

## 科技部補助專題研究計畫成果報告

(期中進度報告/期末報告)

(溫泉旅館服務場景對顧客行為意圖影響之多層次分析：個人層級與商店層級變數之中介與干擾角色檢驗)

計畫類別：個別型計畫 整合型計畫

計畫編號：MOST 104-2410-H-263-007-

執行期間：104年8月1日至105年7月31日

執行機構及系所：致理科技大學休閒遊憩管理系

計畫主持人：張國謙

共同主持人：許雅棣

計畫參與人員：江玉婷、葉思妤、羅舒庭

本計畫除繳交成果報告外，另含下列出國報告，共1份：

執行國際合作與移地研究心得報告

出席國際學術會議心得報告

期末報告處理方式：

1. 公開方式：

非列管計畫亦不具下列情形，立即公開查詢

涉及專利或其他智慧財產權，一年二年後可公開查詢

2. 「本研究」是否已有嚴重損及公共利益之發現：否 是

3. 「本報告」是否建議提供政府單位施政參考 否 是，\_\_\_\_\_ (請列舉提供之單位；本部不經審議，依勾選逕予轉送)

中華民國 105 年 9 月 1 日

# 專題研究計畫題目與中英文摘要

## 溫泉旅館服務場景對顧客行為意圖影響之多層次分析：個人層級與商店層級變數之中介與干擾角色檢驗

摘要：因為顧客體驗與員工行為對於企業營運之成功是密不可分的，但在餐旅研究領域中卻少以服務行銷金三角模型結合 S—O—R（刺激—有機體—反應）模型之觀點來探討顧客體驗與員工行為間之關係，並予以實證性地檢驗。因此，結合個人與公司層次的研究議題，本研究則是以服務行銷金三角模型之觀點為基礎，實證性地檢驗公司層級變數（服務氣候與員工投入）對於個人層級變數關係間（刺激：服務場景—有機體：顧客情感—反應：行為意圖）之跨層次調節影響。本研究以溫泉旅館中之顧客、管理階層及員工作為資料蒐集對象（可避免同源偏差），且為避免統計分析時受資料巢套的影響，因此以階層線性模式探究變數中的假設關係。研究結果顯示員工行為影響了服務的傳遞，並且進一步澄清為何（公司層級的服務氣候與員工投入之跨層次調節角色）與如何（個人層級的知覺服務場景與顧客情感）間的交互效果顯著地影響了顧客於服務企業中的消費體驗。

**關鍵詞：**溫泉旅館、服務場景、顧客情緒、顧客行為意圖、多層次結構方程式

### **A multilevel analysis on how servicescape affects customer behavioral intentions in the hot spring resort sector: An examination of the mediating and moderating roles of individual-level and store-level variables**

Abstract: Although customer experience and employee behavior are essential to a company's success, few hospitality field studies have used the service marketing triangle model to empirically examine service climate and employee engagement as firm-level moderators of the individual-level stimulus(servicescape)—organism (customer emotions)—response (behavioral intentions) relationship. Data were collected from customers, managerial employees, and employees of hot spring resorts. To account for nesting effects, hierarchical linear modeling tested hypothesized relationships among variables. The results show employee behaviors contribute to service delivery and clarify why (cross-level moderation of service climate and employee engagement at the firm level) and how (perceived servicescape and customer emotions at the individual level) of their interactions crucially influence customer consumption experiences in a service firm. The study extends the S—O—R by demonstrating outcome variables are not limited to individual-level effects, as environmental characteristics (firm-level explanatory variables) are also major considerations.

**KEY WORDS:** hot spring resort, servicescape, customer emotions, customer behavioral intentions, multilevel structural equation model

## 報告內容

### INTRODUCTION

With services now outperforming manufacturing in many economies as measured by GDP, environmental psychology and marketing scholars have endeavored to clarify how the physical environment influences the customer service experience (Mari and Poggesi, 2013). Servicescapes (Bitner, 1992) help researchers understand the role of the physical environment, which is particularly important in leisure service settings (Wakefield and Blodgett, 1994) and is of greater importance in determining customers' evaluation of the expected quality in hedonically motivated services (Reimer and Kuehn, 2005), as in the hospitality industry (Lin, 2004).

In terms of the environmental psychology of the servicescape (Bitner, 1992), the term *servicescape*, the landscape within which services are experienced, has been used to describe the physical aspects of the service setting that contribute to the customer's overall physical feel of the experience (Ford, Sturman, and Heaton, 2012). Therefore, a suitably designed servicescape, including tangible facilities, appealing interior design, comfortable lighting and sounds, and unique fragrances, can invite customers into a constructed service atmosphere that satisfies their needs and expectations (Reimer and Kuehn, 2005; Tseng, 2010). Nevertheless, Arnould, Price, and Tierney (1998) have noted that both substantive (functional and mechanical clues) and communicative (human clues) stagings of the servicescape influence visitors' service experience. Accordingly, the service environment should be considered in terms of not only its physical aspects but also the social interactions between customers and employees in that service space because these factors will affect the overall atmosphere (Bitner, 1992; Nilsson and Ballantyne, 2014).

Researchers have previously proposed that certain important relationships are linked to servicescapes in the hospitality field. For example, servicescapes can directly affect customer emotions, and these types of linkages can also produce customer behavioral intentions (Bitner, 1992; Jang and Namkung, 2009; Jani and Han, 2015; Kim and Moon, 2009; Lin and Mattila, 2010). Nevertheless, along with the great contribution of the previous research that applied the S (stimulus)-O (organism)-R (response) paradigm (Donovan and Rossiter, 1982; Mehrabian and Russell, 1974) to explore the linkages among servicescape, emotional reaction, and behavioral response (Bitner, 1992), most studies are limited to customer behaviors and rarely consider the effect of employee behaviors on the relationships. However, the service profit chain suggests that there are critical linkages among employee attitude, customer satisfaction and, ultimately, organizational profits (Heskett, Jones, Loveman, Sasser, and Schlesinger, 1994; Zeithaml and Bitner, 2003). Thus, in light of the service marketing triangle model (Bitner, 1995; Zeithaml and Bitner, 2003), the importance of employees to the ability of firms to keep their promises and succeed in building customer relationships should be considered. In other words, employee behaviors in their working environment should be another critical factor that influences relationships among servicescape, emotional reaction, and behavioral response by customers. Thus, service climate and employee engagement are among the most discussed issues in organizations that promote superior customer experiences and services (Musgrove, Ellinger, and, Ellinger, 2014; Salanova, Agut,

