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**The Importance of Physical, Social and Contextual Elements of the Social-Servicescape
on Customer Affect and Repurchase Intentions**

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Alastair Tombs will be presenting the paper at the conference.

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Abstract

This study addresses an important gap in the services marketing literature by extending previous research on the physical servicescape to include the social and contextual elements of a service environment. Essentially, we argue that in addition to the influence of physical elements, consumer behaviour is influenced by human and contextual elements of the environment in which the behaviour takes place. This study examines the influence of all three environmental factors on customer affect and repurchase intentions. In this paper, we provide a critical review of the literature before operationalising our Social-servicescape model and presenting the results of our 2x2x3 experimental design study of 263 respondents that manipulated Social Density (physical element), Displayed Emotion of Others (social element) and Purchase Occasion (contextual element) to demonstrate how the presence of other customers influences Customer Affect and Purchase Intentions in a restaurant service setting. The results suggest that other customers do play an important role in how the customer feels and that these feelings have a significant impact on repurchase intentions. Important theoretical and managerial implications of these findings are discussed.

Key Words: Servicescapes, Experimental design, customer interaction.

Introduction

Retailers spend considerable sums of money on décor and fittings to create an inviting and comfortable environment, yet the most inviting environments are those full of other customers. Indeed, the influence of these purportedly attractive environments on customer behaviour may be negated if there is a lack of customers present. This paper reports the findings of an experimental study where we investigated the influence of other customers in a service environment in terms of physical, social and contextual elements on customer affect and repurchase intentions.

Theoretical Framework

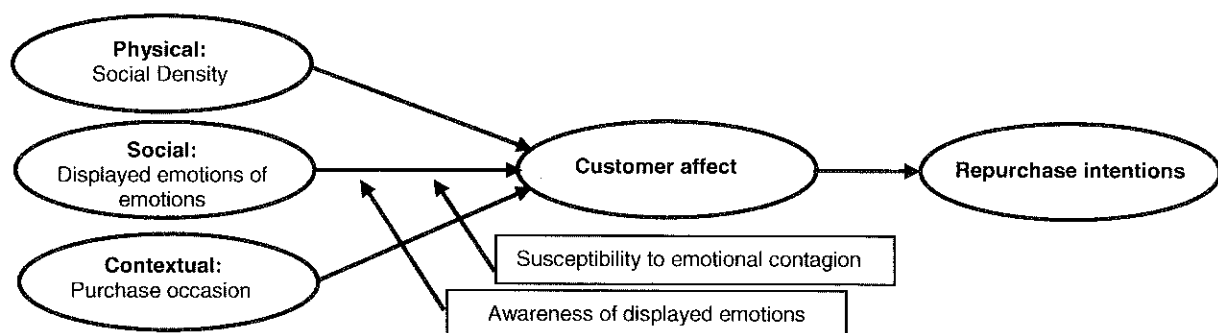
Although there is an established stream of empirical research on the effects of the service environment on customers (cf. Turley and Milliman, 2000), the influence of human and contextual elements of the environment on customer behaviour has been largely ignored. This is surprising given that the human element of the environment is proposed as a factor that may influence customer behaviour in the conceptual papers of Belk (1975), Baker (1987), and Bitner (1992), and again highlighted in Turley and Milliman's (2000) review paper. Yet despite these authors suggesting a need for further investigation of human elements, researchers have primarily focused on the influence of *physical* elements of the environment on customer's perceptions of the service (Bitner, 1990, Grewal and Baker, 1994; Babin and Attaway, 2000; Baker et al., 2002; Donovan and Rossiter, 1982; Donovan et al., 1994). The exception has been a limited number of empirical studies into crowded retail environments (Bateson and Hui, 1987; Eroglu and Machleit, 1990; Hui and Bateson, 1991;

Machliet et al., 2000), and queuing behaviour (Hui et al., 1998; Hui and Tse, 1996; Pruyn and Smidts, 1999).

However, considering that many services now focus on the consumption experience (Shaw and Ivens, 2002) and are delivered in the presence of other customers, the service environment's *human* elements, particularly the influence of customers on other customers; and the *contextual* elements, such as the purchase occasion, are too important for researchers and managers to continue to ignore.

