han, 2011; Ryu & Jang, 2007; Kim & Moon, 2009; Han & Ryu, 2009; Hendriyani, 2018.
Lighting	<i>Graduate Theses and Dissertations. International Journal of Innovation, Management and Technology.</i>	Shah, 2018; Ariffin, et., al, 2017; Ryu & Han, 2011; Baron, 1990; Kurtich & Eakin, 1993; Canny, 2014.
Layout	<i>Journal of Marketing, International Journal of Hospitality Management.</i>	Bitner, 1992; Ryu & Han, 2011; Han & Ryu, 2009.
Table Settings	<i>Journal of Tourism and Gastronomy Studies.</i>	Guzel & Dincer, 2018; Ryu & Jang, 2007; Tuzunkan & Albayrak, 2016.

Findings

Facility Aesthetics and Customer Satisfaction

The facility aesthetics applies to architectural design, interior design, and decor that contribute towards a sense of attractiveness of a dining environment. As facility aesthetics profoundly influences companies' revenues, many restaurants have begun to understand and use the aesthetics of facilities to construct unique restaurant themes. In attracting and pulling customer retention, physical architecture and décor can be crucial, which affect restaurants' string of successes. Other aspects of interior design, such as furniture, pictures and paintings, plants and flowers, and wall and ceiling decorations, may also enhance the perceived nature of a dining environment, generating emotions (pleasure and excitement), which are among the positive effects on consumers. Moreover, a proper frame enhances a painting and a suitable décor makes an artful meal more enjoyable. These factors have been supported by Ryu and Jang (2008) who have mentioned that, among the most important senses emphasised in upscale restaurants, facility aesthetics is the most significant antecedent of customer pleasure, arousal, and behavioural intention.

Ambience and Customer Satisfaction

The ambience is an intangible aspect that tends to unintentionally affect senses in a non-visual manner that impacts consumers. Music, scent, and temperature inside a restaurant are part of the ambience. This is especially important because some customers who dine in a restaurant may pay special attention to temperature as they may become chilly at certain

temperatures. In the interim, an unpleasant scent in the environment is likely to shorten the length of a meal and reduce food consumption. On top of that, noise and music also impact customers' moods in a restaurant. Hence, it is evident that the ambience is one of the physical environment elements influencing customer satisfaction in many restaurants. This is true as a study by Hendriyani (2018) has shown that the atmosphere significantly influences customer satisfaction. Further studies have also found that ambience-related factors have the most significant connection with the perceived quality of service and the second highest correlation with customer satisfaction. Besides, a study by Cetinsoz (2019) has also shown that ambient aroma affects a customer's mood, attitude, or subjective state of feelings.

Lighting and Customer Satisfaction

In restaurants, lighting can be one of the most important physical stimulants. Correct illumination lengthens and improves the comfort of eating. When dining with other diners, such as family and friends, the impact of lighting can be very significant. Based on the findings of previous studies, lighting is very supportive since the atmospheric effects are typically generated particularly during dinner (Hendriyani, 2018). As supported by Unal et al (2014), customers who visit a restaurant with a high-quality atmosphere pay attention to 'lighting' and 'ambience' in the restaurant's surrounding areas. Fine-dining restaurants, for example, usually have dim light so customers will be tempted to stay longer and enjoy their food. This is due to the fact that right lighting improves both the duration and enjoyment of dining. On the other hand, the bright illumination would decrease the length of the customers' time spent while warm lighting tempts them to stay longer and enjoy their food. In contrast, fast-food restaurants use bright lighting, causing customers to eat very fast. As proper lighting is essential, it has been recommended that restaurants provide lighting which is appropriate in order to suit customers who encounter age-related optical health problems.

Restaurant Layout and Customer Satisfaction

Layout refer to the arrangement of objects (e.g., machines, equipment, and furnishings) within an environment. A restricted layout influences directly consumers' expectations of quality and levels of enthusiasm, and impacts indirectly on their willingness to return. As supported by Ryu and Jang (2008) revealed that layout was a significant determinant of the level of pleasure in an upscale restaurant context. The positioning of tables in restaurants has a profound influence on clients' overall experiences. The placement of tables can express a sense of privacy, represent desired functionality, and act as a customer boundary. Meanwhile, materials impact the physical atmosphere of a restaurant too. These elements are especially important for highly educated customers as most of them have regularly attended restaurants for business purposes. Therefore, a layout is essential for clients with university degrees as restaurants offer them a place to schedule business meetings or socialise to make business contacts. Hence, restaurant designers and marketers must arrange an acceptable and convenient layout that provides the customers with privacy and protect them from in-house traffic, which should be taken into account, too.

Table Setting and Customer Satisfaction

Restaurant tables and chairs should be comfortable, long-lasting, and easy to clean. Customers choose booth sitting because it provides privacy and intimacy and protects them from being bumped by other customers or personnel in a busy area. Moreover, texture and pattern are also crucial aspects in the physical environment of a restaurant because the

texture and pattern of the drapes, tables, and flooring inspire creativity. For middle- or upper-class restaurants, the table setting is an important element of the physical environment. Some restaurants decorate their windows with a good texture of curtains using colours and patterns to create a warm atmosphere. It has been reported that table setting will affect customers with cognitive reactions (disconfirmation) and affective responses (emotions), which means that consumer behaviour can also be influenced by it (Hendriyani, 2018).

Conclusion

In conclusion, this study has achieved its objectives to discover the elements of the restaurant physical environment which impact towards customer satisfaction, and identify the most influential element of the physical environment of a restaurant towards customer satisfaction. The findings report that facility aesthetics, ambience, lighting, layout, and table setting affect customer satisfaction towards restaurants. Besides, lighting is the most impactful element that influences customer satisfaction. According to the lighting-element analysis, customers who enjoy their dining experiences at a restaurant are concerned with comfortable lighting, including the emotional effects that result from the existing lighting. This is because lighting is very supportive, particularly during the dinner time, since the atmospheric effects will be produced, which potentially makes the customers satisfied. Nowadays, people like teenagers, artists, and Instafamous, particularly, spend their time hanging out at restaurants where they can talk, socialise, gather, or have a party. As part of the event, they will also have such a good memory where they can take instagrammable pictures with their family and friends. To realise this, lighting is of their utmost importance, which helps them to snap good pictures of them. They will surely be satisfied because of the wonderful pictures taken, which will be rapidly spread on social media. Lastly, these findings would serve as a useful benchmark for restaurant operators to improve their restaurants' physical environment to gain more profits and remain competitive in the industry. It is also crucial that restaurant managers and marketers understand how the elements of the restaurant's physical environment affect customers' dining experiences, which signifies their successful management of the restaurants.

Future studies can be carried out empirically, approaching both customers' and restaurateurs' perspectives in addressing their opinions about elements of a restaurant's physical environment that influence customer satisfaction. Qualitative methods of interviewing respondents would enhance the findings of this area as many studies adopted the quantitative method by distributing questionnaires. On top of that, the samples of restaurants highlighting several types such as fine dining restaurants, casual restaurants, theme restaurants, and fast food, would accelerate the findings of past studies. Larger samples may also be place to study the pattern that arises in several geographical parts of Malaysia.

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