and Peiró, 2005). These issues can be treated as collective and shared phenomena by employees in the workplace due to employees being nested in work groups. Those groups in turn are nested in functions, which are nested in organizations (Salanova et al., 2005). In addition, as noted by Wieseke, Lee, Broderick, Dick, and Dawson (2008), because marketing researchers have tended to emphasize either micro- or macro-level perspectives without recognizing the interactions between the two or the importance of multilevel research approaches in marketing and management research, there is a need for multilevel research to provide practitioners with a more accurate picture of which level of an organization they should directly target in performance improvement efforts. Nevertheless, there remains a lack of empirical research in the hospitality field that investigates the moderating effect of service climate and employee engagement with the servicescape, emotional reaction, and behavioral response relationship. To fill this important research niche in the hospitality literature, service climate and employee engagement are assumed to be moderating variables; the former is explored to verify its role in the relationship between perceived servicescape and customer emotions, whereas the latter is explored to verify its role in the relationship between customer emotions and behavioral intentions.

Accordingly, the purpose of this study is to apply an integrated framework to the research case of hot spring resorts that provides a preliminary investigation into the proposed relationships in the following concerns. First, hot spring resorts differ from ordinary hotels and resorts due to the various ancillary services and entertainment facilities associated with the core product of hot spring bathing (Chen, Hsu, and Tzeng, 2011; Hsieh, 2007). To make the best of this precious resource, servicescape is extremely important for hot spring resorts that attempt to appear “unique” to distinguish themselves from others in the market, as is the critical role of employees performing the various service deliveries; both contribute to the customers’ experience. Second, traditional research concerning servicescape issues in the hospitality field largely applies the S-O-R paradigm to explore individual-level relationships by using regression analysis or correlation analysis (Mari and Poggesi, 2013) without considering the firm-level moderating effect of employee behaviors on the linkage in terms of the service marketing triangle model. Thus, considering the variables of the individual level (i.e., perceived servicescape, customer emotions, and customer behavioral intentions) and the firm level (i.e., service climate and employee engagement) across organizations, to address these different units of analysis, this study employs HLM (hierarchical linear modeling) to conduct a cross-level analysis to clarify the hypotheses in the proposed framework. Third, this study includes managerial employee, employee, and customer data from the hot spring resorts in the same research framework to avoid common method variance because problems with many previous studies were caused by the use of self-reports filled in by customers (e.g., concerning perceived employee performances). Finally, the results of this study provide practical suggestions for hot spring managers for building a service advantage through improved servicescapes and employee behaviors

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### ***Research hypotheses***

Because the hospitality industry provides a high degree of intangible product levels, such as services, the servicescape is not only an important component of a customer's impression formation but also an important source of evidence in the overall evaluation of the servicescape itself and the service organization (Lin, 2004). Thus, as defined by Miles et al. (2012, p. 778), a servicescape is as "a combination of several dimensions that influence a customer's holistic perceptions of the service." The authors summarized previous studies and concluded that the important dimensions of a servicescape's physical surroundings included facility aesthetics (color, music, and lighting), layout accessibility (spatial layout and ability of furnishing to facilitate customer enjoyment), and cleanliness (broadly, the cleanliness of all aspects of the service facility). Moreover, Kim and Moon (2009) performed a literature review and identified five composite dimensions of the servicescape: facility aesthetics, layout, electric equipment, seating comfort, and ambient conditions.

Accordingly, in terms of linkages among environmental stimuli, emotional states, and approach/avoidance responses (Mehrabian and Russell, 1974), many firms deliberately design decorations, lights, music, and friendly service environments to make customers experience positive during consumption (Chang, 2013). Lin and Liang (2011) summarized previous research and concluded that service environments play important roles in service delivery because they can foster pleasant emotional reactions while strengthening customer perceptions and retention. Thus, customer emotions are positive or negative reactions, or mental stages of readiness, that arise as consequences of specific events or circumstances, which are triggered by something or someone, and can therefore be attributed to a certain entity or attitude object (Svari and Olsen, 2012). In terms of the Stimulus-Organism-Response paradigm, positive customer perception of a firm's physical environment would lead to positive emotions (e.g., happiness and arousal) (Miles et al., 2012) or pleasurable feelings (Kim and Moon, 2009). These emotions in turn positively influence their satisfaction (Han and Back, 2007) and subsequent behavioral intentions (e.g., revisit intention, recommendation to others, willingness to pay higher prices than those charged by competitors) (Chen et al., 2011; Ladhari, 2009).

Although most previous studies consider the servicescape in terms of the physical surroundings of a firm (Bitner, 1992), Dong and Siu (2013) have proposed that customer service experience evaluations are influenced by both the substantive staging of the servicescape (its functional and mechanical clues) and its communicative staging of the servicescape (its human clues). The servicescape composed of substantive and communicative aspects can be better used to capture the dynamics of the environment and the entire service context. The substantive staging of a servicescape refers to the physical aspects of the service environment, while the communicative staging of the servicescape refers to how the service environment is presented and interpreted by employees. In the hot spring resort context, aside from the physical environment that influences customer emotions and behavioral intentions, service encounters with employee are another main service experience for customers. Accordingly, the research hypotheses are as follows:

***H1-1.*** *The customer's perceived substantive staging servicescape has a positive effect on customer emotions in the hot spring resort sector.*

