

# Perceived appropriateness and its effect on quality, affect and behavior

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## Abstract

This research investigates cognitive and affective determinants of retail patronage. We examine how perceptual environmental appropriateness alters perceived quality, emotion and shopping value. A nearly infinite number of combinations exist when one considers how various atmospheric elements may be altered. Among these, complementary arrangements exist that are cognitively assimilated and perceptually pleasing. Even relatively small changes in the type and volume of music, the odor, color scheme, or some other characteristics may cause a mental conflict captured by fit. Over 800 mall intercept respondents comprised a sample used to examine a structural model. Model results suggest that when perceptual appropriateness is diminished, consumers report lower positive affect, lower product quality ratings, lower perceptions of personal shopping value and fewer approach behaviors. In addition, the role of perceived quality in shaping shopping outcomes is explained.

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## 1. Introduction

Practical and theoretical interest in retail atmospherics is predicated on a belief that the retail environment can be controlled by manipulating various cues, and in turn, store patrons' behavior can be affected (Kotler, 1974). Atmospherics research has produced a significant body of research describing various consumer reactions brought about by manipulating specific ambient cues. Music manipulations, for example, can affect consumers' patience, emotional reactions and approach behaviors (Yalch and Spangenberg, 1990; Hui et al., 1997; Chebat et al., 2001). Likewise, changing background colors can influence product quality ratings (Bellizzi and Hite, 1992), and manipulating the odors in a shopping environment can influence consumers' purchase intentions and time spent shopping (Spangenberg et al., 1996). Research along these lines is clearly useful, however, it often is based on an implicit assumption that environmental cues affect consumers directly and in isolation from other cues within a broader shopping environment.

Is this assumption valid? Perhaps changes in one element can affect how other elements are perceived

and create an entirely different effect. Clearly, this is true of clothing. Research documents an ensemble effect in which there are relatively fragile configural preferences for combinations of clothing elements (Bell et al., 1991). As consumers view specific clothing items as more appropriate, the more favorable is one's cognitive and affective reaction to the ensemble they create. In retail environments, evidence suggests that physical elements matching in terms of their arousing nature create more pleasing combinations, leading to increased spending and higher satisfaction than do combinations comprised of an inappropriate arousal level (Mattila and Wirtz, 2001). Thus, the perceptual appropriateness of specific elements affects consumers significantly.

We seek to extend this research. Cues comprising a retail environment are processed holistically, not piecemeal (Bitner, 1992; Kubory and Pomerantz, 1981). Thus, perceived differences in even a *single* cue can potentially affect consumers' interpretations of the *entire* environment. The configural arrangements cause environmental elements to be judged as more or less appropriate, setting in motion changes in consumers' cognition, affect and behavior. Thus, retail atmospherics may sometimes fail to produce the desired effect because some element, which may in and of itself be positive, causes all of the environment to seem less appropriate.

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Even though a certain consumer may enjoy hard rock music for example, it may make them feel uncomfortable when shopping for wine (Areni and Kim, 1993).

This study investigates mall shopping behavior including factors related to perceptual appropriateness. Eight hundred mall shoppers are interviewed in a mall exploring atmospheric changes. A structural equations model is tested that examines how perceptual appropriateness, perceived product quality, environmental affect, and approach behaviors affect perceived shopping value. The results are of interest theoretically in that they provide additional insights into how retail environment factors affect shopping. Practically speaking, the results address questions related to potentially intermingled consequences of subtle physical design changes as well as merchandising and store mix decisions. The results have important implications for the manner in which such changes are researched.

## 2. Conceptual background

### 2.1. Perceptual appropriateness

Consumer researchers, influenced by cognitive psychology, have shown interest in the way an object or person's characteristics come together to activate, form, or contrast with relevant mental categories, or schemata, that represent the whole. For example, consumer perceptions of a "snack food" are influenced by the appropriateness of the (a) size of the product, (b) type of packaging and (c) taste (Ratneshwar and Shocker, 1991). Individual wrapping is considered a typical characteristic for snack foods by most consumers and foods that are not packaged in this manner are less often considered appropriate snacks. Other experimental results suggest that a combination of carbonation and fruit juice that consumers like when referred to as a *fruit drink* is disliked when referred to as a *soft drink* (Stayman et al., 1992). A plausible interpretation is that simply changing a single attribute, in this case carbonation, influenced how appropriate a product was judged as a representative of a category.