Physical elements: Research into the influence of other customers in the service environment has revolved largely around the concept of crowding (Harrell et al., 1980; Kaya and Erkip, 1999; Machliet et al., 2000). This research has concentrated on the negative aspects. The lack of physical space is believed to have a negative effect on satisfaction (Eroglu and Machleit, 1990) and encourage avoidance strategies such as disregarding low priority shopping items, delaying the purchase of unnecessary items and reducing planned shopping time (Harrell et al., 1980). However, there are a number of other service environments such as nightclubs and sports stadiums, where high densities of customers are encouraged and indeed viewed positively by the customers. **Social Element:** "The influence of physical settings on behaviour is inextricably bound up with the social aspects of the setting" (Cassidy, 1997, p3). Indeed Guerin (1993) emphasises this by proposing that within the environment social stimuli are likely to receive more attention than non-social or physical stimuli. Despite these assertions few marketing researchers have given empirical consideration to social interactions between customers especially in terms of non-verbal influence. A notable exception is Grove and Fisk's (1997) study identifying social interaction between customers within a service environment as influencer of customer satisfaction and evaluation of the service. Therefore the social aspects of the environment must be included in any study of environmental effects. **Contextual environment:** The contextual component of the environment has been well recognised in the environmental psychology literature as playing a major role in determining the behaviour of those within it. The framework adopted in this study is a development of Barker's (1968) 'behaviour settings' and Cantor's (1986) 'concept of place' which represents the service environment as the context for consumption behaviour (Tombs and McColl-Kennedy, 2003b). Behaviour Setting Theory (Barker, 1968; Wicker, 1992) suggests that an individual's behaviour is determined by the contextual cues within the environment and as such, the contextual environment becomes self-regulating social system (Garling, 1998). Take for example, a church used for a wedding or a funeral: the physical surroundings (building, layout of furniture and placement of people) and the social surroundings (friends and relations) remain the same for each occasion but the contextual surrounding creates very different effects on the behaviour and emotions felt by those within the environment. Similarly the design and composition of a service environment to suit different purchase occasions (contexts) may also influence the behaviour within it. Despite these assertions no research appears to have been undertaken to understand the role of the contextual environment in consumer behaviour.

Figure 1: The Social-servicescape Conceptual Framework.



The social-servicescape conceptual framework (Figure 1) addresses these issues by proposing that the **physical, social** and **contextual** elements of the environment all influence customer affect, which in turn is a driver of behavioural intentions (Tombs and McColl-Kennedy, 2003b) The influence of the social environment on customer affect is however moderated by two factors specific to each individual. Firstly, the degree to which an individual is susceptible to emotional contagion will determine how much of other customers displayed emotions (social environment) will transfer to that individual. Secondly, the degree to which the social environment will influence customer affect will be determined by the individual's ability to perceive emotions in others. In short, the social environment will influence customer affect only to the degree to which customers are aware of others emotions and the degree to which they themselves are susceptible to being influenced by others' emotions.

Methodology

Research design

To test the influence of the three environmental constructs on customer affect and repurchase intentions a 2 x 2 x 3 between subjects experimental design was used. Specifically, in this 12 scenario study depicting a restaurant experience we manipulated purchase occasion (group, private), social density (high, low), and displayed emotions in others (high positive, low positive, high negative). The stories recounted in each scenario were developed from a number of incidents observed during field observations and focus groups during the pre-development stages of this study. The scenarios were narrated onto an audio CD by a professional voice-over actor in a professional sound studio.

Following Smith and Bolton's (2002) lead, experimentally generated scenarios were developed and pre-tested for validity using an expert panel. The scenarios were tested to ensure they captured the manipulations of each construct. This initial test resulted in a 94% inter-rater agreement. The credibility of the scenarios was tested using 148 postgraduate and undergraduate students. Overall the respondents rated the scenarios as realistic and that they were able to adopt the role of the customer ($M = 6.12$ on a 7 point scale where 7 is strongly agree and 1 is strongly disagree).

The experiment was conducted using a convenience sample of 263 business students from an Australian University. The sample size for each manipulation ranged from 20 to 24 respondents. Although there has been an ongoing debate about the external validity of using a student sample this study has followed Lynch's (1999, p371) assertions that "there is no advantage of real people over students – assuming that students' behaviour falls within the domain of the theory". Analysis of the sample showed 79% had been to a restaurant more than five times over the past three months with 48% had been more than 10 times and 21% had been more than 20 times. Therefore it could be assumed that the sample was relatively knowledgeable and experienced with this type of service.