***H1-2.*** *The customer's perceived communicative staging servicescape has a positive effect on customer*

*emotions in the hot spring resort sector.*

**H2.** *The customer's emotions have a positive effect on behavioral intentions in the hot spring resort sector.*

Schneider et al. (1980) were the first researchers to use the term “service climate,” which emerged from a generic construct of organizational climate (Cha and Borchgrevink, 2014). The service climate of a firm refers to “employee perceptions of the practices, procedure, and behaviors that get rewarded, supported, and expected with regard to customer service and customer service quality” (Schneider et al., 1998, p. 151). A common theme in the service marketing literature is that organizations must create and maintain a climate that encourages employees to effectively deliver excellent service (He et al., 2011). The service climate is a collective and shared phenomenon that is built in the light of organizational practices focused on customer service (Salanova et al., 2005). The service climate is the extent to which everything an organization does, as perceived by those in contact with the firm, demonstrates its commitment to customers and to service (Solnet and Paulsen, 2006). Thus, service climate is built on foundations of caring for both internal and external customers, and it is the message employees receive about the importance of service in their organization (Ram et al., 2011). Given the importance of employee behavior in service delivery within the tourism and hospitality industry, the service climate has practical significance to organizational outcomes, such as employee turnover intention, customer satisfaction, and financial performance (Manning et al., 2012). Thus, several researchers have observed significant relationships between service climate and positive customer perceptions of service (Carrasco et al., 2011), where a positive climate for service perceptions of employees is positively related to a customer experience (Schneider et al., 2002) that produces customer satisfaction (Schneider et al., 2005) and loyalty (Dawson and Abbott, 2009). In other words, service climate influences the expression of positive emotions among service employees in their relationships with customers (Carrasco et al., 2011); that is, positive employee emotions are positively related to positive customer emotions and satisfaction (Giardini and Frese, 2008), which refers to the affective state that is the emotional reaction to an experience or a sequence of experiences with a seller (Ram et al., 2011). Specifically, when employees note that managers spend a much time, energy, and resources to reward employees who provide customers with high-quality services and enhance their abilities to provide services that meet customer needs and desires, employee service quality has a significant impact on customers (Yang and Wang, 2010). Accordingly, a third hypothesis is proposed.

**H3.** *Service climate has a positive effect on customer emotions in the hot spring resort sector.*

In addition, employees and customers have frequent contact during the service consumption process. Thus, as suggested by Dietz et al. (2004), personal contact underlies service climate effects, reasoning that a possible mechanism through which service climate affects customer perceptions is the actual interpersonal behavior of employees in their interactions with customers, and frequent contact is associated with more opportunities to experience personal interaction and emotional contagion. Thus, the work unit service climate is a precursor of well-being at work, and employees devote much effort to offering quality services and

pleasing customers. Thus, employees will feel happy if they can obtain specific resources to match job demands from their service climate (Carrasco et al., 2011). Although the customer's perceived servicescape has impact on their emotions during the service consumption process, employee mood will affect their experience with service providers. Accordingly, this study also assumes that service climate has a moderating effect on the relationship between perceived servicescape and customer emotions. Specifically, based on hypotheses 1-1 and 1-2, the more positive a customer's perceived servicescape of a service firm, the more positive the customer's emotional response. Thus, the relationship between customers' perceived servicescape and customer emotions will be strengthened for service staffs working in high-level service climates. However, the relationship between customers' perceived servicescape and customer emotions will be weakened if service staffs work in environments with low-level service climates. Accordingly, a fourth set of hypotheses is proposed as follows.

***H4-1.** Service climate has a significant moderating effect on the relationship between perceived substantive staging of the servicescape and customer emotions in the hot spring resort sector.*

***H4-2.** Service climate has a significant moderating effect on the relationship between perceived communicative staging of the servicescape and customer emotions in the hot spring resort sector.*

Engagement is a motivational construct (Peng et al., 2014) used to describe “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). As concluded by Bakker and Demerouti (2008), engaged employees have high levels of energy and are enthusiastic about their work. Energy is the outcome of positive employee engagement, and an organization benefits from an energized workforce because employees work well together, relationships are supportive and inspiring, and information is freely shared (Cartwright and Holmes, 2006). Thus, employee engagement is the level of commitment and involvement of an employee toward his/her organization and its values. It is a measurable degree of employees' positive or negative emotional attachment to their jobs, colleagues, and organizations, which profoundly influences their willingness to learn and perform at work (Sadiqe, 2014). Because employee engagement has a considerable impact on customer satisfaction with a firm, the only way to maintain consistently really high levels of customer loyalty is to maintain a workforce that is so enthusiastic, creative, and energetic that the firm outperforms its competitors in service delivery, execution, and product design (Harvard Business Review Report, 2013). To date, although there is no single generally accepted definition of the term employee engagement, Gallup defines it as an involvement with and enthusiasm for work that is closely linked with organizational performance outcomes (Markos and Sridevi, 2010). Specifically, companies with energized, motivated employees exert extra effort to create a superior experience for customers who, in turn, reward the company with intense loyalty and contribute to its profit growth. This process begins with leaders who create a culture that caters to happier, more engaged employees (Bakker and Demerouti, 2008). Therefore, as proposed by Dickson (2008), fostering employee engagement is worthwhile in the hospitality industry, which is known for low-paying, often temporary positions. Ncube and Jerie (2012) have conducted a study in the hospitality industry because of the need to understand how best to address

employee engagement as a human resource initiative and source of competitive advantage. Therefore, engagement is about passion and commitment as well as the willingness to invest in oneself and expand discretionary effort to help the employer succeed (Markos and Sridevi, 2010). In terms of the Engagement-Profit Chain, employees who are engaged create greater customer satisfaction, leading to customer loyalty (Kruse, 2014). Accordingly, a fifth hypothesis is proposed as follows.

***H5.** Employee engagement has a positive effect on customer behavioral intentions in the hot spring resort sector.*

Employee engagement in work is associated with individuals who feel obligated to be more deeply involved in their role performance (Kahn, 1990; Lee and Veasna, 2013). Employees who are more engaged are likely to be in more trusting and high-quality relationships with their employer and will, therefore, be more likely to report more positive attitudes and intentions toward the firm (Saks, 2006). Thus, engaged employees are willing to exert discretionary effort to accomplishing tasks that are important to achieving organizational goal (Swarnalatha and Prasanna, 2013), and the service promises provided by the firm regarding what customer expectations will be delivered more successfully (Zeithaml and Bitner, 2003) through engaged employees. Therefore, based on hypothesis 2, the more positive customer emotions toward a service firm, the more positive customer behavioral intentions occur. Thus, for employees who exhibit a high level of engagement in their work, the relationship between customer emotions and customer behavioral intentions will be strengthened. However, the relationship between customer emotions and customer behavioral intentions will be weakened if service staff members exhibit a high level of engagement in their work. Accordingly, a sixth hypothesis is proposed as follows.

