

Designing wine retail interiors to elicit desirable consumer impressions

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Understanding the antecedents of consumer loyalty remains a crucial issue for both tasting room managers and wine retailers. Store personality plays a central role as the congruity with consumers' self increases loyalty. This research proposes and tests a conceptual model that relates wine stores' interior design to consumer impressions of that store's personality. Two independent studies integrate the designer perspective with the consumer perspective to investigate links. The empirical results are generally supportive of the model: Store personality impressions are systematically related to five holistic prototypes of store interiors. Minimal-shell store interiors score high on unpleasantness, Complex-shell designs score high on enthusiasm, genuineness, and solidity, moderate-shell interiors generate impressions of below-average sophistication, genuineness, and solidity, low-content interiors score high on enthusiasm and sophistication, and high-content stores score low on enthusiasm, and high on unpleasantness. Managerial implications and future research conclude the paper.

Keywords: Gestalt, design experts, store interior, store personality

1. Introduction

In today's highly competitive environment attracting new and retaining current shoppers are primary goals (Babin & Attaway, 2000). Consumer-store congruity assumes a key role by linking characteristics of the store with customer loyalty (Chebat, Hedhli, & Sirgy, 2009; Dodd 1999; Michell & Hall 2004; Nowak & Newton 2006; Rundle-Thiele 2005). More specifically, consumers preferably shop stores who match their self-concept (e.g., MacIntosh & Lockshin 1997; Yim, Chan & Hung, 2007). Since 2003, d'Astous and Levesque have called for conducting research aiming at understanding the underpinnings of store personality impressions. However, not a single retailing study appears to investigate store design antecedents of consumer evaluations. This gap is all the more surprising because building and managing a distinctive store personality plays a pivotal role in store brand management as a prerequisite for differentiating the brand, and for building brand equity (Grewal, Levy, & Lehmann, 2004; Wilcox et al. 2008). A more thorough understanding of how consumers form store personality impressions based on wine store design should help managers better understand patronage patterns, thereby assisting them in formulating better marketing programs.

2. Conceptual Framework

D'Astous and Levesque (2003, 457) define store personality as "the mental representation of a store on dimensions that typically capture an individual's personality". The related concept of store image is rooted more strongly in exterior elements and in the store's atmosphere, whereas store personality is more strongly linked to interior elements (Zimmer & Golden, 1988). Several studies establish design's general ability to shape consumer evaluative judgments including personality inferences (e.g., Karjalainen, 2007; Veryzer, 1999). Individuals infer specific impressions from store design (e.g., Areni & Kim, 1994; Baker, Grewal, & Parasuraman, 1992; Bellizzi, Crowley, & Hasty, 1983; Bellizzi & Hite, 1992; Lockshin & Kahrimanis 1998) and form personality judgments based on a variety of visual elements and features (Orth & Malkewitz, 2008). Particularly relevant to store design, research on architectural drawings and car interiors indicates that design leads to consumer evaluative responses including personality associations (Bafna, 2008; Brengman & Geuens, 2004; Karlsson, Aronsson, & Svensson, 2003).

Central to this research is the perspective that wine store personality judgments originate not from any single interior design element, but rather relate to holistic prototypes of design rooted in higher-order generic design factors comprised of multiple elements. This perspective is based on theoretical and empirical evidence. The general idea of part-whole perceptual differences is one of the pioneering contributions of early Gestalt psychologists (Koffka, 1922; Wertheimer, 1925). For example, an open beam ceiling might look ominous when seen alone, and yet add richness to an interior that is characterized by natural materials. Likewise, any one of the multiple interior design elements taken in isolation fails to convey the nature of the room itself, but content and meaning emerge from the orchestration of numerous parts to construct a far richer perceptual whole (Morin et al., 2007).

Gestalt psychology also recognizes the importance of stimulus categorization. Consider figure-ground distinctions, where two store interiors might have similar features (i.e., floors, walls, and ceilings) but differ in which ones they make more prominent (the figure) and which they treat more as the background. Consumers often recognize a particular class, category, or type of objects (i.e., environments) without the ability to identify all underlying details and peculiarities (Berlyne, 1971; Loken & Ward, 1990; Pepper, 1949). Extending these concepts to store design suggests consumers try to

understand an interior by placing it within an existing category. For example, a consumer may perceive a store as sophisticated due to a high and elaborate ceiling, elegant colors, and ornate furniture.

