# RESTAURANT COLOR'S AS STIMULI TO ENHANCE PLEASURE FEELING AND ITS EFFECT ON DINERS' BEHAVIORAL INTENTIONS IN THE FAMILY CHAIN RESTAURANTS

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## ABSTRACT

*Colors have significant impact on our daily life and play an important role in enhancing an environment as well as forming impressions. Restaurants' servicescape color has received limited research interest in the past but it is becoming an important consideration in future servicescape design and construction. The aim of this paper is to investigate the effects of servicescape color on diners' pleasure feelings and behaviors in family chain restaurants in Malaysia. Data gathered through the convenience sampling of family chain restaurant customers using a structured self-administered questionnaire. This study found that color an aspect of servicescapes as stimuli that enhance pleasure feeling in consumption experience and in turn affected diners' behavioral intentions. Findings show that colors play persuasive roles in forming feelings and behaviors, and restaurant managers should focus on the color of servicescape as it plays an important role in creating positive consumer outcomes and building stronger customer relationships.*

*Keywords:*      *color; servicescape; pleasure feeling; behavioral intentions; family chain restaurants; Malaysia*

# INTRODUCTION

A restaurant is a place where customers satisfy hunger as well as experience excitement, pleasure, and a sense of personal wellbeing (Jones and Prine, 2002). Aesthetic factors (specifically colors) are elements that can contribute to the creation of a restaurant environment that provides a positive dining experience to visitors. Servicescape defines as the physical environment in which the service is assembled and in which seller and consumer interact (Bitner, 1992). Individuals' perceptions of a restaurant servicescapes tend to include many aesthetics elements such as the decor, style and furniture, artwork, and architecture. It is also evaluated by including sensory inputs such as color of the environment. All these elements contribute to the formation of customers' image of the restaurant and influence their evaluations. Therefore, in order to analyze the psychological impact of aesthetic elements in servicescapes, one must understand the many ways in which people perceive their surroundings (Gifford, 1988). One of the key determinants of restaurants' servicescapes attributes, which are of interest to the present study, is color. There are many facility aesthetics that exist within a restaurant that color could be considered as one of the most important attribute because of its impact in forming the first impressions by customers. According to Knutson (1988), it is usually easier to meet or exceed customer expectations when the first impressions have been positive. Colors have certain behavioral connotations and influence states of mind as well as the perception of some physical qualities of the immediate environment and, if used resourcefully in design of these environments, can influence the user's emotional and mental balance (Wells et al., 1979). Due to these reasons, this study aim to understand the importance role of colors to customers in dining environment.

Hence, this study attempts to extend the existing literature by demonstrating that complex variable such as color should be better defined and categorized prior to adopting them into research in order to gain more specific results in how this environmental cue have an impact on customer behavior and judgment. A number of criticisms of the analyses of sensory data that this study cites have been raised: (i) specific stimuli such as color application of sensory cues have not

been clearly discussed in food service industry, (ii) these studies also fail to consider the color attributes that occurs prior to measuring emotional response, and (iii) An important aspect of how color influence individuals' behavioral intentions through pleasure feelings have also been neglected. This study essentially focused on the customers experience based on the actual dining environment, as opposed to studies that empirically testing individuals' behavior in a controlled environment such as lab experiments or simulations. Carman's (1990) claim that when one dimension is particularly important to customers, it can be broken into sub-dimensions. Color and some ambience elements, such as lighting and music, are important in the restaurant business (Milliman, 1986; Mattila and Wirtz, 2001; Robson, 1999; Babin et al., 2003; Ryu and Jang, 2008). However, from a practical standpoint, color can also influence other dimensions, such as ambience. For instance, the color can congruently interact with lighting level to create a synergy in creating aesthetic atmosphere. Surprisingly, little research addresses how a store's predominant color affects consumer reactions (Bellizzi and Hite, 1992; Babin et al., 2003). It is still unclear how the application of various color schemes in restaurants affect customers' perceptions of atmospheric attributes, whether they vary in different customer segments or cultures, and whether the differences of perception among them are statistically significant or not. However, the relationships between color and repatronage intentions are not simple and direct but could also depend considerably on other mediating factors like pleasure feelings. Consequently, the specific objective of this study is; 'To determine the effect of color an aspect of servicescapes on diners' pleasure feeling and its relation to diner's behavioral intentions.' in the family chain restaurant sector in Malaysia.

## LITERATURE REVIEW

Diverse academic fields such as architecture, environmental psychology, retailing, and marketing have been paying increasing attention to the effect of physical environment on human psychology and behavior (e.g., Donovan and Rossiter, 1982; Turley and Milliman, 2000; Countryman and Jang, 2006; Liu and Jang, 2009; Kim and

Moon, 2009). The literature in those fields suggests that customer reactions to the physical environment are related to their emotional states, particularly in the hedonic consumption situation (Wakefield and Blodgett, 1996; Lucas, 2003; Newman, 2007; Ryu and Jang, 2007). While many types of service are utilitarian, or function-oriented, dining at theme restaurants, family chain restaurants, upscale restaurants, or consuming leisure services are usually hedonic or emotion centred (Wakefield and Blodgett, 1994; Ryu and Jang, 2007; Kim and Moon, 2009). In this respect, the servicescapes of a restaurant can either enhance or inhibit customers' feelings and emotions. In an effort to explain environmental psychology, Mehrabian and Russell (1974) described it as the direct impact of physical stimuli on human emotions and the effect of physical stimuli on a variety of behaviors. Their conceptual framework (hereafter, M-R Model) is based on the idea that the physical environment creates an emotional response, which in turn elicits either approach or avoidance behavior in regards to the physical environment (Figure 1).