***H6.** The customer's perceived employee engagement has a significant moderating effect on the relationship between customer emotions and behavioral intentions in the hot spring resort sector.*

In summary, a relationship between customer perceived servicescape and customer behavioral intention is proposed, where customer emotions act as mediating variables at the individual level, while employee engagement and service climate, which are assumed to be firm-level factors, perform their moderating roles on the servicescape–customer emotion–behavioral intention links.

## **RESEARCH METHOD**

### ***Measurements***

The items for each variable are measured on a 7-point Likert scale, ranging from 1=strongly disagree to 7=strongly agree. The aspect of perceived servicescape was modified from previous research (i.e., Dong and Siu, 2013) and included the substantive staging of servicescape (through twelve items regarding physical environment) and the communicative staging of the servicescape (through four items regarding employee performance for communicating with customers). The aspect of customer emotions, which was measured through four items, was based on previous research (i.e., Lin and Liang, 2011). The aspect of customer



behavioral intentions, which included three items, was modified from previous research (i.e., Kuo et al., 2012). The service climate, which included four items, was also modified from previous research (i.e., Salanova et al., 2005). The aspect of employee engagement in work, which included four items, was modified from previous research (i.e., Britt et al., 2005). The back-translation method proposed by Sinaiko and Brislin (1973) was used to ensure the translation quality of the instrument from English to Chinese. Finally, respondent demographic characteristics (measured on categorical scales) were requested at the end of the questionnaire. Five items, including gender, age, education, and visiting times, were requested from customers; four items, gender, age, education, and work environment, were requested from employees; and four items, gender, age, education, and position, were requested from managerial employees.

### ***Sample***

This study attempts to explore customer behavioral intentions as they relate to a set of customer perceived servicescape-based causation relationships in selected hot spring resorts in the hot spring area of Taiwan over a 3-month period at 20 similar-level hot spring resorts to ensure a representative sample.

To avoid common method variance (Huang and Lee, 2012; Lin and Peng, 2006), questionnaires regarding perceived servicescape, customer emotions, and behavioral intention were distributed to customers, regarding employee engagement were distributed to employees, and regarding service climate were distributed to managerial employees.

As suggested by Bickel (2007), if a multi-level study concerns interactions between the individual and group levels, a 20/30 ratio is one method of data collection. That is, this study selected 20 hot spring resorts as the research targets at the firm level, and each hot spring resort selected 30 customers as the respondents at the individual level. Therefore, the questionnaire package included three categories, and each package contained copies of a firm-level managerial employee questionnaire (containing questions on service climate), a firm-level employee questionnaire (containing questions on employee engagement), and an individual-level customer questionnaire (containing questions on perceived servicescape, customer emotions, and behavioral intentions). Overall, 600 questionnaires were distributed to customers, 300 questionnaires were distributed to employees, and 200 questionnaires were distributed to managerial employees.

The analysis uses a cross-level model in which firm-level variables perform moderating roles on the relationships among individual-level variables, namely, a moderating effects model (Lin and Peng, 2006; Kozlowski and Klein, 2000). This study uses HLM, which simultaneously considers variables at different levels, and the cross-level data at the individual and firm levels are examined together (Wen and Chiou, 2009). Thus, first, the effect of individual-level customer ratings on the perceived servicescape, customer emotion, and behavioral intention links was examined. Second, the effects of firm-level variables, that is, of service climate and employee engagement, on the relationships among individual-level links were tested.

## **DATA ANALYSIS AND RESULTS**

### ***Descriptive Analysis***

Of the 519 questionnaires from customers, 33.9% were from male respondents and 65.7% were from

females. A substantial majority of respondents was between 25 and 44 years of age (82.3%). The largest number of respondents (73.4%) held a bachelor's degree, and service workers were the most highly represented occupation (38%). Most respondents (75.1%) visit the location 2-4 times per year.

Of the 270 questionnaires from employees, 37% were from male respondents and 63% were from females. A substantial majority of respondents was between 25 and 34 years of age (34.1%). The largest number of respondents (60.4%) held a bachelor's degree and felt that their work environment not bad was the most highly represented occupation (50.4%).

Of the 177 questionnaires from managerial employees, 39% were from male respondents and 61% were from females. A substantial majority of respondents was between 35 and 44 years of age (32.8%). The largest number of respondents (59.9%) held a bachelor's degree, and basic managerial positions were the most common occupations (81.9%).

### ***Hypothesis testing***

To assess the hypotheses, a sequence of models is required: null, random-coefficient regression, intercept-as-outcomes, and slopes-as-outcomes models (Wech and Heck, 2004). In addition, as suggested by Qin et al. (2014), it is very difficult for researchers to find significant effects in empirical studies (e.g., Huang and Lee, 2012; McClelland and Judd, 1993) if the group-level sample size is relatively small. Thus, this study used traditional 0.05 significance levels to test the relationships among variables of the same level and 0.1 significance levels to test cross-level interaction effects and main effects.

## **CONCLUSIONS AND MANAGERIAL IMPLICATIONS**

First, the results support previous studies that indicate that perceived servicescape significantly affects customer emotions (Lin, 2004) in which customer's perceived substantive staging of the servicescape ( $\gamma_{10}=0.276$ ,  $p<0.01$ ; H1-1 was supported) positively affects customer emotions in hot spring resorts. Because hot spring resorts are recreational places for physical and mental customer relaxation, especially for enjoying hot springs bathing in comfortable spaces, the perceived physical servicescape becomes more important with the time spent in the facility, that is, the longer the time a customer spends in a facility, the greater the likelihood that the perceived quality of servicescape will play an important role in determining satisfaction with the service (Wakefield and Blodgett, 1994). Lin and Liang (2011) also concluded that the physical environment (e.g., ambient and design factors) is more important for customer emotions and satisfaction with a business (e.g., fashion apparel store). Moreover, for hot spring resort managers, a resort design that can add local culture into the servicescape design to create uniqueness is also an important concern (Dong and Siu, 2013). For example, the Yangmingshan hot spring destination is famous for hot spring bathing influenced by Japanese colonization, and Japanese-style hot spring resorts evoke many old stories and customer images. In addition, as suggested by Lin (2004), the servicescape should be compatible with guest expectations. Hence, service providers must define their target customers prior to determining the overall layout and design of the servicescape. Kaltcheva and Weitz (2006) proposed that service providers could use different elements of the store environment to influence customer arousal levels (e.g., music, color, and layout). Accordingly, hot spring

resort operators should attempt to design a substantive staging of the servicescape to elicit an affective quality of “love at first sight” (Zhang and Li, 2004).