Empirical support for the contention that store design effects relate to holistic types of design stems from design practice. Interior designers make choices regarding elements such as layout, lighting, color schemes, furniture, ornamentation, and textures, and decide how to mix those elements (Kotler, 1973). In recent years, designers specifically create shells which convey key messages to people rather than acting merely as a background to the products (Frampton, 2006). For example, the interior design of a wine tasting room may include a plain matte tile floor, low-intensity lights, overall harmonious color scheme, dim monochromatic walls with few naturalistic paintings, a large wooden bar, open-beam ceiling, and a prominent fire place, all working together to generate impressions of genuineness and solidity. Integrating design theory with retail brand management this research puts forward the idea of generalizable holistic store interior designs which are systematically related to generalizable store personality impressions.

3. Research method

The method closely follows approaches and procedures established and accepted in research on design (i.e., Henderson, Giese, & Cote, 2004; Orth & Malkewitz, 2008). The first step involves obtaining an initial list of universal interior design elements from trade and academic literatures. The many elements available to decision-makers in the wine store interior design process break down into two basic groups: those design elements that relate to the actual physical environment or shell of the store (shell), and the contents that are placed in the store (content). Professionals (interior designers, architects, retailers, and academics; $N = 13$) expanded the initial list obtained from literature. Integrating their feedback through a multi-round process yields a final list of eighty-two design elements.

To select stimuli, another group of professionals ($N = 26$) assisted in compiling a list of wine tasting rooms representative of the variance in the design elements. In the end, the final list holds a total of 76 wine tasting rooms and stores located across the U.S. West Coast which represent the full range of the design elements used in store interiors. Actual stimuli for the subsequent data collection consist of six standardized images taken in each store from pre-determined spots and perspectives with pre-selected content (i.e., image #1 = standing in initial entry doorway facing center, etc.). A trained panel of twenty-one design professionals rated the 76 interiors on seven-point semantic differential scales for each of the 82 design elements. In all, the design professionals provided 47,590 ratings.

A consumer survey generated data for assessing wine store personalities. The study relies on a convenience sample including visitors to tasting rooms and stores intercepted during several days and at various times over a two-week period. In all, 286 individuals provided data on the twenty-item store personality scale (d'Astous & Levesque, 2003).

4. Analyses and results

Data analyses follow past research (Henderson & Cote, 1998; Henderson et al., 2004; Orth & Malkewitz, 2008), and are conducted at the stimulus level (i.e., store interiors) rather than at the individual level (i.e., consumers). All remaining analyses use these aggregate stimulus scores ($N = 76$). The variables used in further analysis thus include 82 averaged design elements (mean expert scores) and 20 averaged store personality items (mean consumer scores).

A confirmatory factor analysis tests whether the store personality data replicates the factorial

structure of the original scale (d’Astous & Levesque, 2003). After removing the item thriving, the model fits the data well (CFI = .93) with all loadings being acceptably high (> .68). All reliabilities exceed the recommended levels with AVEs (Average Variance Extracted) equaling or exceeding .61, indicating acceptable convergent validity. On the basis of these results averaging scores of the underlying items generates five store personality dimensions: enthusiasm (lively, welcoming, enthusiastic, and dynamic), sophistication (elegant, chic, stylish, high class), unpleasantness (superficial, irritating, load, annoying), genuineness (honest, true, sincere, reliable), and solidity (solid, hardy, reputable).

The next analytical step, K-means cluster analysis, aims at identifying holistic types of store interiors based on similarities (and dissimilarities) among the 82 design elements. Examining the average distance between clusters compared with within-cluster distances assists in determining the number of clusters (Orth & Malkewitz, 2008). Five clusters appear to describe the data best.

An exploratory factor analysis with Varimax rotation identifies design factors instrumental in differentiating the five prototypes. The analysis reveals fifteen factors explaining 86.8% of the variance with item-factors correlations ranging from .54 to .90, and all alphas exceeding .70 except for the factor labeled lamps (.67). To determine what design factors significantly differentiated clusters, ANOVA and t-test procedures determine what cluster-specific factor scores are significantly smaller or greater than mean scores across clusters. According to the findings (Table 1) three clusters appear to be formed primarily on the basis of shell elements and factors, and two clusters are formed primarily on the basis of content.