**Figure 1: Mehrabian-Russell Model (Mehrabian and Russell, 1974)**

| Environmental Stimuli | → | Emotional States | → | Approach or Avoidance Response |
|---|---|---|---|---|

Mehrabian and Russell's (1974) suggests that environmental stimuli (S) lead to an emotional reaction (O) that, in turn, drives consumers' behavioral response (R) based on the stimulus-organism-response (S–O–R) concept. The model assumes that customers have three emotional states in response to environmental stimuli: pleasure, arousal, and dominance (Mehrabian and Russell, 1974). Pleasure, arousal and dominance are three dimensions of emotions that underlie any emotional responses to environmental stimuli (Mehrabian and Russell, 1974). Pleasure refers to the affective state of feeling good, pleased, happy or joyful. Arousal is the extent to which an individual feels stimulated, alert, excited or active. Dominance is the degree to which an individual feels influential, important or in control. These emotional responses result in two different behaviors: either approach or avoidance. Approach behavior involves a desire

for staying, exploring, and affiliating with others in the environment, whereas avoidance behavior includes escaping from the environment and ignoring communication attempts from others (Mehrabian and Russell, 1974).

Accordingly, the M–R model as presents in Figure 1, which incorporates the concepts of the physical environment, emotions, and response, is used as a theoretical foundation for the current section. Although various studies investigate the impact of the servicescapes on customers' behaviors in the services industry, few studies explore the effect of colors that comprise the servicescapes in the restaurant industry. Therefore, it is needful to extend the M–R model and understand how customers' emotions and behaviors vary according to their perception of servicescapes color attributes. This study assumes that the color attributes of servicescape should influence customers' approach-avoidance behavior (particularly behavioral intentions) toward the family chain restaurant experience through their emotional responses (specifically pleasure feelings) while in the restaurants.

## Color Attributes:

Color is a complex variable which includes its own independent characteristics. However, no empirical research yet developed on appropriate classification of color to better differentiate the diverse typologies in color schemes (Funk and Ndubisi, 2006). This study aims to investigate the impact of color on diners perceived pleasure feeling and behavioral intentions which synthesizes current practical research within a servicescapes. Funk and Ndubisi (2006) examined the effect of color on customers' product choice; they acknowledged five proportions of Color namely**;** attitude towards color, color attractiveness, color preferences, normative color and the significance of color. Attitude depicts a like or dislike for something (color in the present case). Therefore, consumers are more likely to buy items that come in the color they have a favorable evaluation (Funk and Ndubisi, 2006). Color attractiveness is the perception of the color traits of an individual or group, race, or type of people, as attractive or beautiful. Color preference refers to a person's color penchant; color preferences for particular settings are dependent on the situa-

tion and the underlying associations' people may have developed (Grossman and Wisenblit, 1999). Normative color refers to the color that is acceptable to people who are important to the customer or people who influence customers' behaviors. Finally, the rank order of preference for color' hues emerges with some degree of consistency and could be culturally different. Birren (1961) recommended several ideas for selection of color palettes for specific interiors. He suggested that bright and warm colors like, red, orange and, yellow tend to simulate the autonomic nervous system of man, including digestion, while soft and cool colors tend to retard it.

## Color, Pleasure feeling and Behavioral intentions:

As Bitner (1992) demonstrated, perceived physical environments elicit cognitive responses, influencing people's beliefs about a place, people, and products. In contrast, some environmental elements capture affective information. For instance, color could provide more than just cognitive information. Color actually influences how people feel (Boyatzis and Varghese, 1994). Research has shown that different colors stimulate different personal moods and emotions (e.g., warm, comfortable, inviting). Besides, Bellizzi and Hite (1992) determined that colors influence people's emotional pleasure more strongly than arousal or dominance. Therefore, as explained in the M–R model (Mehrabian and Russell, 1974), the color of service-scapes expected to affect customers' pleasure feeling, because pleasance are caused by customers' exposure to color stimuli. For instance, happiness may be caused by the exceptionally favourite color of environment. Accordingly, a study by Babin et al. (2003) showed that wall colors in a retail establishment affect customers' evaluations of the store. The authors also suggest that store color is important in understanding patronage behavior (such as willingness to return to the store and to deliver good word-of-mouth to fellow customers).

