



6th AWBR International Conference
9 – 10 June 2011
Bordeaux Management School – BEM – France

The Servicescape Response: do Brand Committed Consumers Respond Differently to the Cellar Door Experience?

Teagan Altschwager

University of Adelaide Business School, Australia
teagan.altschwager@adelaide.edu.au

Cullen Habel

University of Adelaide Business School, Australia
cullen.habel@adelaide.edu.au

Steve Goodman

University of Adelaide Business School, Australia
steve.goodman@adelaide.edu.au

◦Purpose - The purpose of this study is to measure consumer outcomes of cellar door servicescape, and whether these outcomes are moderated by a consumer's level of trust and commitment to the winery brand. The primary relationships measured are Servicescape to Response Behaviours of Approach and Avoidance (Mehrabian and Russell 1974), and Servicescape to Future Purchase Intention.

◦Methodology – 613 usable responses were obtained from online questionnaires distributed to the databases of five wineries from the McLaren Vale Wine Region in South Australia.

◦Findings – Primary relationships are confirmed with results showing significant relationships for servicescape to response behaviour, and servicescape to future purchase intention. Brand trust and commitment are found to have a significant moderating effect on both relationships; both moderators weaken the primary relationships as the consumer's levels of brand trust and commitment increase.

◦Practical implications- for wineries, the results of this study indicate the importance of creating a positively perceived servicescape by implementing a high quality, attractive cellar door. Results suggest that servicescape influences consumer responses, but more specifically identifies those consumers who are more/less influenced by their surrounding environment.

Key words: Servicescape, Cellar Door, Response Behaviour, Future Purchase Intention

1. LITERATURE REVIEW

The physical environment surrounding service consumption – for example a winery cellar door – is termed 'servicescape' and has received significant attention in a variety of service contexts. Due to the intangible nature of a service, the surrounding environment is argued to have heightened importance as it can influence perceptions about the overall service experience (Baker 1987). 'Servicescape' is defined in this paper as the physical environment or setting in which a service takes place, that has the propensity to influence consumers' perceptions of that service, and can ultimately affect the consumer's response to the service (Bitner and Booms 1981; Baker and Cameron 1996; McComish and Quester 2005; Hall and Mitchell 2008). The servicescape of a given service setting includes Ambient Factors (for example music, lighting, fragrance), Design Factors (both aesthetic and functional design elements including colour and spatial layout), and Social Factors (perceptions of service personnel and other customers) (Baker 1987; Bitner 1992; Baker, Grewal and Parasuraman 1994; Baker and Cameron 1996). A variety of outcomes to servicescape have been investigated in previous studies; this study will measure the relationship between servicescape and Mehrabian and Russell's (1974) Response Behaviours of Approach and Avoidance. 'Response Behaviour' is established in environmental psychology literature as the reaction a person has to the physical environment around them (Bitner 1992). The variables of response behaviour measured in this study include; (1) Attraction, (2) Length of time spent within the service organisation, (3) Propensity to spend, and (4) Friendliness towards others. The basis of this concept in a service marketing context is that consumers who have positive perceptions of a servicescape are expected to respond positively with regards to the response behaviour variables – this is termed 'approach behaviour'. Consumers who have negative perceptions of a servicescape are expected to respond negatively with regards to the response behaviour variables – this is termed 'avoidance behaviour'.

