



# The Effect of Physical and Social Environments on Customer's Emotion and Word of Mouth Recommendations in Hotel Setting

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## **Abstract :**

*Purpose – The objective of this study is to investigate the relationship of physical and social environments, customer emotion and word of mouth recommendations in hotel setting.*

*Design/methodology/approach – We proposed hypotheses to examine relationships between physical and social environments, customer positive emotion and word of mouth recommendations. Survey data was collected from 110 hotels' guests in Bandung.*

*Practical implications – This study will provide information on factors that influence and affect consumers' positive emotion that lead to favorable word of mouth recommendations.*

*Research limitations – This study concerned only on physical and social environments in non three stars hotels.*

*Originality/value – Little research has been done on understanding the role of physical and social environments on guests' positive emotion and behavior in non five stars hotels in Indonesia.*

**Keywords** – *Physical environment, social environment, pleasure feeling or positive emotion, non-five stars hotels, word of mouth recommendations.*

## **INTRODUCTION**

Many studies have shown that physical environment, also has been conceptualized by a variety of scholars using several different terms such as servicescape (Bitner 1992), atmospherics (Kotler, 1973), service environment (Cronin, 2003).

With the increasing competition, service firms must improve their physical environments to attract customers. Physical surroundings are more important in service settings because customers as well as employees often experience the firm's facility (Bitner, 1992).

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Increasing attention has been paid to the influence of physical environment on human psychology and behavior in diverse academic fields, such as architecture, environmental psychology, retailing, and marketing (Donovan & Rossiter, 1982; Turley & Milliman, 2000). The literature in those suggests that customer reactions to the physical environment are more related to emotional states than cognitive perception, particularly in the hedonic consumption situation (Donovan & Rossiter, 1982; Turley & Milliman, 2000).

Although there is a substantial amount of research about the influence of the physical environment on human psychology and behavior, previous research has been focused to one or a few particular physical environmental elements. Limited studies about combine effect of multiple elements that make up the physical environment. Because physical environment is believed to be one of the most influential factor affecting a customer's psychological state and behaviors in hospitality service situation, there is a need to understand how customers' emotional states and behavior change based on their perception of environmental elements. Thus the current study tried to fill the research gap by assessing the effects of customer perceptions of physical environment and social environment on their positive emotion which could have an impact on their intended behaviors in the hospitality industry, particularly in non five stars hotels context.

The purpose of this study is to examine the relationships of physical and social environments in 3 stars hotels. This study could provide information for understanding the important role of physical and social environments in creating positive emotion or pleasure feeling and word of mouth recommendations.

## **CONCEPTUAL BACKGROUND**

### **Physical environment and customer emotion**

There are various terms found in literature to conceptualize the context of physical and non-physical aspect of service delivery. For instance the "physical environment" (Baker, 1987), "servicescape" (Bitner, 1992); "Store environment" (Roy and Tsai, 2003); "Service environment" (Cronin, 2003; Atmospheric experiences (Slåtten et al., 2009); "Dining atmospheric" (Liu and Jang, 2009).

Many studies have shown the important role of physical environment in determining customers' evaluation of service. Kotler (1973) conceptualized the term as atmospherics, as perceived via customer's five senses. Furthermore Baker (1986) included ambience and design factors and social factors (referring to employees and customers). Edvardsson et al (2005,2010) developed the notion of "experience room" that covers physical and intangible artefacts, technology and various social elements). Based on Edvardsson et al. (2010), customers can infer an anticipated

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service experience from the physical artefacts (e.g. lighting , décor and layout) of a pre-use environment e.g. website homepage, a showroom, or an information event.

Ambience has become a great concern for tourism and hospitality managers worldwide (Heide, Lærdal and Grønhaug,2007).Ambience will be more important for service organizations than for producers of tangible goods (Bitner, 1992). Actually that services are produced and consumed simultaneously, and that this occurs within the physical facilities of the firm, customers will be exposed to the ambience of “production site”( Heide et.al, 2007), and consequently it will be an important determinant for pleasure feeling, perceived value and behavioral intention. A study in restaurant setting found that ambience is often perceived by both guests and staffs as even more important than the food itself (Kokko, 2005).

Physical environments play an important role in service delivery because it can foster pleasant emotional reactions, while enhancing customer perception and retention (Tsai and Huang, 2002; Bitner 1992; Baker et al, 2002). Physical surroundings are more important in service settings because customers as well as employees often experience the firm’s facility (Bitner ,1992). Individuals react to places with two general and opposite formats of behavior : approach and avoidance (Mehrabian and Russell, 1974).Approach behaviors are all positive behaviors that might be directed at a particular place such as desire to stay, explore, work, and affiliate, while avoidance indicates the opposite (Mehrabian and Russell, 1974).