On the other hand, the degree of emotion such as pleasure-feeling (e.g., unhappy-happy) in a hedonic service encounter (e.g., family chain restaurant) may determine subsequent behaviors. Accordingly, in the retailing literatures, Donovan and Rossiter (1982) provide empirical evidence that the store visitors' pleasure feeling derived

from the servicescape influences retail outcomes such as the likelihood of returning to the store, the enjoyment of shopping in the store, and the willingness to talk to employees. Moreover, Donovan and Rossiter (1982), and Dube et al. (1994) examined the O–R linkage of the Mehrabian and Russell model and maintained that pleasure is a powerful determinant of approach–avoidance behaviors within stores, including spending more than anticipated. These studies indicated that pleasure influenced intended approach and actual approach behaviors. Ryu and Jang (2007) investigated atmospheric effect in upscale restaurants, their results indicated that both pleasure and arousal had significant effects on behavioral intentions, and pleasure appeared to have a stronger influence than arousal. Kim and Moon (2009) also found that customers' pleasure feeling emotion is positively related to revisit intentions. They suggest that the perception of the servicescapes directly influences customer emotions and in turn indirectly affects their behavioral intentions.

In an early landmark study by Guilford and Smith (1959; cited in Countryman and Jang, 2006), it was shown that colors that are bright and highly saturated tend to produce pleasant feelings. In retail atmospheric studies, it was confirmed that color has the ability to create pleasant feelings among customers (Bellizzi and Hite, 1992). Moreover, colors and color combinations affect perceptions and attitudes, and may cause certain behavioral differences (Robson, 1999). Kotler (1973) indicated that atmospherics such as sizes, shapes, noises, scents and colors could help create attention, convey messages, and create feelings that might increase purchase probability. The effects of such atmospherics have been demonstrated to persuade pleasure feelings and behavioral intentions. In addition, Wakefield and Blodgett (1999) emphasized that an attractively designed servicescapes could more consistently generate a positive influence on customers' feelings about the place. The results of Jang and Namkung (2009) also empirically support that emotions have a stronger positive indirect effect than the direct effect from atmospherics on behavioral intentions. Hedonic value shown to be related to revisit intention because perceiving value through emotions and affective experiences can be antecedents of approach or avoidance behavior (Donovan and Rossiter, 1982; Mehrabian and Russell, 1974; Ha and Jang, 2010). Because behavioral intentions have been

specified as a substitute indicator of actual behavior in marketing studies (Oliver, 1997), this study also used behavioral intentions as an outcome construct influenced by pleasure feeling. Behavioral intention in this study can be described as a stated likelihood to return to the restaurant, word-of-mouth and willingness to recommend the restaurant to family, friends, and others in the future (Oliver, 1997; Zeithaml et al. 1996).

## RESEARCH FRAMEWORK AND HYPOTHESES

The model describes the proposed linear relationships between the three construct that reflect color of servicescape as independent factor based on the earlier arguments above. In addition, pleasure feeling and behavior intention factors have been positioned in the framework to act as mediator and dependent variable. In accordance with these considerations, a total of two hypotheses were developed to test the model, which is shown in conceptual framework in Figure 2.

**Figure 2: the conceptual model of the study**

| Independent Variable | Mediator Variable | Dependent Variable |
|---|---|---|
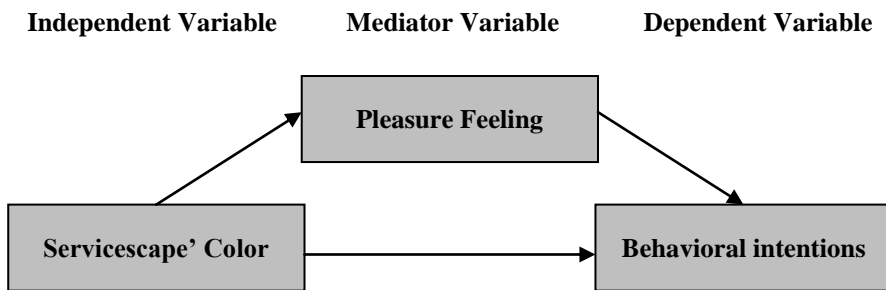


*Hypothesis 1:* There is a positive and significant relationship between servicescapes' color and diners' behavioral intentions in family chain restaurants.

*Hypothesis 2:* Pleasure feeling significantly mediates relationship between the servicescapes' color and diners' behavioral intentions in family chain restaurants.

# RESEARCH METHODOLOGY

*Data Collection:* Secondary sources were explored first to assess past researches conducted on color and customer feelings and behavior in the restaurant industry. The next stage involved gathering information via quantitative methods from restaurant goers. This step involved designing and pre-testing a questionnaire that was administered based on convenient sampling. The pre-test was instrumental in assessing the strengths and weaknesses of the questionnaire and in ensuring that all related variables were included. The scales used in this study were adapted from established existing measures that were applied and validated in previous studies (Oliver and Swan, 1989; Zeithaml et al., 1996; Funk and Ndubisi, 2006; Ryu and Jang, 2007, Kivela et al., 1999). Besides, a reliability analysis using Cronbach's alpha was performed to test the internal consistency of the all the measurements. An alpha of 0.7 or above is considered acceptable as a good indication of reliability (Nunnally and Bernstein, 1994). In this study, the first draft of the survey instrument was distributed to 35 convenient subjects, the result of pre-test shows that the reliability of all variables was more than 0.7. Thus, the scale of the constructs is highly reliable and considered to be very good. At this stage, several modifications were made to the instrument to remove items that did not seem to fit the context and to improve the flow of the questions. The final version was administered to a representative sample of Malaysian diners during the months of May and June 2009. A non-probabilistic (convenience) procedure was used for the sampling.