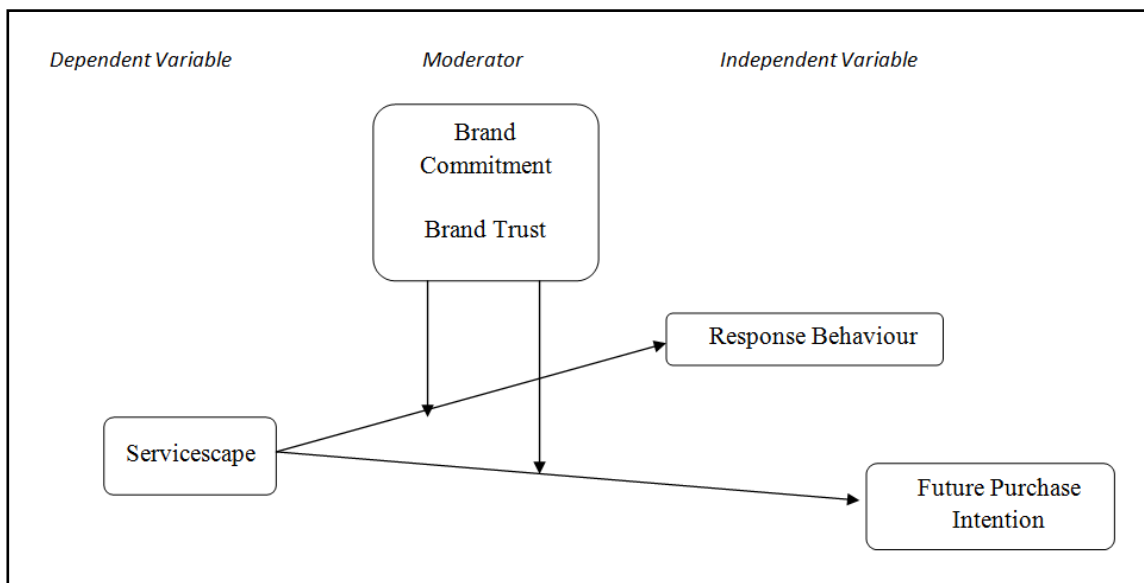
The purpose of this study is not only to measure this primary relationship, but also to investigate potential moderating variables. Lin (2004) proposes that a consumer's individual characteristics may influence the servicescape to response behaviour relationship; two such characteristics, brand commitment and brand trust, were selected for investigation. Consumers possessing high levels of brand commitment demonstrate stable purchase behaviour based on little evaluation of product attributes, and regardless of changes in the marketing environment (Amine 1998). Therefore, it is proposed that those with high levels of brand commitment will be less influenced by perceived servicescape as they make little evaluation about the product before they purchase; they make purchasing decisions based on prior experience, product attachment, or identification (Amine 1998). The second

characteristic, brand trust, decreases the perceived risk associated with service consumption (Delgado-Ballester and Munuera-Alemán 2001). Consumers with high levels of brand trust will base their judgments on emotional attachment and confidence in a brand, and will pay less attention to product attributes (Bowden 2009). Therefore, consumers with high brand trust are proposed to be less influenced by servicescape, thus weakening the relationship between servicescape and response behaviour.

An additional area under investigation is the influence of positive cellar door servicescape on future purchase intention in off-premise purchase situations. O'Neill, Palmer and Charter's (2002) study identified the potential for a customer, who favourably responds to servicescape, to repurchase that brand of wine at a restaurant or wine retailer. The consumer's positive service 'experience' is proposed to have a lasting effect, with the memory of this experience being used to make purchase decisions at a later time. This outcome, if supported, suggests a long term, tangible effect of positive servicescape. The purpose of this study is depicted through the research question and conceptual framework outlined below (see figure 1):

To what extent does servicescape influence consumer response behaviour and future purchase intention, and what role does (a) brand commitment and (b) brand trust play in moderating this relationship?

Figure 1: Conceptual Framework



2. RESEARCH METHODOLOGY

Online questionnaires were distributed to consumers of five participating wineries in the South Australian wine region of McLaren Vale. Winery consumers were contacted through each winery's email database, facebook page, or Enewsletter. Incentives of a case of wine were offered, most of which were donated by the participating wineries. The respondents obtained, although through a convenience sample, were appropriate for this study as respondents met the criteria of (a) being wine consumers, who (b) have recently visited the cellar door in question, and thus (c) are able to make judgments on the level of perceived servicescape. A total of 613 respondents were included in the final analysis after data cleansing. A questionnaire approach enabled data on the consumer's perceptions of cellar

door servicescape, their subsequent response behaviours, future purchase intentions, and their characteristics to be measured; the measurement items used were consistent with a number of other servicescape studies (for example Wakefield and Blodgett 1999; Hightower, Brady and Baker 2002; George 2006; Gill, Byslma and Ouschan 2007). Whilst it may have been optimum to administer the questionnaire *within* the consumption setting (Wakefield and Blodgett 1996) it was a condition of winery cooperation that questionnaires were only administered online. This meant reflective perceptions of servicescape were measured instead of initial perceptions, which we consider to be a limitation of this particular study. This limitation is mitigated to some degree by ensuring recency of visit as well as photos throughout the questionnaire to aid recall. A generic questionnaire was developed, with the wording then customized to be specific to each winery. 9-point Likert and bipolar scales were used to measure most constructs, with purchase probability being measured using a slider scale from 0-100%.