Respondents listened to the scenarios in small groups. Each group was randomly assigned one scenario. Prior to listening to a scenario each respondent was asked to rate how they felt using Richins' (1997) "Consumption Emotion Set" (CES). They were then told to imagine that they were the person being described in the scenario. The main character in the scenario, the role the respondents were to adopt, was just described as 'you' to avoid any gender, age or ethnicity bias. After exposure to the stimulus the respondents again rated how they felt using the CES scale. The remainder of the questionnaire contained scales to measure repurchase intentions (Brady et al., 2002), susceptibility to emotional contagion (Doherty, 1997), awareness of emotions in others (Mayer et al., 1999) plus credibility checks (Sparks and McColl-Kennedy, 2001).

Operationalising of independent variables

The **social density** is portrayed by the busyness of the environment. Where the social density is described as high there were no vacant tables in the restaurant. Movement around the restaurant was restricted. Where the social density is described as low there were many vacant tables in the café / restaurant. The **displayed emotions of others** is portrayed in the scenarios by the activity at the nearest table to the central character. The activity representing activated pleasant emotions is the description of a birthday celebration. Activated unpleasant emotions are represented by an argument erupting at the nearest table to the central character. Unactivated pleasant emotions are represented by a description of the other diners talking quietly among themselves. Two measures of **purchase occasion** were used. The group purchase occasion describes a social situation where several work colleagues go out together to a café / restaurant after work on a Friday night. The private purchase occasion in contrast is a very personal and private business meeting between two associates from different firms.

Dependent Measures

Customer affect was operationalised as the change in emotions due to the environmental stimuli. Customer affect was measured using Richins (1997) consumption emotion set of 16 key emotions. Each key emotion in this scale is captured by either 2 or 3 descriptors (sub-emotions). The mean value of these descriptors was taken to provide a score for each of the key emotions in the scale. In order to reduce the number of variables describing customer affect to a more manageable size and provide some meaningful categories specific to the influence of the social-servicescape a factor analysis (maximum likelihood, promax rotation) was carried on these 16 key emotions. This resulted in a 4-factor solution (total variance explained 60%) describing positive affect ($\alpha = 0.91$), negative affect ($\alpha = 0.85$), sense of belonging ($\alpha = 0.76$) and arousal ($\alpha = 0.75$). The eigenvalues for these four factors were 5.137, 1.989, 1.397, and 1.098 respectively. Three items were used to capture the construct of **repurchase intentions** (Brady et al., 2002): repatronage, word of mouth, and purchase decision-making ($\alpha = 0.89$).

Results

Table 1 provides the MANOVA results for the influence of environmental factors on the 4 factors of customer affect. As shown, there was a significant multivariate main effect for all three independent variables. In line with the assumption that other customers are an important factor within the service environment, the social element had the strongest influence on customer affect. There were no statistically significant interaction effects between the independent variables, suggesting that the purchase occasion, social density and displayed emotions act independently on customer effect. We tested the moderating effects of both susceptibility to emotional contagion and awareness of emotions in others on the influence environmental factors have on customer affect using moderated regression analysis (Baron and Kenny, 1986). The results shown in table 2 indicate that susceptibility to emotional contagion moderates the influence of displayed emotions of others on three of the four components of customer affect. It had no moderating effect on belonging nor were there any effects on the influence of social density or purchase occasion. Awareness of emotions in others moderated the influence of displayed emotions of others only for belonging. Table 3 shows the regression of the repurchase intention items on the affect measures. Only two of the IVs were found to be significant predictors of repurchase intentions. Positive affect is a statistically significant predictor of positive repatronage, recommendation and same choice (desire to make the same purchase decision again). If a customer on the other hand feels negative affect then this has a strong negative impact on repatronage, willingness to recommend and desire to make the same purchase decision again. Feelings of belonging and arousal had no significant effect on any of the repurchase intentions.