Cue *congruence* influences the effectiveness of advertisements. MacInnis and Park (1991) examine how advertising cues such as pictures, source characteristics and music, can be varied to affect consumer perceptions of appropriateness. For example, as subjects in their experiments viewed the music in an ad as less appropriate, their attitudes toward the ad and their ratings of product characteristics were also lowered. Similarly, a pleasant scent must also be congruent with the consumption setting implied by the advertisement to produce any positive results (Bone and Jantraris, 1992).

Similarly, Areni and Kim (1993) show congruence effects in a retail setting. They report experimental

results showing increased approach behaviors among wine store shoppers subjected to classical background music than among shoppers exposed to top-40 music. One potential explanation is that the appropriateness of background music helps shape the overall store atmosphere.

Although a few experimental studies focus on certain combinations of environmental properties, such as lighting and music, as appropriate for certain types of stores (Baker et al., 1992, 1994), only a few studies specifically address retail/service environmental categorization. One study explicitly taking this approach suggests that there are certain environmental characteristics that help define dining categories (Ward et al., 1992). Consumers recognize a typical "fast food" restaurant by bright color schemes, plastic laminated furniture decor and bright lights. These are characteristics not highly associated (appropriate) with "fine dining". Similarly, research suggests that certain person characteristics such as manner of dress and body size are congruent with consumers' mental representations of retail salespeople and service providers (Babin et al., 1995; Sujan et al., 1986). Finally, an experiment in which salesperson appearance, store name and store location were each manipulated suggests that altering these characteristics affected consumer perceptions of prototypicality (category assimilation), which in turn, alters the affective quality and patronage intentions associated with a retail environment (Babin and Babin, 2001).

Thus, consumer perceptions of environmental cues affect consumer expectations by being appropriate or by deviating from a known type. A consumer's perception of the appropriateness of a retail environment's characteristics is based on how well the ensemble elements match expectations for a shopping context. In other words, it represents how congruent the physical characteristics are with the venue type. Appropriateness is based upon an individual consumer's personal experiences. Thus, it is subjective to the extent that one's varying experiences shape their cognitive representations (MacInnis and Park, 1991). Further, the appropriateness of one characteristic affects the appropriateness of others as they come together to give the environment an emergent meaning. For example, a decor making slate marble very prominent to consumers may work together with muted color schemes and classical background music to create varying degrees of appropriateness when shopping for expensive, high quality, prestigious products.

Fig. 1 displays a theoretical model suggesting how appropriateness may influence shoppers patronage behavior, in-store affect, product quality and the shopping experience's overall value. While the model does not exhaust all the important theoretical constructs that could be studied, the constructs included provide a

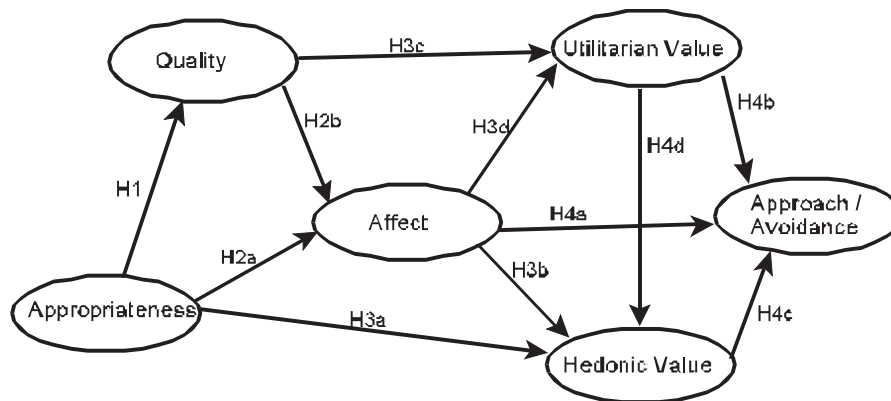


Fig. 1. Hypothesized model.

broad perspective in that cognitive, affective, evaluative, and behavioral aspects are included. Model paths are developed, where possible, based on existing patronage research. A key theoretical element is the important mediating role played by affect associated with an environment (Dawson et al., 1990; Donovan and Rossiter, 1982; Holbrook, 1986; Hui et al., 1997; Wakefield and Baker, 1998). Environments influence behavior in large part because they alter one's feelings.