Previous studies have shown that customers respond emotionally to various physical environments (e.g. Bitner, 1992; Wakefield and Baker,1998), included design and ambient factors(Baker et al, 1994; Sheng et al, 2011).Edvardsson et al (2012) found that physical environment has both functional and social dimension and it is an important driver of customer service experiences in restaurants. Customers interact with these drivers individually and create their own meanings and value expressed as feelings, thoughts , imagination and behavior. Previous studies also supported the relationship of physical environment and affect (e.g. Donovan and Rossiter, 1982; Wakefield and Baker, 1998).

Previous studies have suggested that various atmospheric factors can influence consumers’ positive and/or negative emotions in service settings. For example, the level of warmer and cooler color could have a different impact on customer’s feeling (Liu & Jang, 2009). Warm colors e.g. red or orange were found to be arousing and sometimes even stressful; whereas cool colors e.g. blue or green were relaxing and distressful (Bellizi et al, 1983).Music is another atmospheric factor that has received growing attention. Musical tempo, pitch, mode, and genre were found related to consumer’s emotions (Bruner, 1990). Furthermore lighting, scent,

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temperature, layout, and social cues have all been found to influence consumer emotional states in specific settings (Liu & Jang, 2009; Slatten et al, 2009; Heide and Graunhaug, 2006; Baker and Cameron, 1996; Yuksel, 2007; Turley and Milliman, 2000).

Kim and Moon (2009) found that customers' perceptions of the physical servicescape in a theme restaurant positively affect customers' pleasure feeling; another study conducted by Slåtten et al. (2009) found that design factors have an influence on joy.

A study conducted by Slåtten et al (2009) found that design factors and interaction or social factors had a positive effect on customers' feeling of joy. Based on a review of the atmospheric literature, the following hypotheses were proposed:

**H1: Ambient factors will have a positive effect on customer positive emotion**

**H2: Design factors will have a positive effect on customer positive emotion**

### **Social environments and customer emotion**

Research found that both Social and physical environments have positive effect on customer emotion and satisfaction that lead to behavioral intentions (Sheng et al, 2011). Service employees' expression of emotions can result in customers' emotional state (Pugh, 2001; Tsai and Huang, 2002). Person-oriented behaviors deal with the customer in a warm, understanding, and personable manner (Butcher et al, 2002). Several studies have shown the importance of friendly employee's behaviors in improving service outcomes (Hurley, 1998; Bitner et al, 1990; Sheng et al, 2011; Hening-Thurau et al, 2006;Barger and Grandey, 2006).

In many service contexts, fellow customers are present in the service environment and can influence the nature of the service outcome process (Zeithaml et al, 2013).

Other customers are often viewed as part of the service environment (Brocato and Kleiser, 2005; Huang, 2008).Sheng et al (2011) found that customer climate, i.e. Customer's perception of the environment shared by other customers receiving the service influenced customer positive emotion. Furthermore , Huang (2008); Moore et al (2005) indicated that interaction among customers within service environment influences emotion.

On the contrary, the existing of other customers can detract from customer satisfaction and perception of quality. Some of the ways fellow customers that are negatively can influence the service experience are by exhibiting disruptive behaviors (Zeithaml et al, 2013).

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Positive customer to customer interaction can create a share of experience, enhancing enjoyment of the service. If there is a similarity or comparability between customer and fellow or other customers' behavior, more positive emotion will be encouraged. Hence we hypothesize:

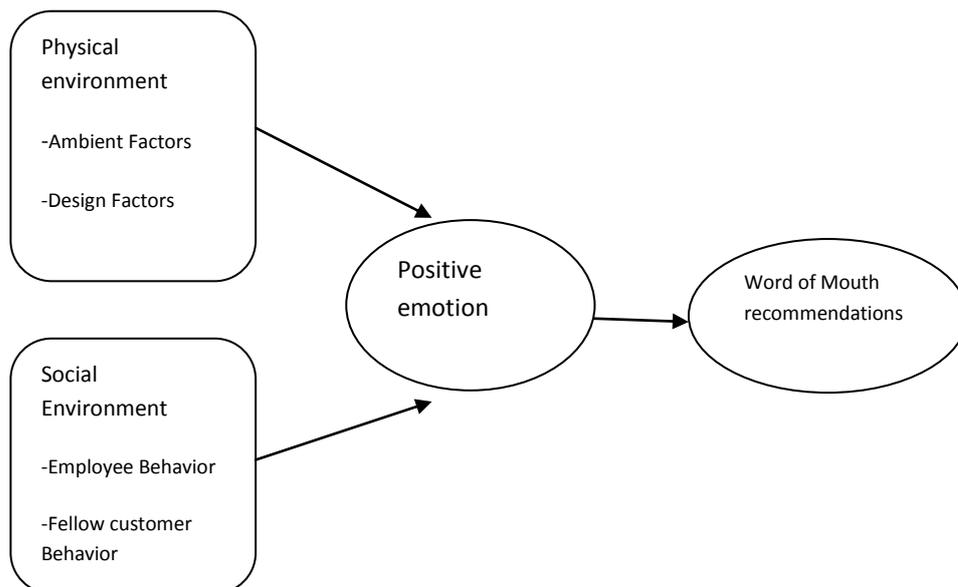
- H3. Service employee behavior will have a positive effect on customer positive emotion**
- H4. Fellow customer behavior will have a positive effect on customer emotion**