Second, the results showed that service climate at the firm level has a positive effect on customer emotions at the individual level in the hot spring resorts sector when considering substantive staging of the servicescape ( $\gamma_{01}=0.741$ ,  $p<0.05$ ) and communicative staging of the servicescape ( $\gamma_{01}=0.552$ ,  $p<0.1$ ) at the individual level (i.e., H3 was supported). As proposed by Huang and Lee (2012), the individual-level outcome variables are not only affected by the individual-level independent variables but also by the firm-level variables. Thus, perceived servicescape at the individual level and service climate at the firm level are two variables that interactively influence customer emotions. The results showed that the cross-level interaction between service climate and perceived substantive staging of the servicescape ( $\gamma_{11}=0.425$ ,  $p<0.05$ ; H4-1 was supported) has a positive effect on customer emotions. The result of a study by Kralj and Solnet (2010) showed that internal organizational dynamics (i.e., a climate for service) and customer satisfaction, an important business outcome, are highly correlated. Thus, developing a service climate in which management and customer goals are in congruence will provide employees with the resources and support they need to dedicate their attention to fulfilling customer expectations. Furthermore, as suggested by Liao and Chuang (2007), a work unit’s service climate may have cross-level, top-down influences on an individual employee’s service performance. In the service context, a positive service climate may help employees perceive that superior service is expected, desired, and rewarded, thus providing a strong motivational force for employees to deliver better service. Thus, service climate is consistent with the standpoints of the service marketing triangle in which service firms must provide employees with the necessary skill, resources, and rewards to demonstrate the service firm’s commitment to service quality and in turn provide better services to their customers (Bitner, 1995). Wang (2015) also concluded that firm-level service climate positively affects interaction quality and customer loyalty at the individual level. Particularly in the hot spring resorts sector, knowledge and various skills must be provided through employee training to satisfy customer requirements, such as understanding water qualities and curative effects of different types of hot springs, massage skills, facial and nail beauty services, and even regimens and health benefits. Additionally, increasing numbers of foreign tourists to hot spring resorts, require service staff to learn some foreign languages (e.g., English, Japanese, and Korean) to communicate with and serve customers from all over the world.

Furthermore, the perceived communicative staging of the servicescape ( $\gamma_{10}=0.273$ ,  $p<0.01$ ; H1-2 was supported) is another important concern, which implies that the image of front-line staff belongs to the communicative staging servicescape (focus on employee performance) domain and cannot be ignored by hot spring resorts managers. The results also showed that the cross-level interaction between service climate and the communicative staging of the servicescape ( $\gamma_{11}=0.709$ ,  $p<0.01$ ; H4-2 was supported) has positive effects on customer emotions. Customers with experience intensification, such as souvenir and dining purchases, are more likely to be influenced by the service provided by staff (Dong and Siu, 2013). Specifically, some hot spring resorts (such as Radium Kagaya hot spring resort in the Yangmingshan hot spring destination) are even famous for providing *butler* services to customers; thus, perceived communicative staging of the servicescape

is the most important customer perception. Therefore, in terms of firm-level concerns, employees who work in a decent working environment and feel supported by teams spontaneously provide better services to customers. The customers' perceived communicative staging of the servicescape is reflected by the decent service climate; thus, the interaction between service climate and perceived communicative staging of the servicescape improve customer emotions.

Third, the results also support previous studies indicating that customer emotional satisfaction affects their behavioral intentions, such as engaging in positive word-of-mouth ( $\gamma_{10}=0.733$ ,  $p<0.01$ ; H2 was supported) (Yu and Dean, 2001), in the hot spring resort sector. Giardini and Frese (2008) have suggested that positive customer affect is related to the customer's evaluation of the service encounter, which was proposed to be related to customer satisfaction. As concluded by Bagozzi et al. (1999), customer emotions, such as happiness, joy, enjoyment, and gladness, exhibited common variance with customer satisfaction, which has positive impact on post-purchase reactions (e.g., repurchase and word-of-mouth intentions) toward a business. Furthermore, the results also showed that employee engagement at the firm level has positive effects on customer emotions at the individual level ( $\gamma_{01}= 0.874$ ,  $p<0.01$ ; H5 was supported) in hot spring resorts. When engaged, an employee is understood to be physically involved, cognitively alert, and emotionally attached (Rothmann and Baumann, 2014). In other words, engaged employees demonstrate their vigor, absorption, and dedication as a positive and fulfilling work-related state of mind (Saks, 2006; Schaufeli and Bakker, 2004) and bring themselves into the work-role performance (Rothmann and Baumann, 2014). In addition, the results of this study also showed that the cross-level interaction between employee engagement and customer emotions ( $\gamma_{11} =0.220$ ,  $p<0.1$ ; H6 was supported) has positive effects on behavioral intentions and, as suggested by Bakker and Demerouti (2008), is an important reason why engaged workers outperform non-engaged workers. Engaged employees often experience positive emotions, including happiness, joy, and enthusiasm; better health; and job and personal resource creation. They also transfer their engagement to others. Thus, positive employee affect will be positively associated with the display of positive emotion by employees during their interactions with customers, which further engenders positive service quality perceptions (Pugh, 2001). Managers must provide employees with resources and benefits that will oblige them to reciprocate in kind with higher levels of engagement (Sakes, 2006). That is, a positive relationship between display of positive emotion by employees and positive customer affect is consistent with emotional contagion occurring during the service encounter (Pugh, 2001). Thus, hot spring resorts managers, because of their external marketing communication with customers about how they can be served and their knowledge of which employees are engaged, are critical persons to achieve firm goals. In other words, hot spring resorts provide happiness to customers by creating happy employees, and then, positive customer emotions result in more positive behavioral intentions.