## 2.2. Perceived quality

Research and anecdotal evidence suggests that consumers' perceptions of an environment can influence subsequent quality perceptions. Product selections framed by an environment with bright lights and popular background music are generally rated lower in quality than the same product selections displayed in a softly lit place with classical background music (Baker et al., 1992). Furniture and fashion items tend to be evaluated less favorably when framed by warm colors (i.e., red or orange) than by cool colors (i.e., blue) (Bellizzi and Hite, 1992; Bellizzi et al., 1983; Crowley, 1993). Further, it is unlikely that even a fashionable clothing item showing no indication of every being used (perhaps with the original tags still affixed), would be rated as high in quality by most consumers in a thrift store (i.e., Salvation Army or St. Vincent de Paul) as it would when displayed at Nieman Marcus. Marketers' distribution strategies often take this possibility into account as various "prestige" assortments are not made available to discount retailers.

Further, the retail environment may be diagnostic in determining how other even less tangible or credence attributes are rated (Alford and Sherrell, 1996). In health care settings for example, the quality of care provided is affected by patient perceptions of the physical interior of a service setting (Clow and Fischer, 1995). More generally, the atmosphere may function as

advertising does in the face of ambiguous information. Hoch and Ho (1986) provide research suggesting that advertising influences product quality when the attributes present ambiguous information. Hoch and Deighton (1989) provide a model of consumer learning which suggests that a consumer's interaction with the retail environment provides evidence which may influence the quality beliefs about product attributes.

Quality, operationalized here as consumers' general evaluations of a shopping environment's product assortments, may be influenced directly by perceived appropriateness. Advertising research suggests that consumer ratings of the appropriateness of music played in an ad relate positively to evaluations of product characteristics (MacInnis and Park, 1991). Additionally, Fiske (1982) presents theory and evidence suggesting a consistent tendency for people to prefer other people whose characteristics and mannerisms match the expected social stereotype. In a retail setting then, a specific item, such as a Polo shirt, may be judged of lower quality if the décor providing its background is inappropriate (bright plastic). Recent research suggests that a product's perceived price fairness will vary in this way based upon the atmosphere in which the product is presented while controlling for price and brand (Babin et al., 2003). One explanation for such findings is that congruent cues are more easily processed. Mentally, the fewer mismatches a consumer is forced to accommodate or reconcile, the more something is preferred. Thus, it is likely that appropriateness and quality are related positively, and although not tested specifically here, this becomes even more likely as a shopping experience is oriented toward prestige.

H1: Atmosphere appropriateness is related positively to perceived quality. That is, consumers will perceive product assortments to be of higher (lower) quality when shopping environment elements are perceived as highly (not so) appropriate.

### 2.3. Shopping affect

A basic premise of environmental psychology is that people respond to places emotionally (Mehrabian and Russell, 1974). A retail place's functional quality, its tangible characteristics, and affective quality, its emotional personality, are linked closely (Darden and Babin, 1994). Retail shoppers generally, but not always, seek places with a positive affective quality.

Recently Mattila and Wirtz (2001) provide experimental results suggesting that increased positive affect (pleasure and satisfaction) is experienced when a store's scent and music match in terms of their degree of arousal. That is, shoppers react better to the combination of either a highly arousing scent with highly arousing music or a low arousal scent with low arousal music than they do to either "mismatch" combination. Here, the mismatch in the arousing nature of the two elements may contribute to perceptual inappropriateness causing systematic changes in customer comfort level.

However, matching intensity levels are not the only way that elements can combine to affect the retail gestalt, or consumers' categorization processes. The appearance of an unfamiliar element within a configural arrangement, or an element that takes on an unusual character, can cause it to be viewed as less typical perhaps even evoking a perceptual contrast. Research on this topic shows a direct positive correlation between perceived prototypicality and consumer attitudes (Ward et al., 1992). In other words, a fast food restaurant with common fast food characteristics creates more positive affect. Extending these findings, recent research suggests that store prototypicality (the degree to which it matches or shares the most associated characteristics of that category) driven by fashion store characteristics is correlated significantly with positive affect (Babin and Babin, 2001). A partial explanation for these findings is that inappropriate (appropriate) cues inhibit (facilitate) cognitive categorization, resulting in negative affect (Cohen and Basu, 1987).