Table 1: Multivariate and Univariate Effects for Consumption Emotions

Treatment variable	Dependent	df	Multivariate F	Univariate* F
Purchase occasion (contextual environment)	Positive affect	(4,246)	7.611 *** a	21.043 ***
	Negative affect			20.043 ***
	Belonging			2.607 (NS)
	Arousal			7.509 **
Social density (physical environment)	Positive affect	(4,246)	4.577 *** b	8.466**
	Negative affect			12.924 **
	Belonging			3.948 (NS)
	Arousal			4.255 (NS)
Displayed emotions (social environment)	Positive affect	(8,492)	9.858 *** c	20.225 ***
	Negative affect			10.700 ***
	Belonging			24.137 ***
	Arousal			7.021 ***
Interaction Effects				
Occasion x Density		(4,246)	2.062 (NS)	
Occasion x Emotions		(4,246)	0.665 (NS)	
Density x Emotions		(8,492)	1.652 (NS)	
Occasion x Density x Emotions		(8,492)	0.914 (NS)	

Statistical Power: a = 0.996, b = .882, c = 1.000

* = Bonferroni adjusted $\alpha = 0.013$ ** $p < 0.01$ *** $p < 0.001$

Table 2: Regression Model Indicating Moderation Effects

		Displayed emotions	Susceptibility to emotional cont.	Susceptibility x display	Awareness of emotions	Awareness x display
Positive affect	<i>B</i>	-.331	-.209	.179	-.187	.016
	<i>t</i>	-5.757	-3.300	2.836	-1.292	1.187
	<i>p</i>	.000	.001	.005	.197	.236
Negative affect	<i>B</i>	.262	.115	-.185	.106	-.449
	<i>t</i>	4.406	1.754	-2.820	.716	-1.136
	<i>p</i>	.000	.081	.005	.474	.257
Belonging	<i>B</i>	-.362	-.169	.102	-.186	.727
	<i>t</i>	6.311	-2.674	1.618	-1.313	1.925
	<i>p</i>	.000	.008	.107	.190	.055
Arousal	<i>B</i>	-.175	-.145	.146	-.017	.135
	<i>t</i>	2.867	2.160	2.117	-.110	.335
	<i>p</i>	.004	0.032	.030	-.913	.738

Numbers in boldface indicate significant moderation effects

Table 3: The Beta Coefficients for the Influence of Customer Affect on Repurchase Intentions

	Repatronage	Recommendation	Same choice
Positive affect	0.297 **	0.255 *	0.363 **
Negative affect	-0.843 **	-0.924 **	-0.773 **
Belonging	0.136 (NS)	0.152 (NS)	0.042 (NS)
Arousal	-0.063 (NS)	-0.127 (NS)	0.101 (NS)
Adjusted R ²	0.162	0.141	0.115
F	13.722	11.758	9.521

* $p < 0.01$ ** = $p < 0.05$ *** $p < 0.001$

Conclusions and discussion

There are two key findings of theoretical and practical significance. Firstly, the results suggest that all three environmental elements proposed in the social-servicescape conceptual model impact on customer affect and repurchase intentions within a restaurant service setting. Furthermore, there were no statistically significant interaction effects between these factors suggesting that the physical, social and contextual elements of the environment act independently. This suggests that studies that rely on just one facet of the environment, such

as the physical elements, may only be capturing part of the environmental effects. This supports the claims by Cassidy (1997), Guerin (1993) and Garling(1998) that the environment should be considered as more than just physical elements and this finding further demonstrates that the Tombs and McColl-Kennedy (2003) Social-servicescape can be applied in a restaurant service setting. Moreover, this is the first study in marketing to highlight the importance of social and contextual elements of the service environment on customer affect and repurchase intentions. For the service manager, this finding emphasises the need to consider the contextual and social elements as well as the physical elements when designing and operating a service environment. In other words keeping the environment consistent with the customers' purchase occasion and facilitating a social environment that will enhance the customer's enjoyment of the service experience.

Secondly, consistent with previous studies that have examined affect driven behavioural responses to the "physical" shopping environments our study showed that positive customer affect influenced approach behaviours (desire to return, positive word of mouth) and negative customer affect influenced avoidance behaviours (negative repurchase intentions such as an unwillingness to return). In addition to these results however, this study has also revealed that the social environment evokes emotions in customers that appear to represent a sense of belonging. While these "sense of belonging" feelings had no significant effect on the repurchase intention measures used in this study, previous research has indicated that a sense of belonging will influence the spatial layout of customers within the environment (Tombs and McColl-Kennedy, 2003a) and identification with a service provider, for example my dentist, my (department) store and my café (Barnes, 2000). Future research into the influence of service environments should investigate affect-driven behavioural and attitudinal responses that lie outside of the traditional approach/avoidance response measures used in this field. From a managerial perspective this research emphasises the need to create positive customer affect to enhance the likelihood of repurchase and recommendation to others. It also suggests that staff need to fully understand the possible consequences of the emotions their customers display so that they can facilitate positive emotions and manage negative emotions. This has important implications for training.

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