### **Customer emotion and word of mouth recommendations**

Based on consumer surveys in three leisure service settings, Wakefield and Blodgett (1999) found that the tangible physical environment plays an important role in generating excitement in leisure settings; excitement, in turn, plays a significant role in determining customers' repatronage intentions and willingness to recommend. Furthermore Nyer (1997) found that people in positive emotions are willing to engage in positive word of mouth. Thus we propose:

- H.5 Guest positive emotion is positively related to word of mouth recommendations.**

Figure 1: Conceptual framework



### **Method**

Three stars hotels guests participated in this study. 130 responses from convenient sampling were collected, 110 valid responses were used for further analysis.



## **Measures**

All constructs included in the model were measured using multi-item scales.

### ***Physical environments***

It consists of two dimensions: ambient and design factors were measured using instruments adapted from Sheng et al (2011).

Ambient factors were measured using 4 items (e.g. "Pleasant air quality").

Design factors were measured using 3 items (e.g. "organized layout").

### ***Social environments***

It consists of 2 dimensions: employee behavior and fellow customer behavior

Employee behavior was measured using 4 items (e.g. "I would describe the staff in this hotel as friendly") adapted from Slåtten et.al (2009).

Fellow customer behavior was measured using 3 items (e.g. "I find that this company's other customers leave me with a good impression of its service") adapted from Sheng et al (2011).

### ***Customer emotion***

Six items were adapted from Liu et al. (2009) (e.g. "I felt pleasure during my stay in this hotel")

### ***Word of mouth recommendations***

Behavioral intention was measured using 2 items (e.g. "I would like to say positive things about this hotel to friends and relatives") adapted from Zeithaml et al (1996).

## **RESULTS AND DISCUSSION**

Following the two-step approach, a measurement model was first estimated using a confirmatory factor analysis (CFA). Each measurement item was loaded on its prior construct. The instrument reliability was assessed using Cronbach's alpha. The alpha values range from 0.60-0.82.

Convergent validity meets the requirements in this study all the items had relatively high factor loadings on the underlying construct, the values range from 0.68 to 0.87. Overall model fit for CFA was assessed using the Chi-square test and goodness-of-fit-indices. Since the Chi-square test is significant (indicating the model a poor fit,  $\chi^2=670.22, p=0.000$ ), other indices of fit were assessed i.e. Comparative Fit Index (CFI), the Normed Fit Index (NFI), Root Mean Square Error (RMSEA) indicated the measurement model fit the data well (CFI=0.950, NFI=0.922, RMSEA=0.02).

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As the second step, the proposed structural model was assessed producing the following statistics:  $\chi^2=482.15$  ,  $\chi^2/df=2.55$ , On the basis of CFI=0.97, NFI=0.92, RMSEA=0.06) indicated that the model fit was acceptable.

Table 3. Structural model results

Hypothesized relationship	Standardized coefficient	t-value	Results
H1 Ambient factors → Customer emotion	0.38	2.88*	supported
H2 Design factors → Customer emotion	0.39	2.26**	Supported
H3 Employee behavior → Customer Emotion	0.27	2.75**	Supported
H4 Fellow Customer → Customer Emotion	0.26	2.92**	Supported
H5 Customer Emotion → Word of Mouth	0.53	5.73*	Supported

$\rho^* < .05$   $\rho^{**} < .01$

All predictor variables were found to be significantly and positively influenced customer's positive emotion, thus Hypothesis 1 was supported. Ambient had the positive effect on customer emotion ( $\beta=0.38$ ,  $t=2.88$ ). Design factors were also had a significant effect on customer emotion ( $\beta=0.39$ ,  $t=2.26$ ), thus hypothesis 2 was supported. Hypothesis 3, 4 and 5 were also supported. Employee behavior had an influence on word of mouth recommendations ( $\beta=0.27$   $t=2,75$ ) and fellow customer behavior influenced word of mouth recommendations ( $\beta=0.26$ ,  $t=2.92$ ) . Customer had a positive effect on word of mouth recommendations ( $\beta=0.53$ ,  $t=2.73$ ).

## CONCLUSIONS AND IMPLICATIONS

The present study validated a model that predicts the effect of physical and social environments toward customer emotion and word of mouth recommendations in hotel setting. Both physical and social environments revealed had positive effect on customer emotion that finally influenced word of mouth recommendations .

This research provides insights for non five stars marketers indicating that physical as well as social environments are important in determining customer positive emotion that lead to positive behavior which . The findings of this study



suggest that non five stars hotels' managers need to consider physical as well as social environments to create customer positive emotion.

### **Limitations and future research**

There are several limitations of this study. First, convenience sampling was used to collect the data therefore the generalization of the findings is limited. Second, other variables such as customer demographics and personality were not included in this study. Future research could consider these variables including different service settings.

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