In contrast, Meyers-Levy and Tybout (1989) investigate the congruity of novel products with category schemata. Their results suggest that while moderate levels of incongruity generate relatively high numbers of negative thoughts, it can produce favorable reactions based on increased cognitive processing relative to congruent and extremely incongruent attributes. Thus, although this would lead to a prediction of a nonlinear relationship, the evidence in service contexts mentioned above provide better fit with the research context used here. Thus, as consumers perceive that the environment is simply inappropriate for its type, positive affect experienced when shopping is diminished.

H2a: Perceived appropriateness and positive environmental affect are related positively. As environ-

mental elements are perceived as appropriate, higher positive affect results.

Previous research suggests that quality ratings and positive affect are associated positively (Wakefield and Baker, 1998). Consumer perceptions of prestigious brands create a more exciting retail affective quality (Darden and Babin, 1994). Therefore, as consumers cognitively evaluate a shopping environment's products as higher in quality, which is determined partly by appropriateness perceptions, the environment is likely perceived as more exciting. Therefore, the following hypothesis facilitates an indirect relationship between perceptual appropriateness and affect.

H2b: Perceived product quality is related positively to affect. Higher (lower) quality merchandise is associated with greater (less) pleasure.

### 2.4. Shopping value

Personal shopping value represents the overall worth of a shopping experience (Babin et al., 1994; Griffin et al., 2000). In other words, given the resources invested in a shopping experience, what value results? Personal shopping value is captured by two distinct but related dimensions. Utilitarian shopping value represents task accomplishment. The experience was worthwhile because a shopper found the item or information needed. Hedonic shopping value represents the immediate gratification provided by the shopping experience. Here, the activity is enjoyable and worthwhile in and of itself.

There are two possible perspectives. First, an atmosphere that fits, relative to an unusual atmosphere, creates a positive response through assimilation or accommodation. However, this could lower hedonic shopping value in that it reduces stimulation that occurs through interacting with new things. Whether or not stimulation comes across as positive or negative depends in part on the desired stimulation level for given service environments (Wirtz et al., 2000). In mall settings, a generally positive relationship between pleasing feelings and arousing feelings suggests that consumers generally desire some stimulation (Babin et al., 1998). This may change in other service settings (Mattila and Wirtz, 2000). A second possibility is that appropriateness increases gratification directly due to the reassurance it provides. This effect is similar to the gratification a familiar salesperson provides (Reynolds and Beatty, 1999). Here, the latter seems the stronger possibility because it is less contingent upon individual difference characteristics not operationalized in this study. Shoppers will find greater hedonic value in an atmosphere that is appropriate for the shopping occasion. Further, although affect is an important mediator of

environmental effects, a direct appropriateness—hedonic value link represents gratification not captured fully by the single affect construct used here.

H3a: Perceived appropriateness is related positively to hedonic shopping value. Higher hedonic value is reported as an environment is rated as appropriate.

In addition to the direct effect, an indirect path through positive affect is also hypothesized. Affect, serving in its intervening role, facilitates the relationship described above (Baron and Kenny, 1986). Research supports a direct relationship between positive affect and hedonic shopping value (Babin and Attaway, 2000; Beatty and Ferrell, 1998; Chebat et al., 2001; Wakefield and Baker, 1998). The emotions not only motivate a great deal of shopping behavior (Bellenger and Korgoankar, 1980; Bloch et al., 1986), but they are a primary mechanism through which hedonic shopping value is created (Babin et al., 1994).

H3b: Positive affect is related positively to hedonic shopping value. Increases in positive affect are associated with increases in hedonic shopping value.

In most traditional mall type settings, where upscale department stores are the most typical anchors, high quality goods are expected and are the norm. Assuming mall consumers will seek quality products more often than not, a shopping center with higher quality products will facilitate the shopping task and contribute to higher utilitarian value. Thus, to the extent that the atmospherics are consistent with this type of venue, high quality goods are likely to be perceived and purchased, contributing to utilitarian value. A failure to make the intended purchase would lower utilitarian value. Together with H1, the following path forms an indirect relationship:

H3c: Perceived quality is related positively to utilitarian value. As the perceived quality of products within the environment increase, utilitarian value increases.