In fact, family chain restaurants (or casual dining restaurants) are full-service restaurants with more than one unit, where consumers can dress comfortably, bring the kids, have table service, the level of expectation and the price points are higher than quick serve establishments (Wade, 2006). Accordingly, family-chain restaurants in this research were defined as those family restaurants in which average per-person check was more than RM40.00. The chain has more than one branch in Klang Valley and offered table services. This segment was considered particularly appropriate for this study due to a variety of reasons, including features such as extended contact with the servicescapes and economic importance (Babin et al., 2005;

Kim et al., 2003; Kim and Kim, 2005; Harris and Ezeh, 2008). In addition, customer behaviors assessments are relatively easy to obtain on site, immediately following a service episode. The organizations that are included in this segment are readily identifiable, and they cross international boundaries. The family chain restaurants are especially attractive for such researches on customer behaviors, because it is a worldwide phenomenon and growing rapidly (Gilbert et al., 2004). Moreover, Klang Valley is a main business and transaction attraction and most mega malls that sited family chain restaurants are located in these area. Accordingly, chief executive officers of the family chain restaurants were contacted to introduce the study and requested permission for data collection. In fact, when the respective restaurateurs were approached about conducting the survey in their restaurants, some of them refused the request. The researchers then decided it was best to approach restaurateurs and restaurant managers who have allowed us to conduct the surveys in their restaurants. Besides, most of the managers agreed to limit for only 10 to 12 customers to be surveyed per restaurants during lunch time (Lunch time preferred in order to consistency of environmental factors and, also lunch time was convenient for the researcher rather than dinner time). Some of them also inquired for anonymity of restaurant name and logo. Respondents were approached as they finished the dining experience but before they leave their tables. They were informed that this survey was being conducted by a well-known local university, and that their responses would be completely anonymous. If the customer agreed to participate, they were provided a survey to complete, which was collected before they left the restaurant. Respondents were offered incentives for completing the survey. Approximately 500 restaurants' customers were approached but a total of 400 restaurants' customers participated in survey in this research. Only 384 surveys were usable for data analysis (77% response rate). The reasons of excluding the 16 respondents in this study are due to too many missing values and also unreliable answer given by the respondents along with uncompleted questionnaires.

*Measurement:* The questionnaire asked respondents to evaluate their experience in the restaurant. A total of nineteen measures were used to capture the underlying constructs. While the instrument used was

based on prior works, all of the items were adapted so that the items' content matched the industry and to suit the research objective requirements. Accordingly, seven items adapted from Funk and Ndubisi (2006) were developed to measure the consequences of color within servicescape. This section contains of two parts, first part is items related to 'color attributes' such as; color significance, attitude towards color, color attractiveness, normative color and, color preference towards the servicescape of restaurants on five point Likert scale (strongly disagree-strongly agree). While, second part directly asking respondents that which color hue make you feel pleased in the restaurant, and they were allowed to select more than one option between twelve colors like; white, yellow, orange, pink, red, green, blue, purple, brown, black and gray, gold, and silver, in two values of dark and bright. Besides, four items were developed to measure the emotion and feelings of respondents toward color of servicescape. 'Pleasure feeling' was measured using the four items suggested by Ryu and Jang (2007), on five point Likert scale using Semantic differential format, which represent unhappy–happy, disappointed–delighted, annoyed–pleased, and bored–entertained. Consequently, behavioral intentions as the ultimate dependent construct was measured with the four item scale developed by Zeithaml et al. (1996). The scale items were intentions to revisit the restaurant in near future, intentions to bring friends and family to visit the restaurant, restaurant would be the first choice over other ones and intentions to recommend the restaurant to friends and others on five point Likert scale (most unlikely-most likely). In addition, four questions were designed to gather customers' characteristics, demographics and social information.

## RESULT

Types of procedures for the analysis of data were employed in this study included; descriptive analysis, reliability analysis, Confirmatory Factor Analysis (hereafter; CFA), Measurement model and structural model (path analysis) under Structural Equation Modeling (hereafter; SEM).