3. RESULTS

Table 1 indicates that all constructs obtained acceptable values for convergent validity and reliability, excluding Brand Commitment which was low for both sampling adequacy (KMO) and reliability (Chronbach's alpha). Bartlett's test of sphericity was also measured, receiving a value of .000 for all constructs, further confirming convergent validity. Discriminant Validity was considered adequate with no crossloading in excess of 0.4.

Table 1: Factor Analysis Results

Construct:	Testing for convergent validity:			Reliability:
	KMO	Eigenvalues	Total Variance Explained (%)	Cronbach's Alpha
Ambient Factors	.82	3.13	62.52	.85
Design Factors	.71	2.42	80.58	.88
Social Factors	.82	Component 1: 4.19 Component 2: 1.34	78.86	.88
Brand Trust	.74	2.55	85.03	.91
Brand Commitment	.50	1.43	71.28	.60
Response Behaviour	.79	Component 1: 3.99 Component 2: 1.29	75.53	.86
Future Purchase Intention	.73	2.37	78.86	.87

3.1 Primary Relationships

Multiple regression was used to test the significance and strength of the primary relationships. The relationship between servicescape and response behaviour was significant with a ($p < 0.001$). Servicescape accounted for 35% of the variance in response behaviour (R Square value of .35). In view of the sample non-normality, a Durbin-Watson value of 1.830 and no clearly identifiable pattern in the scatterplot meant that the sample passed post hoc testing. The second primary relationship, between Servicescape and Future Purchase Intention, was also significant ($P < 0.001$) with servicescape accounting for 11.2% variance in future purchase intention. Post Hoc tests are passed with a Durbin-Watson value of 1.884 and a scatterplot with no identifiable pattern. The low R Square indicates that other influences may be contributing to the variability in future purchase intention; this may include things such as promotions, habitual purchasing, and availability, as well as individual characteristics which will now be tested.

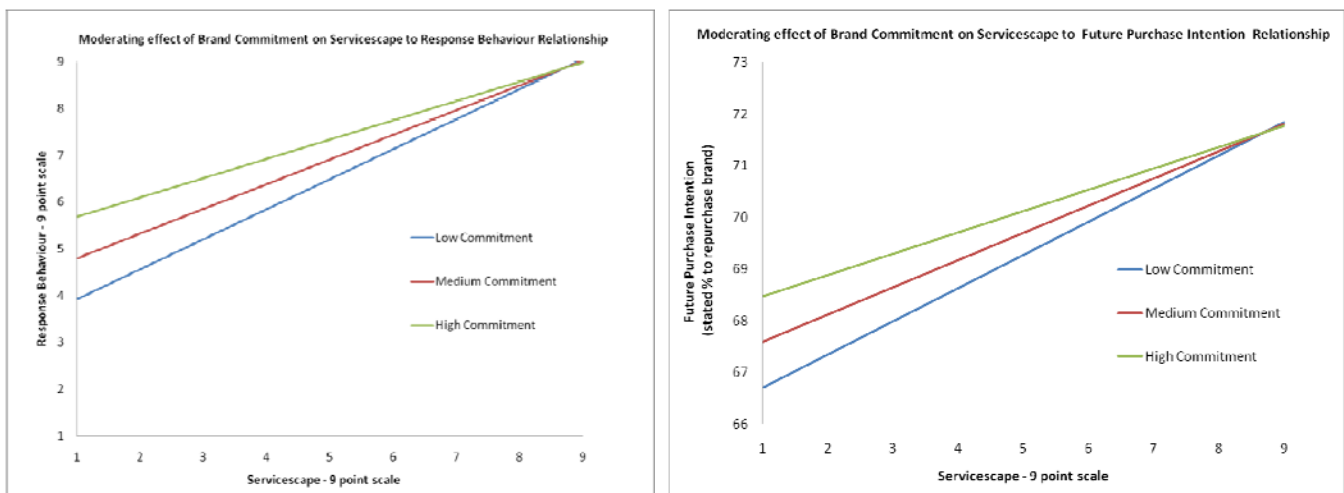
The multiple regression was re-run, this time including the moderator variable and an interaction variable (Independent Variable X Moderator) to test for moderation. These variables were centralised before computation of the interaction term to decrease problems of multicollinearity.