Appropriateness also may influence utilitarian shopping value through positive affect. Pleasure can facilitate task completion. For example, psychological experiments demonstrate that subjects with mildly positive moods are more efficient in completing simulated consumer choice tasks than are those with a less positive mood (Isen, 1987). Additionally, positive affect produces approach motivations and a desire to affiliate. Both increase the likelihood that a shopping task can be completed. Consistent with this rationale, a

study of retail shoppers supports a positive pleasure—utilitarian shopping value path (Babin and Darden, 1995).

H3d: Positive affect is related positively to utilitarian shopping value. As positive affect increases, so does utilitarian value.

## 2.5. Approach behaviors

Approach behavior is a key outcome often used in atmospherics research (Mehrabian and Russell, 1974; Donovan and Rossiter, 1982; Dawson et al., 1990; Spangenberg et al., 1996). Approach behaviors are suggested by an increased willingness to interact with others (including salespeople) in an environment, increased willingness to spend time and return to an environment, and an increased willingness to spend money. People experience greater approach behaviors in environments creating positive affect and greater avoidance behaviors in environments creating negative affect (Mehrabian and Russell, 1974). Thus, the positive affect—approach avoidance relationship, demonstrated in numerous patronage studies (cf. Donovan and Rossiter, 1982; Dawson et al., 1990), facilitates a relationship between perceived appropriateness and approach avoidance.

H4a: Positive affect is related positively to approach responses. More positive feelings are associated with greater desire to stay and interact within an environment.

Likewise, perceived shopping value also links fit and approach-avoidance indirectly, and contributes incrementally to the total effect of fit. Consumers are more likely to return and spend a greater portion of their money with a retailer that provides relatively high utilitarian or hedonic shopping value (Babin and Attaway, 2000). Both the knowledge that a shopping task can be completed by interacting with a retailer, and the gratification from the shopping experience itself motivate further interactions between a consumer and a retailer (Childers et al., 2001). Thus, shopping value is likely associated with increased approach behaviors.

H4b: Utilitarian shopping value is related positively to approach responses. Greater perceived utilitarian value creates greater desire to stay and interact.

H4c: Hedonic shopping value is related positively to approach responses. Greater perceived hedonic value creates greater desire to stay and interact.

Although utilitarian and hedonic value are conceptually related (Babin et al., 1994), previous patronage models have not generally modeled this path. Thus, the primary issue is the direction of the relationship. However, the key to this relationship may lie in the notion of a job well done. Previous research demonstrates that consumers' competence in terms of measurable outcomes (i.e., computer games) produces an hedonic payoff (Holbrook et al., 1984). Furthermore, performance relates to the hedonic content of brand meaning (Van Osselaer and Janiszewski, 2001). Therefore, the following is offered:

H4d: Utilitarian shopping value is related positively to hedonic shopping value. There is a tendency for the two types of shopping value to complement each other rather than oppose each other.

### 3. Research methods

#### 3.1. Sample

Data were obtained from a large, northeastern, up-scale, metropolitan shopping mall. A mall intercept approach was used to collect data from approximately 850 shoppers. The intercepts were made in an atrium-type, central area in the heart of the center. This helped insure that respondents had been shopping for a significant time and had not just arrived. The atrium provides easy visual and physical access to the majority of the center's stores. During the time of the study, mall management experimented with different types of background music, décor and scents. Data collection efforts were counterbalanced across these conditions. This allowed an examination of whether or not general mall characteristics are associated with consumers' merchant perceptions. From a holistic perspective, it is impossible to totally separate mall and store characteristics.

Trained interviewers randomly selected potential respondents over a 1-week period. Respondents were asked an initial screening question to eliminate customers who may simply be walking through the mall to avoid downtown sidewalks. Thus, although an actual purchase was not a prerequisite for inclusion in the sample, the screening resulted in analyses of shoppers only. Respondents were given brief instructions and a self-response questionnaire containing the necessary measures. Small incentives were provided in the form of discount coupons to mall merchants. The questions generally asked for summary reactions to the entire shopping experience in the mall. A comfortable place within the central area was provided for completing the questionnaire and interviewers were available to answer any queries. More than half of all potential respondents

approached agreed to cooperate. The questionnaire took approximately 7 min to complete, on average. In all, 820 completed questionnaires were obtained and used in analyses reported below.