In this study, respondents demographic are described in terms of gender, age, occupation, frequency of visiting the family chain restaurants and main purpose of visiting the restaurants. From the total of 384 respondents, over half (54.8%) of them are females while male accounts for about 44.9%. The age distribution of the sample is mostly biased toward the younger generation. Majority of the respondents fall between 21 to 35 years old (57.0%), followed by 36-50 age range (22.9%). In term of occupation, 97 (25.3%) out of 384 respondents are professional, followed by students (19.0%), managers (14.6%) and self-employed (14.6%). Respondents who visit a family chain restaurant once or more in a week made up the highest percentage that is, 45.6%, followed by once or twice in a month (38.8%). Besides, the main purpose of 59.6 % of them were meeting up with friends followed by celebrating occasions (25.5%) and business purposes (22.4%). There are some useful insights from the respondents' profile. One observation is young people between 21 to 35 years old are the main visitors of family chain restaurants during lunch. Even though most frequent respondents are professionals and managers, their main purpose of visiting family chain restaurants is to meet up with friends and clients as well as celebrating occasions. Hence, these give an opportunity to restaurateurs to review their servicescapes development and business strategy in order to enhance satisfaction and build a long term relationship with these categories of respondents.

Next, regression imputation predicts the missing value based on other variables which are not missing. In this sense, AMOS uses maximum likelihood imputation. In this study compared the output from an incomplete data model with output from a complete data sample and found ML imputation yielded very similar chi-square and fit measures despite the incomplete data model, because the number of missing data was really small. In fact, a critically important assumption in the conduct of SEM analyses in general, and in the use of AMOS in particular is that the data are multivariate normal (Byrne, 2010). Schumacker and Lomax (2006, cited in Garson, 2009) reveal that as a rule of thumb the data may be assumed to be normal if skew and kurtosis is within the range of +/- 1.0 (some say +/- 1.5 or even 2.0). In this study, the assessment results of normality in measurement model based on skew and kurtosis criteria

within the range of +/- 1.0 reveal no item to be non-normal. Skews were ranged from 0.001 to - 0.59 and kurtosis was ranged from 0.177 to -0.844. Then, Hair et al., (2010) stated that a multiple correlation of 0.9 between the independent variable and all others would result in a tolerance value of 0.19, and then possible problem of Multicollinearity. The results of correlation estimates between the constructs in measurement model showed that there were not any problems of Multicollinearity between the constructs. The correlation estimates between the constructs ranged from 0.60 to 0.67 (Figure 3).

In additions to aforementioned analysis, this study assessed the influence of servicescapes' color on diners' pleasure feeling and behavioral intention in family chain restaurants. To determine these relationships the measurement model, and structural equation model between these three constructs considered. The results of assess the measurement model showed that the data was good fit the model: $x^2$ (62) = 162.120, p = .000, $x^2$/ d.f. = 2.615, GFI = .941, AGFI = .913, CFI = .959, NFI = .935, TLI = .948, RMSEA = .065. The results of measurement model based on standardized factor loading indicated satisfactory construct validity. All the items of these three constructs (servicescapes' color, pleasure feeling, and behavioral intention) had high standardized factor loading on their underlying constructs (values ranged from .61 to .81), were all significant at 0.001. Moreover, the average variance extracted (AVE) was from all constructs, exceeded the minimum criterion of 0.50, indicating that the majority of the variance was explained by the constructs (See Table 1 and Figure 3). In addition, the alpha values for three constructs ranged from 0.822 to 0.871. As shows in the Table 1, each construct exceeded the minimum requirement of 0.7, ensuring adequate internal consistency.

## Table 1:  Results of CFA for Measurement Model

| Constructs and indicators | Standardized factor loadings | Cronbach's alpha | AVE |
|---|---|---|---|

| | | | |
|---|---|---|---|
| [Servicescapes Color] | | 0.851 | .537 |
| Color Significance | .72 | | |
| Color Attitude | .69 | | |
| Color Attractiveness | .70 | | |
| Color Normative | .76 | | |
| Color Preferences | .79 | | |
| | | | |
| [Pleasure Feeling] | | .871 | .625 |
| Item 1: Annoyed-Pleased | .74 | | |
| Item 2: Bored-Entertained | .78 | | |
| Item 3: Disappointed-Delighted | .83 | | |
| Item 4: Unhappy-Happy | .81 | | |
| | | | |
| [Behavioral intentions] | | .822 | .544 |
| Item 1: Intention to revisit in near future | | | |
| Item 2: Intention to bring fam-ily/friends in near future | .75 | | |
| Item 3: Restaurant will be my first choice over others | .83 | | |
| Item 4: Intention to recommend d to family/friends | .61 | | |
| | .73 | | |

$x^2$ (62) = 162.120, p = <.000, $x^2$ / d.f. = 2.615, GFI = .941, AGFI = .913, CFI = .959, NFI = .935, TLI = .948, RMSEA = .065