3.2 Brand Commitment as a Moderator

Brand Commitment was found to significantly moderate the relationships between both servicescape and response behaviour, and servicescape and future purchase intention (Sig F values both of .000). Brand Commitment and Servicescape together explain 36.4% of the variance in Response Behaviour; this value increased to 37.9% when the interaction term (Brand Commitment X Servicescape) was included (R Square change of 0.15, Sig F value remaining .000). Brand Commitment and Servicescape together explain 16% of the variance in Future Purchase Intention; this value increased to 16.9% when the interaction term (Brand Commitment X Servicescape) was included (R Square change of .009, Sig F Change now .012). Post hoc tests for normality are passed with Durbin Watson values of 1.852 and 1.887 respectively, with scatterplots showing no identifiable pattern. A tolerance level of .97 indicates no problems of multicollinearity between servicescape and commitment (see appendix 1).

Figure 2 shows two graphs that plot the relationship between servicescape and each of the dependent variables at different levels of commitment. Both graphs indicate the same change in relationship; a weakening of each primary relationship as the consumer’s level of brand commitment increases. The standardised beta coefficient of the interaction variable (-.126 for response behaviour and -.094 for future purchase intention) reiterates this weakening effect. The lines of both graphs intersect at approximately (9,9) in the response behaviour graph (left), and (72,9) in the future purchase intention graph (right), indicating that when servicescape is extremely high, response behaviour and future purchase intention is just as high for those with low commitment as those with high commitment.

Figure 2: Consumer brand commitment moderates the effect of servicescape



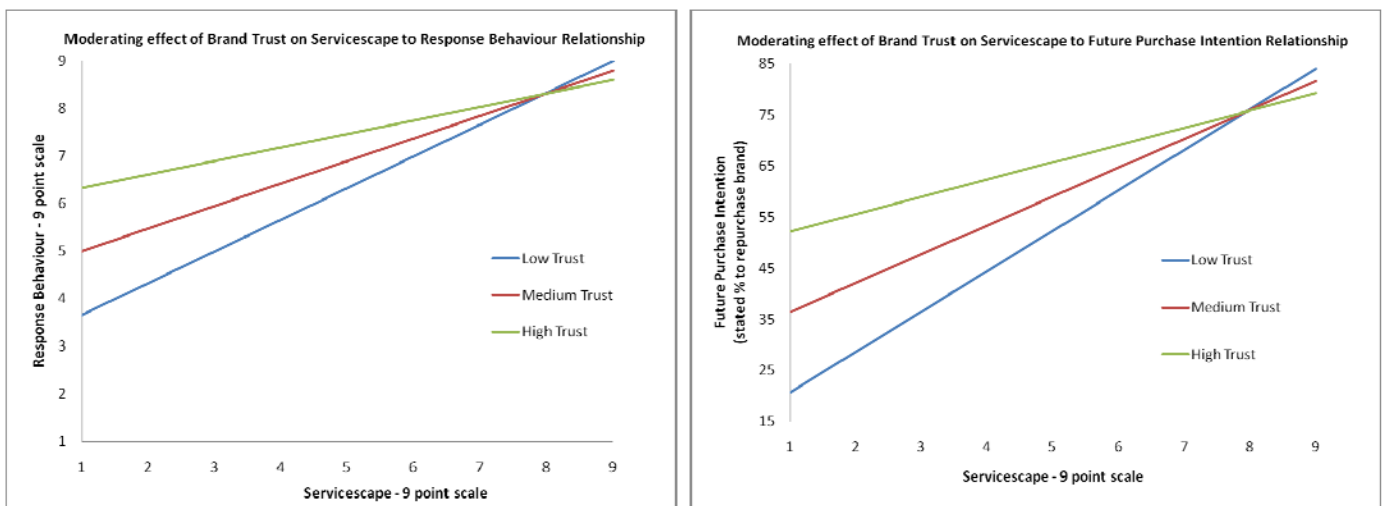
3.3 Trust as a moderator

Brand Trust and Servicescape together significantly predict response behaviour and future intention (both with Sig F values of .000), see Appendix 2 for multiple regression output. Trust and Servicescape together explain 37.6% of the variance in response behaviour, which