#### 3.2. Questionnaire measures

Mall management placed limits on the length of the questionnaire. Thus, every attempt was made to measure constructs in an efficient fashion. Although we relied heavily upon previous measures, this constraint required that we use shortened versions of the longer scales. Items were generally placed on the instrument such that dependent measures were assessed prior to predictor items (Perdue and Summers, 1986). An Appendix A is included describing each measure.

Three items represent approach behaviors (Donovan and Rossiter, 1982). A seven-point disagree-agree format was used to collect these responses. Personal shopping value was assessed using items taken from Babin et al. (1994). Three items assess utilitarian shopping value and five items assess hedonic shopping value. Respondents replied using a five-point disagree-agree format based upon how well the items described their shopping experience in the center on that particular day.

Six, seven-point, semantic differential affective adjective pairs operationalized positive affect (Russell and Pratt, 1980). The items represent upbeat positive emotions versus unarousing negative emotions. This approach was seen as preferable to using items representing only pleasure or a positive mood since upbeat, positive affect seems most appropriate for mall shopping experiences (Babin et al., 1998; Darden and Babin, 1994; Wakefield and Baker, 1998; Machleit and Eroglu, 2000) and many consumption experiences in general (Holbrook and Gardner, 1998). This also allowed us to represent positive affect with a single dimension rotated approximately half way between the traditional pleasure and arousal dimensions (Russell and Pratt, 1980).

Quality was operationalized as a *general* evaluation of the center's product assortments. Three seven-point items were used. Respondents were asked whether the selection was inadequate or adequate, whether the products in the stores were outdated or up to date, and to rate the general quality of products available in the mall from low to high.

Three items represent atmospheric appropriateness. Seven-point disagree-agree items were used to judge the appropriateness of the center's music, odor or scent, and general décor for mall shopping. Further, its important to note that the appropriateness rating of one element works together with the appropriateness rating of the others such that this is considered a latent construct and not a check-list type measure. Thus, it is not necessary to

have respondents rate every potential characteristic, which would be infeasible in any event. While there are many ways that an atmospheric characteristic could be judged as appropriate or inappropriate (see Mattila and Wirtz, 2001; Turley and Chebat, 2002), these ways would include a mismatch between mall and store expectations. Highly arousing mall characteristics, for instance, might come across as inappropriate for shopping best suited to less arousing environments.

## 4. Results

### 4.1. Measurement results

The 23-item congeneric measurement model was validated using confirmatory factor analysis (CFA). Covariances among the items were first computed and used as input in testing the implied model. Table 1 provides the standardized maximum likelihood loadings

and fit statistics that resulted. The model  $\chi^2$  is 669.3 with 215 degrees of freedom ( $p < 0.001$ ). Other indicators of the model's fit include a comparative fit index (CFI) of 0.94, a goodness of fit index (GFI) of 0.93, a squared root-mean residual (SRMR) of 0.044 and a parsimony normed fit index (PNFI) of 0.78. These statistics generally suggest a good fit given the large sample and the number of measured items (Childers et al., 2001). Thus, the fit statistics suggest that the constructs are unidimensional and fit the data well.

Discriminant validity was examined further by comparing the correlation estimate between constructs (Table 2) with the variance extracted measure. All constructs meet this conservative test of discriminant validity as the variance extracted estimates from each construct exceed the squared correlation between each construct (Fornell and Larcker, 1981). Additionally, all factor loadings are highly significant ( $p < 0.001$ ) and the reliability estimates (composite and  $\Omega_w$  in Table 1,  $\alpha$  in Table 2) are adequate suggesting convergent validity. Although some of the loading estimates are below 0.6

Table 1  
Confirmatory factor analysis results including standardized loading estimates