**Figure 3: The CFA Measurement Model of Servicescapes' Color, Pleasure feeling, and Behavioral intention**
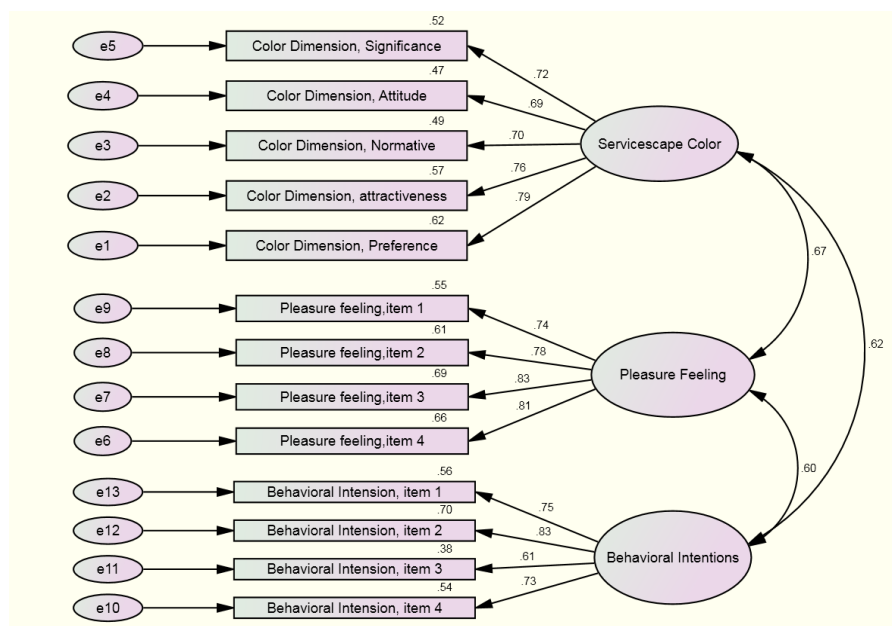
# Structural Equation Model of Servicescapes' color, Pleasure feeling, and Behavioral intention

To assess the influence of servicescapes' color on diners' pleasure feeling and behavioral intention in family chain restaurants, a structural path model considered. A path analysis conducted by latent variables to investigate the relationships between the variables. Results of the Structural path Model indicated that the data fit the model: $x^2$ (62) = 162.120, p = .000, $x^2/$ d.f. = 2.615, GFI = .941, AGFI = .913, CFI = .959, NFI = .935, TLI = .948, RMSEA = .065 (see Figure 4).

**Figure 4: The Path Model of Servicescapes' Color, Pleasure feeling, and Behavioral intention**
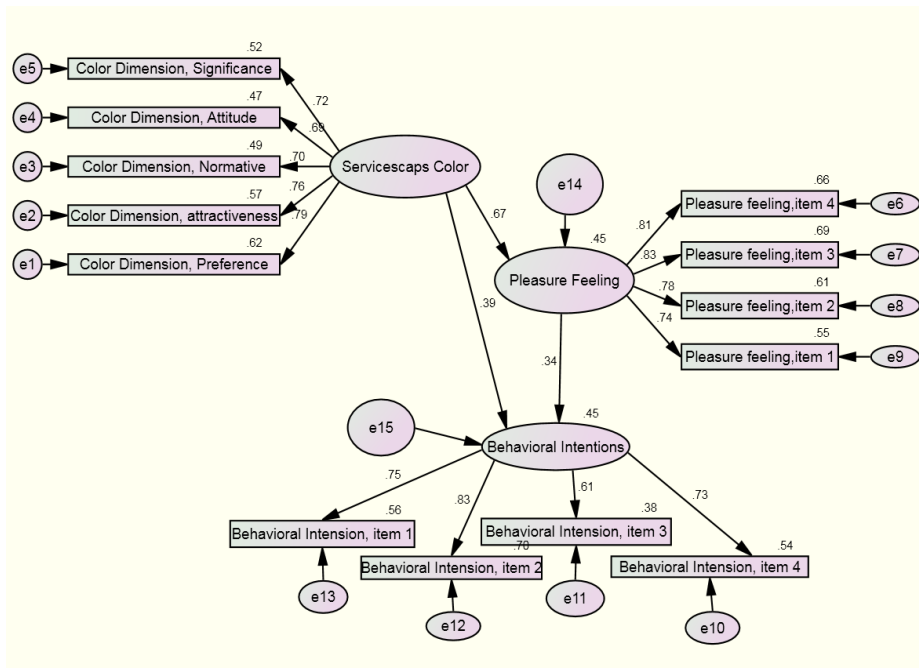


The regression weights and standardized regression weights for the hypothesized path model showed that of the three coefficients associated with the path linking the model's exogenous and endogenous variables, all are significant by the critical ratio test ($> \pm 1.96$, $p <$ .05) (See Table 2). Moreover the results of path model revealed that

45% of variance of pleasure feeling could be explained by servicescapes' color. The results also showed that 45% of variance of behavioral intentions could be explained by pleasure feeling in this path model.

**Table 2: Regression Weights and Standardized Regression Weights in the Hypothesized Path Model**

| Hypothesized Relationships | | Regression Weights Estimate B | S.E. | Standardized Regression Weights Beta | C.R. | P |
|---|---|---|---|---|---|---|
| Servicescapes Color | → Pleasure Feeling | .662 | .059 | .671 | 11.165 | *** |
| Pleasure Feeling | → Behavioral Intentions | .324 | .072 | .338 | 4.504 | *** |
| Servicescapes Color | → Behavioral Intentions | .371 | .073 | .392 | 5.100 | *** |

## Analysis of the Hypotheses Testing

<u>Hypothesis 1</u>

**H1** stated that there is a positive and significant relationship between servicescapes' color and behavioral intentions in family chain restaurants. Results of the standardized path coefficient showed that the data were consistent with the hypothesis by indicating a significant positive relationship ($B = .392$, Sig = <.000) between the variables. Therefore, hypothesis 1 was supported.