### **Limitations and Directions for Further Research**

There are some limitations of this study that should be considered for future research. First, replication studies could be conducted in a different industry (e.g., the restaurant and travel industries) to test the validity

of the findings reported here. Second, although many important variables have been included in our model, it is important to realize that other factors may also play critical roles in the relationship between perceived servicescape, customer emotions, and behavioral intentions. For instance, future research might investigate how other factors, such as work values or professional efficiency (Liang, 2012), affect this relationship. Third, as argued by Kuo et al. (2012), the perceived quality of product and service offerings is highly related to the value that strong brands add to customer purchase evaluations. In particular, strong brands enable “customers to better visualization and understand the intangible side of the products and services” (Kayaman and Arasli, 2007, pp. 93–94). Therefore, the role of firm-related factors such as branding should be considered in future research. Finally, as discussed by Kim et al. (2007), because loyal customers and frequent visitors are significantly different, future researchers should note and distinguish between these groups in their perceptions of the servicescape and post-purchasing behaviors.

## REFERENCES

- Alexandris, K., Dimitriadis, N., Markata, D., 2002. Can perceptions of service quality predict behavioral intentions? an exploratory study in the hotel section in Greece. *Managing Service Quality* 12 (4), 224-232.
- Bagozzi, R.P., Gopinath, M., Nyer, P.U., 1999. The role of emotions in marketing. *Journal of the Academy of Marketing Science* 27 (2), 184-206.
- Bakker, A.B., Demerouti, E., 2008. Towards a model of work engagement. *Career Development International* 13 (3), 209-223.
- Bartholomew, K.J., Ntoumanis, N., Ryan, R.M., Thøgersen-Ntoumani, C., 2011. Psychological need thwarting in the sport context: assessing the darker side of athletic experience. *Journal of Sport and Exercise Psychology* 33 (1), 75-102.
- Bickle, R., 2007. *Multilevel Analysis for Applied Research: It's Just Regression*. Guilford Press, New York.
- Bitner, M.J., 1992. Servicescape: the impact of physical surroundings on customers and employees. *Journal of Marketing* 56 (2), 57-71.
- Bitner, M.J., 1995. Building service relationships: it's all about promises. *Journal of the Academy of Marketing Science* 23 (4), 246-251.
- Bliese, P.D., 1998. Group size, ICC values, and group-level correlations: a simulation. *Organizational Research Methods* 1 (4), 355-373.
- Booms, Bernard H., Bitner, M.J., 1981. Marketing strategies and organization structures for service firms. In: Donnelly, J.D., George, W.R. (Eds.), *Marketing of Services* (pp. 47-52). American Marketing Association, Chicago.
- Britt, T.W., Castro, C.A., Adler, A.B., 2005. Self-engagement, stressors, and health: a longitudinal study. *Personality and Social Psychology Bulletin* 31 (11), 1475-1486.
- Carrasco, H., Martínez-Tur, V., Peiró, J.M., García-Buades, E., Moliner, C., 2011. Service climate and display of employees' positive emotions: the mediating role of burnout and engagement in services.

- Psychologica 55, 229-253.
- Cha, J., Borchgrevink, C.P., 2014. Service climate in restaurants. *International Journal of Hospitality and Tourism Administration* 15 (1), 19-37.
- Chang, K.H., 2013. *Marketing Management: Theory and Case Analysis* (3rd edition). Yeh Yeh Book Gallery, Taipei City, Taiwan.
- Chang, K.C., 2015. How travel agency reputation creates recommendation behavior. *Industrial Management and Data Systems* 115 (2), 332-352.
- Chen, C.F., Tsai, D.C., 2007. How destination image and evaluative factors affect behavioral intentions? *Tourism Management* 28 (4), 1115-1122.
- Chen, K.Y., Yang, M.C., Lin, Y.S., Lee, M.C., 2011. A study of the relationships among servicescape, interpretation service quality, and tourists' behavioral intentions in tourism factory. *Journal of Outdoor Recreation Study* 24 (4), 1-28.
- Clemes, M.D., Wu, J.H.C., Hu, B.D., Gan, C., 2009. An empirical study of behavioral intentions in the Taiwan hotel industry. *Innovative Marketing* 5 (3), 30-50.
- Cohen, J., 1988. *Statistical Power Analysis for the Behavioral Sciences* (2nd Ed.). Erlbaum, Hillsdale, NJ.
- Dawson, M., Abbott, J., 2009. Hospitality culture and climate: keys to retaining hospitality employees and creating competitive advantage. *International CHRIE Conference-Refereed Track, Paper 3* (August 1, 2009). Available at: <http://scholarworks.umass.edu/refereed/Sessions/Saturday/3> (Accessed 10 October, 2014).
- Dickson, D., 2008. Fostering employee engagement: a critical competency for HR practitioners. Available at: <http://scholarworks.rit.edu/other/807> (Accessed 16 October, 2014).
- Dietz, J., Pugh, D.D., Wiley, J.W., 2004. Service climate effects on customer attitudes: an examination of boundary conditions. *Academy of Management Journal* 47 (1), 81-92.
- Dong, P., Siu, N.Y.M., 2013. Servicescape elements, customer predispositions and service experience: the case of theme park visitors. *Tourism Management* 36, 541-551.
- Giardini, A., Frese, M., 2008. Linking service employees' emotional competence to customer satisfaction: a multilevel approach. *Journal of Organizational Behavior* 29 (2), 155-170.
- Goi, M.T., Kalidas, V., Zeeshan, M., 2014. Personality as a moderator of SOR model. *Review of Integrative Business and Economics* 3 (2), 67-76.
- Gonring, M.P., 2008. Customer loyalty and employee engagement: an alignment for value. *Journal of Business Strategy* 29 (4), 29-40.
- Gracia, E., Bakker, A.B., Grau, R.M., 2011. Positive emotions: the connection between customer quality evaluation and loyalty. *Cornell Hospitality Quarterly* 52 (4), 458-465.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., 2010. *Multivariate Data Analysis: A Global Perspective*. Prentice Hall, Upper Sadder River, NJ.
- Han, H., Back, K.J., 2007. Assessing customers' emotional experiences influencing their satisfaction in the lodging industry. *Journal of Travel and Tourism Marketing* 23 (1), 43-56.