increased to 43.4% when the interaction variable (Brand Trust X Servicescape) was included (R Square change .058, Sig F value remaining at .000). Trust and Servicescape together account for 11.5% variance in future purchase intention; this value increased to 13.2% when the interaction variable (Brand Trust X Servicescape) was included (R Square change .018, Sig F value remaining at .000). Post hoc tests for normality are passed with Durbin-Watson values of 1.878, and 1.81 respectively. A tolerance level of .909 indicates no multicollinearity problems between servicescape and trust.

Figure 3 includes two graphs that plot the relationships between servicescape and each of the dependent variables at different levels of trust; at the mean (0), and a standard deviation above and below the mean (+/- 1.43). As with Brand Commitment, the two graphs indicate the same relationship for Brand Trust, a weakening effect on the primary relationship as the consumer's level of brand trust increases. Negative standardised beta coefficients of the interaction variable reiterate this weakening effect (-.252 for response behaviour, and -.139 for future purchase intention). The lines on each graph intersect at approximately (8,8) in the response behaviour graph (left), and (8,75) in the future purchase intention graph (right); indicating that at extremely high levels of servicescape, response behaviour and future purchase intention are just as high for those with low levels of trust as those with high trust.

Figure 3: Consumer brand trust moderates the effect of servicescape



4. DISCUSSION AND CONCLUSION

These findings indicate that –in some small measure – brand commitment and trust both exhibit a negative moderating effect on servicescape outcomes. That is, higher levels of both brand trust or brand commitment reduce the effect of a winery improving its cellar door. It is suggested that future servicescape research take these moderators into account when measuring an environment's influence on behaviour. The moderating effect implies that certain consumers will not (or to a lesser extent) take servicescape into consideration when in the cellar door, or indeed recall their experience to then influence their decisions in restaurants, wine retailers, or bottle shops. In addition, servicescape appears to increase future purchase intention of the brand. Perhaps the cellar door 'feel' becomes a trigger when making purchase selection in restaurants, bottle shops or wine retailers. For managers, this implies that although servicescape can influence behaviour in cellar door and should therefore be taken into consideration during cellar door design (the primary relationship was significant), some consumers will not be as strongly influenced by the environment. Managers must

consider the type of consumers (high or low commitment/trust) who are visiting the cellar door, and ultimately determine whether their money is better spent on a peripheral service element such as cellar door, or on core branding activities which will enhance levels of brand commitment and trust. As the wine industry is heavily tourist oriented, with high levels of new consumers visiting cellar doors, the benefits of servicescape should not be disregarded.

The major limitations within this study include the sample, and method of questionnaire administration. The participating wineries were confined to a single wine region, and the questionnaires were sent to cellar door consumers online. Thus respondents completing the questionnaire at home must rely on memory (and some prompts) to evaluate servicescape, which is more a reflective measure than a response measure. Nevertheless, these early findings provide a platform for further investigation of the servicescape response within winery cellar door, later in off-premise purchase situations, and also into the moderating influences of consumer characteristics.