<u>Hypothesis 2</u>

**H2** stated that pleasure feeling significantly mediate relationship between the servicescapes' color and behavioral intentions in family chain restaurants. The results indicated that pleasure feeling partially mediates the relationships between the servicescapes' color and behavioral intentions. The results of direct model showed that servicescapes' color had a significant direct relationships with behavioral intentions ($\beta = .62$, Sig = <.000). The results of indirect model showed that the indirect relationship between these variables through pleasure feeling also was significant (servicescapes' color →

pleasure feeling → behavioral intentions) ($\beta$ = .69, Sig = <.000 and $\beta$ = .63, Sig = <.000, respectively). Then in overall model, pleasure feeling included as a mediator which reduced direct relationships of servicescapes' color and behavioral intentions while it was significant ($\beta$ = .39, Sig = <.000) as well. Thus the analysis result supports the partial mediation effect of pleasure feeling between servicescapes' color and behavioral intentions (see Appendixes).

The results indicate that pleasure feelings had assured impact towards the patronage intentions of customers. This means that, if the owners or managers would like to have their customers loyal to their restaurants, they should concentrate on how make them feel pleased. Improving the quality of color of physical environment of these restaurants will predictably increase the customer pleasure feelings and as a result increasing their intentions to revisit these family chain restaurants. Actually, the objective of the study was "To determine the impact of servicescapes' color on diners' pleasure feeling and their subsequent behavioral intentions." Consequently, as shown in Table 1 and 2, there is the positive influence of color attributes on pleasure feeling emotions that effect significantly on customer behavioral intentions. Therefore, the objective was achieved and hypothesis H1 and H2 was supported as the variable had P-value of less than 0.01, indicating that there is a significant influence of these variables towards family chain restaurants.

In addition, According to Crozier (1999), hue refers to what we have so far been calling color, red, green, yellow, etc. Previous researches have shown that different colors stimulate varying personal moods and emotions. In evaluating a servicescape, this visual sensory input includes forming a mental picture through cognitive processing prior to affecting individuals' personal moods and emotions (Lin, 2004). In this part of study, the frequency of colors that made the respondents of family chain restaurants feel pleased was analyzed. The descriptive statistics further show that the most pleased color picked by respondents for restaurant servicescape were white (35.2 percent), followed by brown (26 percent), then blue (24.7 percent), green (24 percent), yellow (22.9 percent), etc. According to Hemphill (1996), white color has been associated with harmony and cleanliness. Brown as the color of soil and woods has significant association for

naturalists and the association of blue with the sky and ocean, which are seen to be limitless, calm and serene, could be the reasons for its pleasances. Pleasances of the color green, was based on its association with forests, trees and nature. Yellow was stated as pleasances because of its association with the bright sun. Nevertheless, the interpretation of colors very much related to culture and religion (Singh, 2006). Due to this, colors may also affect different people in different ways. In restaurant colors can interestingly be a tool to increase the likelihood of customers staying longer and this will eventually lead to increase in their average checks. However, other aspects of the restaurant such as good food and excellent service must also be equally appealing to sustain customers.

## DISCUSSION, IMPLICATIONS AND CONCLUSIONS

There are some contributions of this study on color impacts. Color as one of the elements of servicescape is an important variable in facility aesthetics and it is a relatively easy way to alter the atmosphere of a restaurant environment. It is firstly because colors can effect on environment pleasances and a more pleasant atmosphere may have a beneficial effect on mood and emotion of customers. Second, changing the wall colors in existing environments is fairly easy and inexpensive, making it an interesting variable for restaurant industry to generate such a favorable effect. In comparison, service researchers have given relatively little attention to color aspects including the impact of it on emotions and feelings. Thus, one contribution of the current study is the examination of the role of color plays on diners' pleasure feelings and behavioral intentions in the family chain restaurants. On the other hand, consumer theories in food service industry are also limited in that it has been focusing largely on Western consumer cultures. The development of both theoretical relationships among constructs and the measurement scales used to assess those constructs has largely taken place in America and Europe (Babin et al., 2005). As the service function has become progressively more global in orientation, the importance of testing the measurement and theory regarding key concepts in other cultures is apparent. Thus, another contribution of comes from this study is test of the proposed model within a communal consumer culture from

Western cultures to the relatively communal Malaysian consumer culture.