- Han, T.T., Huang, K.K., 2013. The study of consumption value of the recreation industry customer hot-spring. *Journal of Sport and Recreation Management* 10 (1), 167-179.
- Harvard Business Review Report, 2013. The Impact of Employee Engagement on Performance. Harvard Business School Publishing, Boston, MA.
- He, Y., Li, W., Lai, K.K., 2011. Service climate, employee commitment and customer satisfaction. *International Journal of Contemporary Hospitality Management* 23 (5), 592-607.
- Hofmann, D.A., Morgeson, F.P., Gerras., 2003. Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: safety climate as an exemplar. *Journal of Applied Psychology* 88 (1), 170-178.
- Hooper. D., Coughlan, J., Mullen, M.R., 2013. The servicescape as an antecedent to service quality and behavioral intentions. *Journal of Service Marketing* 27 (4), 271-280.
- Huang, M.C., Lee, P.P., 2012. The moderating effects of internal marketing and external marketing upon the relationship between interactive marketing and customer satisfaction: a multi-level model. *Sun Yat-Sen Management Review* 20 (2), 637-672.
- Hsiao, C.C., Tung, Y.Y., 2007. A study of the multi-level analysis of junior high school teachers' team learning behavior: application of a hierarchical linear model. *Journal of Taiwan Normal University: Education* 52 (3), 65-89.
- Jacobby, J., 2002. Stimulus-Organism-Response reconsidered: an evolutionary step in modeling (consumer) behavior. *Journal of Consumer Psychology* 12 (1), 51-57.
- Kahn, W.A., 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal* 33 (4), 692-724.
- Kaltcheva, V.D., Weitz, B.A., 2006. When should a retailer create an exciting store environment. *Journal of Marketing* 70 (1), 107-118.
- Kayaman, R., Arasli, H., 2007. Customer based brand equality: evidence from the hotel industry. *Managing Service Quality* 17 (1), 92-109.
- Kim, W.G., Lee, S., Lee, H.Y., 2007. Cobranding and brandy loyalty. *Journal of Quality Assurance in Hospitality and Tourism* 8 (2), 1-23.
- Kim, W.G.K., Moon, Y.J., 2009. Customers' cognitive, emotional, and actionable response to the servicescape: a test of the moderating effect of the restaurant type. *International Journal of Hospitality Management* 28 (1), 144-156.
- Klein, K.J., Kozlowski, S.W.J., 2000. From micro to meso: critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods* 3 (3), 211-236.
- Kozlowski, S.W.J., Klein, K.J., 2000. A multilevel approach to theory and research in organizations: contextual, temporal, and emergent processes. In: Klein, K. J., Kozlowski, S.W.J. (Eds.), *Multilevel Theory, Research and Methods in Organizations: Foundations, Extensions, and New Directions* (pp. 3-90). Jossey-Bass, San Francisco, CA.
- Kralj, A., Solnet, D., 2010. Service climate and customer satisfaction in a casino hotel: an exploratory case

- study. *International Journal of Hospitality Management* 29 (4), 711-719.
- Kruse, K., 2014. Employee engagement: the wonder drug for customer satisfaction. Available at: <http://www.forbes.com/sites/kevinkruse/2014/01/07/employee-engagement-the-wonder-drug-for-customer-satisfaction/> (Accessed 25 October, 2014).
- Kuo, N.T., Chang, K.C., Chen, M.C., Hsu, C.L., 2012. Investigating the effect of service quality on customer post-purchasing behaviors in the hotel sector: the moderating role of service convenience. *Journal of Quality Assurance in Hospitality and Tourism* 13 (3), 212-234.
- Ladhari, R., 2009. Service quality, emotional satisfaction, and behavioral intentions. *Managing Service Quality* 19 (3), 308-331.
- Liao, H., Chuang, A., 2004. A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal* 47 (1), 41-58.
- Liao, H., Chuang, A., 2007. Transforming service employees and climate: a multilevel, multisource examination of transformational leadership in building long-term service relationship. *Journal of Applied Psychology* 92 (4), 1006-1019.
- Lee, L.Y., Veasna, S., 2013. The effects of social exchange perspective on employee creativity: a multilevel investigation. *Psychology Research* 3 (11), 660-678.
- Liang, Y.W., 2012. The relationships among work values, burnout, and organizational citizenship behaviors. *International Journal of Contemporary Hospitality Management* 24 (2), 251-268.
- Lin, I.Y., 2004. Evaluating a servicescape: the effect of cognition and emotion. *International Journal of Hospitality Management* 23 (2), 163-178.
- Lin, S.M., Ding, Y.P., 2011. A research framework of servicescape-customer relationship: case study of spa industry in northern Taiwan. *The Journal of International Esthetic Science* 8 (1), 197-222.
- Lin, J.S.C., Liang, H.Y., 2011. The influence of service environments on customer emotion and service outcomes. *Managing Service Quality* 21 (4), 350-372.
- Lin, I.Y., Mattila, A.S., 2010. Restaurant servicescape, service encounter, and perceived congruency on customers' emotions and satisfaction. *Journal of Hospitality Marketing and Management* 19 (8), 819-841.
- Lin, C.C., Peng, T.K., 2006. Multilevel research in management: conceptual theoretical, and methodological issues in level of analysis. *Journal of Management* 23 (6), 649-675.
- Manning, M., Shacklock, A., Bell, N., Manning, R., 2012. Organizational climate and service climate in tourism and hospitality: a review. *Journal of New Business Ideas and Trends* 10 (2), 1-18.
- Markos, S., Sridevi, M.S., 2010. Employee engagement: the key to improving performance. *International Journal of Business and Management* 5 (12), 89-96.
- McClelland, G.H., Judd, C.M., 1993. Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin* 114 (2), 376-390.
- Mehrabian, A., Russell, A., 1974. *An Approach to Environmental Psychology*. MIT Press, Cambridge, Mass.
- Miles, P., Miles, G., Cannon, A., 2012. Linking servicescape to customer satisfaction: exploring the role of