Table 1. Store interior designs and differentiating factors

Design factor	Holistic store design					Mean	p
	Minimal shell (N=10)	Complex shell (N=15)	Moderate shell (N=15)	Low content (N=13)	High content (N=23)		
Color naturalness [®]	3.1	2.9 ⁻	3.5	3.0	3.7 ⁺	3.3	.007
Ceiling elaboration [®]	4.0 ⁺	3.8 ⁺	3.3 ⁺	2.3 ⁻	2.6 ⁻	3.1	.001
Display weight	4.1	4.2	3.6 ⁻	3.5 ⁻	4.4 ⁺	4.0	.022
Furniture elaboration	3.2 ⁻	4.3 ⁺	4.0	3.1 ⁻	3.7	3.7	.010
Lighting intensity	4.9 ⁺	4.8 ⁺	4.5	4.6	3.6 ⁻	4.4	.006
Color contrast	2.7 ⁻	3.0	3.6	3.0	3.9 ⁺	3.4	.007
Floor elaboration	2.9 ⁻	4.8 ⁺	3.3	4.5	2.9 ⁻	3.6	.001
Details presence [®]	2.7	4.0 ⁺	4.2 ⁺	3.1	1.9 ⁻	3.1	.001
Wall elaboration	1.9 ⁻	2.7 ⁺	2.3	1.7 ⁻	2.7 ⁺	2.4	.025
Bar weight	5.1 ⁺	4.8 ⁺	3.9 ⁻	3.8 ⁻	4.0	4.3	.010
Layout symmetry [®]	4.2 ⁺	3.4	4.3 ⁺	3.1 ⁻	3.6	3.7	.046
Displays naturalness	3.0	2.6 ⁻	4.2 ⁺	3.4	3.8 ⁺	3.5	.001
Floor surface	2.9 ⁻	4.8 ⁺	3.3	4.5 ⁺	2.9 ⁻	3.6	.001
Display harmony [®]	2.6 ⁻	2.5 ⁻	3.3	4.7 ⁺	3.3 ⁻	3.3	.001
Lamps elaboration	4.1	5.5 ⁺	4.0 ⁻	3.6 ⁻	3.4 ⁻	4.1	.006

⁺ indicates cluster mean scores significantly greater (p < .01) pooled mean, and ⁻ indicates cluster means significantly smaller than pooled mean. [®] indicates reverse-coded

The first cluster, labeled minimal-shell design comprises ten of the 76 interiors. This cluster exhibits relatively low scores on design elements utilized in the actual physical environment or shell of the store. Factors that differentiate this holistic type from others include high ceilings with little elaboration, plain furniture, numerous large windows and bright no-spot lighting, noticeable but plain bars, plain, functional and contemporary displays, plain walls, harmonious overall color schemes made up of few colors, and shiny floors. Overall, the store interior can be described as simple, technical, Spartan, and clean, exhibiting an almost industrial quality.

The second cluster, complex-shell design, comprises fifteen store interiors. This cluster is formed based on relatively high scores on design elements utilized in the shell of the store. Differentiating factors include natural colors, elaborate structured ceilings, natural lighting through many and large windows, elaborate furniture, ornate walls, large and nicely detailed dominating bars, matte floor surfaces, decorative lamps in larger numbers, natural paintings, elaborate displays, and ornate windows. These factors characterize the store interior as natural, elaborate, and harmonious, an overall archetypical, prototypical or representative design.

The third cluster, moderate-shell design, comprises another fifteen store interiors. This cluster is formed based on average scores on design elements utilized in the shell of the store. Prominent within this holistic type is the relative scarcity of outstanding design characteristics. Differentiation (or the lack thereof) is achieved through average and plain ceilings, light natural displays, inconspicuous bars and lamps, abstract pictures on otherwise plain walls, and a general lack of design elements scoring above or below average. Overall, this holistic design can be described as plain, inconspicuous, residential, or non-descript.