Besides, this study contributes to the academic literature from a number of perspectives. For instance, this study proposed and confirmed the relationships among servicescapes color, diners' pleasure feeling, and behavioral intentions, and demonstrated that servicescape color are direct antecedents of pleasure feeling and behavioral intentions in the family chain restaurant setting. This study suggests that restaurant color is important in understanding patronage behavior. However, the relationships between color and patronage behavior are not simple and depend considerably on other moderating and mediating factors. Therefore, one of the important theoretical implications of this study is that pleasure feeling appears to moderate the strong relationship between the servicescapes color and behavioral intentions in the restaurants. Hence, the analysis result supports the partial mediation effect of pleasure feeling between servicescapes' color and behavioral intentions (servicescapes' color → pleasure feeling → behavioral intentions). Thus, restaurant managers should consider the functionality of the environmental color within servicescape, since its influential predictor of pleasure feelings and behavioral intentions. The results of this study will not only contribute to the awareness of the relationship between the variables but it will also direct managers in areas for quality improvement to increase customer behavioral intentions in family chain restaurants.

From a practical standpoint, color and its attributes as color significance, color attitude, color attractiveness, normative color and, color preference could cause pleasure feeling for customers in restaurants as well as an outcome for customers' behavioral intentions. Consequently, the implication for restaurateurs is that they should be aware of the perceived importance of colors and their interpretation in a particular geographic area. Restaurants' decor and wall colors can significantly affect their sales. Restaurateurs have an option of exploiting these differences to their advantage while laying out design for their restaurants. They should identify and deliver the right color to develop pleasant environments for their customers. Thus, restaurant managers could improve the probability of favorable be-

havioral intentions by making changes in atmospheric colors of restaurants. When managing this variable, restaurants must take into account that the services they offer are a special class of product, and they must therefore be treated as such. In this service, the establishment plays an important role. Primary differences in the aesthetic design of interiors are due to culture, history and tradition; they result from the styles and fashions of their locations and times, from the economic, social and other circumstances that influenced those styles and fashions. Environments in other cultures are often quite different from what they might be in Malaysian culture. Besides, facility aesthetic affects all the environmental components that may view in different ways by different persons in different situations. Baker et al. (1988) have demonstrated that a "prestigious atmosphere" leads to more favorable social impressions (e.g., pleasantness, attractiveness, and cleanliness) of a store than a "discount atmosphere". Hence, it is suggested that designs of the family chain restaurants in Malaysia should portray a prestigious image to attract customers. The way in which the dining environment is decorated should make customers feel that they are in a prestigious or elegant environment. An important implication for restaurateurs is that not only the layout and design need to be carefully design but the color of restaurant interiors and exteriors should be complementing a pleasant dining atmosphere to attract new customers and to retain the existing customers. Not only this is good for their business, but this could also reinforce the customer patronage intentions. Quality of the dining environment might have to exceed expectations to generate positive emotions. Therefore, in a competitive business environment, restaurant managers should continue to maintain and enhance the quality of servicescapes to a level that meets or exceeds customer standards. This includes providing additional effects with differentiated atmospherics and service aspects.

There are some factors that restrict the study to further its objectives. The main limitation of this research was that the results of this study cannot be generalized to the whole population because of the convenience sampling procedure or non-probability sampling method. The sample was drawn from restaurants in Klang Valley area in Malaysia only and was represented by a convenient sampling of 400 diners which is not statistically representative of Malaysian popula-

tion. Moreover, because of time restriction and management policy of some restaurants, this research only covered respondents of those restaurants that management has agreed to allow the researcher to collect data. Also, the design of the study allowed the results of the sample to be drawn exclusively from respondents who dined in these restaurants at the time only. Besides that, financial and time constraints were some factors which limit the determination of this study. Accordingly, further studies, should cover more areas such as other states and cities in Malaysia. Furthermore, in this study were assumed that everybody could see colors. However, Kaufman-Scarborough (2002; cited in Singh, 2006) indicated that in the US alone approximately 19 million Americans suffer from some form of color-blindness. The symptoms can vary from mere color confusion to a complete color-blindness, i.e. seeing in white, black, and shades of gray. Also, the eyes naturally turn yellow with age, changing people's perception of colors (Harrington and Mackie, 1993).

In conclusion, the need for customer-driven business strategies will increase considerably as the restaurant industry in Malaysia growing rapidly and must adjusts to new customers' demands and new emerging market conditions. Thus, it is not surprising that restaurateurs manipulate environmental cues to draw pleasurable experiences which in turn lead to favorable customer behaviors. Accordingly, this study provides appropriate and useful knowledge for the restaurateurs to better serve customers and suggesting them to focus not only on providing functional service quality, but also to make sure that the environment provides high levels of positive affect and pleasures. Finally, certain colors combined with other colors may be viewed as acceptable or even preferred, while the colors individually may be undesirable or considered ugly. Due to the significant influence of color on the overall impression of restaurants, potential guests should be surveyed and further research needs to be done on what colors and color combinations create more positive or favorable reactions by customers. Given the particular focus on impact of color on restaurant customer pleasure feeling and their behaviors has driven to believe this study represents a small step in a series of needed studies to understand the bigger picture in the family chain restaurants' environment. This research was intended to address spe-

cific issues related to servicescapes' colors and the findings could provide a foundation for future research related to this subject.

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