- competitive strategy. *International Journal of Operations and Production Management* 32 (7), 772-795.
- Namkung, Y., Jang, S.C.S., 2010. Effects of perceived service fairness on emotions, and behavioral intentions in restaurants. *European Journal of Marketing* 44 (9), 1233-1259.
- Ncube, F., Jerie, S., 2012. Leveraging employee engagement for competitive advantage in the hospitality industry. *Journal of Emerging Trends in Economics and Management Sciences* 3 (4), 380-388.
- Peng, J.C., Lee, Y.L., Tseng, M.M., 2014. Person-organization fit and turnover intention: exploring the mediating effect of work engagement and the moderating effect of demand-ability fit. *The Journal of Nursing Research* 22 (1), 1-11.
- Pugh, S.D., 2001. Service with a smile: emotional contagion in the service encounter. *Academy of Management Journal* 44 (5), 1018-1027.
- Qin, Q., Wen, B., Ling, Q., Zhou, S., Tong, M., 2014. How and when the effect of ethical leadership occurs? a multilevel analysis in the Chinese hospitality industry. *International Journal of Contemporary Hospitality* 26 (6), 974-1001.
- Ram, P., Bhargav. G. S., Prabhakar, G.V., 2011. Work environment, service climate, and customer satisfaction: examining theoretical and empirical connections. *International Journal of Business and Social Science* 2 (20), 121-132.
- Rosenbaum, M.S., Massiah, C., 2011. An expanded servicescape perspective. *Journal of Service Management* 22 (4), 471-490.
- Rothmann, S., Baumann, C., 2014. Employee engagement: the effects of work-home/home-work interaction and psychological conditions 4, 515-530.
- Sadiqe, M., 2014. Employee engagement in hospitality industry in India: an overview. *Global Journal of Finance and Management* 6 (4), 375-378.
- Saks, A.M., 2006. Antecedents and consequents of employee engagement. *Journal of Managerial Psychology* 21 (7), 600-619.
- Salanova, M., Agut, S., Peiró, J.M., 2005. Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. *Journal of Applied Psychology* 90 (6), 217-227.
- Schaufeli, W.B., Bakker, A.B., 2004. Job demands, job resources, and their relationships with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior* 25 (3), 293-315.
- Schaufeli, W.B., Salanova, M., González-Romá, V., Bakker, A.B., 2002. The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *Journal of Happiness Studies* 3 (1), 71-92.
- Schneider, B., Ehrhart, M.G., Mayer, D.M., Saltz, J.L., Niles-Jolly, K., 2005. Understanding organization-customer links in service settings. *Academy of Management Journal* 48 (6), 1017-1032.
- Schneider, B., Parkington, J., Buxton, V., 1980. Employee and customer perceptions of service in banks. *Administrative Sciences Quarterly* 25 (2), 252-267.
- Schneider, B., Salvaggio, A.N., Subirats, M., 2002. Climate strength: a new direction for climate research.

- Journal of Applied Psychology 87 (2), 220-229.
- Schneider, B., White, S.S., Paul, M.C., 1998. Linking service climate and customer perceptions of service quality: test of a causal model. *Journal of Applied Psychology* 83 (2), 150-163.
- Sinaiko, H. W., Brislin, R. W., 1973. Evaluating language translations: experiments on three assessment methods. *Journal of Applied Psychology* 57 (3), 328-334.
- Slåtten, T., Mehmetoglu, M., 2011. Antecedents and effects of engaged frontline employees: a study from the hospitality industry. *Managing Service Quality* 21 (1), 88-107.
- Solnet, D., Paulsen, N., 2006. Service climate, employee identification, and customer outcomes in hotel property rebrandings. *Journal of Hospitality and Leisure Marketing* 13 (3/4), 3-27.
- Sureshchandar, G. S., Rajendran, C., Anantharaman, R. N., 2002. Determinants of customer-perceived service quality: a confirmatory factor analysis approach. *Journal of Services Marketing* 16 (1), 9-34.
- Svari, S., Olsen, L.E., 2012. The role of emotions in customer complaint behaviors. *International Journal of Quality and Service Sciences* 4 (3), 270-282.
- Swarnalatha, C., Prasanna, T.S., 2013. Employee engagement from a retail sector perspective. *International Journal of Marketing and Human Resource Management* 4 (1), 1-7.
- Taiwan Tourism Bureau, 2014a. 2013 Survey of Travel Activities by R.O.C. Citizens. Taiwan Tourism Bureau, Taipei City, Taiwan.
- Taiwan Tourism Bureau, 2014b. 2013 Survey of Foreign Tourists Consumption in Taiwan. Taiwan Tourism Bureau, Taipei City, Taiwan.
- Tansuhaj, P., Randall, D., McCullough, J., 1988. A services marketing management model: integrating internal and external marketing functions. *The Journal of Services Marketing* 2 (1), 31-38.
- Tseng, C.M., 2010. *Beauty Salon Marketing Management*. Hwa Li Publishing Co., New Taipei City, Taiwan.
- Wakefield, K.L., Blodgett, J.G., 1994. The importance of servicescapes in leisure service settings. *Journal of Service Marketing* 8 (3), 66-76.
- Wang, M. L., 2015. Linking service climate to customer loyalty. *The Service Industries Journal*, DOI: 10.1080/02642069.2015.1015518.
- Wech, B.A., Heck, A.L., 2004. An introduction to hierarchical linear modeling for marketing researchers. *Marketing Bulletin* 15, Technical Note 1, 1-8.
- Wen, F.H., Chiou, H.J., 2009. Methodology of multilevel modeling: the key issues and their solutions of hierarchical linear modeling. *National Taiwan University Management Review* 19 (2), 263-294.
- Wieseke, J., Lee, N., Broderick, A.J., Dawson, J.F., Dick, R.V., 2008. Multilevel analysis in marketing research: differentiating analytical outcome. *Journal of Marketing Theory and Practice* 16 (4), 321-339.
- Yang, J., Wang, Y., 2010. A study on the impact of organizational service climate on customer experience. 2010 3rd International Conference on Information Management, Innovation Management and Industrial Engineering, pp. 93-96.
- Yu, M.C., Chen, W.C., Huang, C.C., 2014. The effects of positive psychological capital, work engagement, and service climate on service-oriented organizational citizenship behavior: the case of

- telecommunications industry. *Service Management Review* 11, 25-42.
- Yu, Y.T., Dean, A., 2001. The contribution of emotional satisfaction to consumer loyalty. *International Journal of Service Industry Management* 12 (3), 234-250.
- Zeithaml, V.A., Bitner, M.J., 2003. *Service Marketing: Integrating Customer Focus across the Firm*. McGraw-Hill, New York.
- Zhang, P., Li, N., 2004. Love at first sight or sustained effect? the role of perceived affective quality on users' cognitive reactions of information technology. Paper presented at the proceedings of 25th international conference on information systems, Washington, DC.