The fourth cluster, low-content design, comprises thirteen stores. Factors differentiating this holistic type from others tend to be more content-related, compared to the more shell-related clusters discussed before. This cluster is differentiated through furniture, natural lighting, numerous but small and inconspicuous lamps, small pieces of tasteful decoration, and no-frills homogeneous displays, as well as environment design elements such as ceilings, plain and lightly-colored walls, small bars, matte floor surfaces in muted colors, and restrained doors and windows. Overall, this prototype can be described as very open, airy, contemporary, and delicate. The main difference to the moderate-shell type lies in the emphasis on content rather than shell elements and factors producing differentiation.

The last cluster, high-content design, comprises twenty-three stores. Content-related design elements such as vibrant and contrasting colors, modern displays, mostly artificial lighting through large conspicuous lamps and few spotlights, abstract paintings on multi-color walls, contrasting displays, and weighty bars differentiate this cluster from others. Environment design elements such as elaborate ceilings, fewer and smaller windows, ornate walls, and shiny floor surfaces with modern designs also contribute to this cluster's differentiation. Stores of this type can be described as cluttered, Kitsch, POP-happy, contrasting, lively, or vivid.

Results of an ANOVA show that generic store interior designs are associated with generalizable responses. Differences in consumer responses to the interior design types emerge for all store personality dimensions (Table 2). Minimal-shell interiors score high on unpleasantness, low on enthusiasm, and have otherwise average personalities. Complex-shell stores score high on enthusiasm, genuineness, and solidity, and low on unpleasantness. Moderate-shell interiors generate impressions of below-average sophistication, genuineness, and solidity. Low-content interiors score high on enthusiasm

and sophistication, and low on unpleasantness. High-content stores score low on enthusiasm, and high on unpleasantness.

Table 2. Relations between interior designs and store personality impressions

Store Personality Dimension	Holistic store design					Mean	p
	Minimal shell (N = 10)	Complex shell (N = 15)	Moderate shell (N = 15)	Low content (N = 13)	High content (N = 23)		
Enthusiasm	3.0 ⁻	3.6 ⁺	3.1	3.5 ⁺	2.9 ⁻	3.2	.001
Sophistication	2.7	3.0	2.1 ⁻	3.7 ⁺	2.6	2.8	.011
Unpleasantness	2.2 ⁺	1.2 ⁻	2.0	1.6 ⁻	2.4 ⁺	1.9	.020
Genuineness	3.5	4.3 ⁺	3.0 ⁻	3.5	3.5	3.6	.008
Solidity	3.5	3.9 ⁺	2.7 ⁻	2.9	3.3	3.3	.006

⁺ indicates mean scores significantly greater ($p < .01$) pooled mean, and ⁻ indicates cluster means significantly smaller than pooled mean.

5. Discussion and implications

The identification of holistic interior design types presented here may assist both designers and managers in more confidently using interior design to convey store personality. First, retail managers can better communicate their interior design needs to designers using the taxonomy of five types of holistic designs. Given the myriad of design elements relevant in different contexts and settings, and considering that few managers have design experience, describing store interiors by the five holistic types which plausibly exist for a wide range of outlets appears to be particularly useful. Two clusters are formed due to physical environment design element strength (i.e., minimal- and complex-shell designs), two of the clusters are grouped on the strength of their content design elements (i.e., low- and high-content designs), and one cluster is formed due to a lack of outstanding differentiating elements (i.e., moderate shell design).

The results of this research also indicate that some interior designs may be more appropriate for specific consumer groups than others. For example, minimal-shell designs may be more appropriate in urban settings where more sophisticated customers seek congruity with the Spartan, industrial, loft-like settings more commonly seen in urban markets. Complex-shell environments might be the interiors of choice for traditional offerings, whereas minimal-shell environments might be more appropriate for value-for-money, less sophisticated offerings. Low-content interiors might be more appropriate for upscale offerings, where more spacious interior support impressions of walking through an upscale store or boutique, whereas high-content stores may appeal to consumers who prefer hide-and-seek, bargain-hunting environments.

Because the interior design types examined in this research vary greatly in the evaluative responses they create, retailers can more accurately create store personality impressions using holistic designs. When satisfaction results those design-evoked impressions should translate into gains in brand strength and equity. Initially, managers need to determine what personality is desirable for their store. Appropriate store interiors can then be designed to achieve desired responses. The findings presented

here start to provide guidance on this issue by establishing systematic relations between types of store interiors and generic response dimensions for wine tasting rooms as an appropriate example category.

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