5. REFERENCES

- Amine, A. (1998). "Consumers true brand loyalty: the central role of commitment." Journal of Strategic Marketing **6**(4): 305-319.
- Baker, J. (1987). "The role of the environment in marketing services: the consumer perspective." The Services Challenge: Integrating for Competitive Advantage, American Marketing Association, Chicago, IL: 79-84.
- Baker, J. and M. Cameron (1996). "The Effects of the Service Environment on Affect and Consumer Perception of Waiting Time: An Analysis of an Industrial Technology Diffusion." Journal of the Academy of Marketing Science **24**(4): 338.
- Baker, J., D. Grewal, Parasuraman, A. (1994). "The Influence of Store Environment on Quality Inferences and Store Image." Journal of the Academy of Marketing Science **22**(4): 328-339.
- Bitner, M. J. (1992). "Servicescapes: The Impact of Physical Surroundings on Customers and Employees." Journal of Marketing **56**(2): 57-71.
- Bitner, M. J. and B. H. Booms (1981). "Marketing strategies and organization structures for service firms." Marketing of Services, American Marketing Association.
- Bowden, J. L.-H. (2009). "The process of customer engagement: A conceptual framework." The Journal of Marketing Theory and Practice **17**(1): 63-74.
- Hall and R. Mitchell (2008). Wine Marketing: A Practical Approach Oxford Butterworth Heinemann.
- Delgado-Ballester, E. and J. Munuera-Alemán (2001). "Brand trust in the context of consumer loyalty." European Journal of Marketing **35**(11/12): 1238-1258.
- George, B. (2006). "Wine tourist motivation and the perceived importance of servicescape: A study conducted in Goa, India." Tourism Review **61**(3): 15-19.
- Gill, D., B. Byslma, R. Ouschan (2007). "Customer perceived value in a cellar door visit: the impact on behavioural intentions." International Journal of Wine Business Research **19**(4): 257-275.
- Hightower, R., M. K. Brady, T. L. Baker (2002). "Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events* 1." Journal of Business Research **55**(9): 697-707.
- Lin, I. (2004). "Evaluating a servicescape: the effect of cognition and emotion." International Journal of Hospitality Management **23**(2): 163-178.
- McComish, M. and P. G. Quester (2005). "Consumers' Affective Responses to the Retailscape: A Spatial and Temporal Perspective " ANZMAC 2005 Conference: Retailing, Distribution Channels and Supply Chain Management, The University of Adelaide.
- Mehrabian, A. and J. A. Russell (1974). "An approach to environmental psychology." Cambridge, MA: The MIT Press.
- O'Neill, M., A. Palmer and S. Charters (2002). "Wine production as a service experience-the effects of service quality on wine sales." Journal of Services Marketing **16**(4): 342-362.
- Wakefield, K. and J. Blodgett (1996). "The effect of the servicescape on customers' behavioral intentions in leisure service settings." Journal of Services Marketing **10**(6): 45-61.
- Wakefield, K. L. and J. G. Blodgett (1999). "Customer response to intangible and tangible service factors." Psychology and Marketing **16**(1): 51-68.

APPENDIX 1: Regression Analysis - Brand Commitment (BC) as a moderator

<i>a. Model 1: Servicescape, Brand Commitment & Response Behaviour</i>						
R Square	R Square Change	Sig. F Change	Durbin-Watson	Tolerance Statistic	Standardized Coefficients-Beta	
0.364	0.364	0			(Constant)	
					centred servicescape	0.553
					centred BC	0.166
<i>Model 2: Servicescape, Brand Commitment & Response Behaviour - Interaction variable Included</i>						
0.379	0.015	0	1.852	0.97	(Constant)	
					centred servicescape	0.532
					centred BC	0.175
					* interaction variable BC*Servicescape	-0.126
<i>b. Model 1: Servicescape, Brand Commitment and Future Purchase Intention</i>						
0.16	0.16	0			(Constant)	
					centred servicescape	0.28
					centred BC	0.243
<i>Model 2: Servicescape, BC & Future Purchase Intention - Interaction variable included</i>						
0.169	0.009	0.012	1.887	0.97	(Constant)	
					centred servicescape	0.264
					centred BC	0.25
					* interaction variable BC*Servicescape	-0.094

APPENDIX 2: Regression Analysis - Brand Trust (BT) as a moderator

<i>a. Model 1: Servicescape, Brand Trust and Response Behaviour</i>						
R Square	R Square Change	Sig. F Change	Durbin-Watson	Tolerance Statistic	Standardized Coefficients-Beta	
0.376	0.376	0			(Constant)	
					centred servicescape	0.505
					centred BT	0.212
<i>Model 2: Servicescape, Brand Trust and Response behaviour - Interaction variable included</i>						
0.434	0.058	0	1.878	0.909	(Constant)	
					centred servicescape	0.48
					centred BT	0.149
					* interaction variable BT*Servicescape	-0.252
<i>b. Model 1: Servicescape, Brand Trust and Future Purchase Intention</i>						
0.115	0.115	0			(Constant)	
					centred servicescape	0.279
					centred BT	0.116
<i>Model 2: Servicescape, Brand Trust & Future Purchase Intention - Interaction variable included</i>						
0.132	0.018	0	1.81	0.909	(Constant)	
					centred servicescape	0.265
					centred BT	0.081
					* interaction variable BT*Servicescape	-0.139