|                       | Quality | Affect | Utilitarian value | Hedonic value | A/A behavior | Approp. |
|-----------------------|---------|--------|-------------------|---------------|--------------|---------|
| Q1                    | 0.86    |        |                   |               |              |         |
| Q2                    | 0.83    |        |                   |               |              |         |
| Q3                    | 0.79    |        |                   |               |              |         |
| Cheerful              |         | 0.80   |                   |               |              |         |
| Colorful              |         | 0.83   |                   |               |              |         |
| Stimulating           |         | 0.89   |                   |               |              |         |
| Lively                |         | 0.82   |                   |               |              |         |
| Bright                |         | 0.88   |                   |               |              |         |
| Interesting           |         | 0.86   |                   |               |              |         |
| UV1                   |         |        | 0.55              |               |              |         |
| UV2                   |         |        | -0.35             |               |              |         |
| UV3                   |         |        | 0.82              |               |              |         |
| HV1                   |         |        |                   | 0.63          |              |         |
| HV2                   |         |        |                   | 0.68          |              |         |
| HV3                   |         |        |                   | 0.70          |              |         |
| HV4                   |         |        |                   | 0.55          |              |         |
| HV5                   |         |        |                   | 0.45          |              |         |
| AA1                   |         |        |                   |               | 0.55         |         |
| AA2                   |         |        |                   |               | 0.80         |         |
| AA3                   |         |        |                   |               | 0.50         |         |
| App. music            |         |        |                   |               |              | 0.72    |
| App. odor             |         |        |                   |               |              | 0.70    |
| App. decor            |         |        |                   |               |              | 0.70    |
| Variance extracted    |         |        |                   |               |              |         |
| Estimates             | 0.68    | 0.72   | 0.37              | 0.37          | 0.40         | 0.50    |
| Reliability estimates | 0.87    | 0.94   | 0.61              | 0.74          | 0.66         | 0.75    |
| $\Omega_w$            | 0.87    | 0.94   | 0.73              | 0.76          | 0.72         | 0.75    |

$$I\Gamma^2 = 669.3$$

$$df = 215$$

$$CFI = 0.94$$

$$GFI = 0.93$$

$$SRMR = 0.044$$

$$PNFI = 0.78$$

Table 2  
Interconstruct correlation estimates (standardized  $\Phi$ )

|          | Quality     | Affect      | Utilitarian value | Hedonic value | A/A         |             | Scale mean | Standard deviation |
|----------|-------------|-------------|-------------------|---------------|-------------|-------------|------------|--------------------|
|          |             |             |                   |               | Behavior    | Approp.     |            |                    |
| Quality  | <i>0.87</i> |             |                   |               |             |             | 5.35       | 1.09               |
| Affect   | 0.54        | <i>0.94</i> |                   |               |             |             | 4.90       | 1.26               |
| U. value | 0.50        | 0.30        | <i>0.60</i>       |               |             |             | 3.78       | 0.90               |
| H. value | 0.44        | 0.41        | 0.43              | <i>0.74</i>   |             |             | 3.22       | 0.80               |
| AA       | 0.48        | 0.43        | 0.32              | 0.38          | <i>0.61</i> |             | 4.52       | 1.40               |
| Approp.  | 0.29        | 0.22        | 0.05              | 0.27          | 0.15        | <i>0.76</i> | 3.33       | 1.51               |

Coefficient  $\alpha$  shown in italics on diagonal. All estimates are significant ( $p < 0.05$ ) except that between utilitarian value and fit.

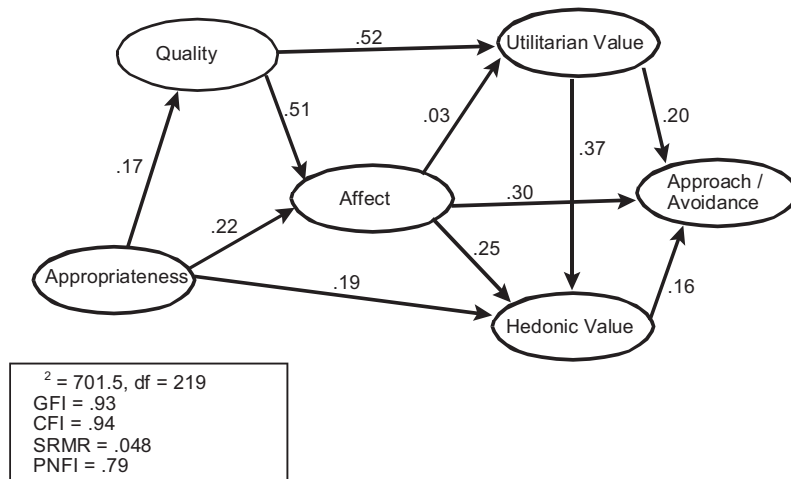


Fig. 2. Standardized theoretical path coefficients.

and thus could be dropped, they were retained because they did not produce any unusually high residuals between error terms, nor did they contribute to fit instability as the fit remained stable through various phases of testing, three items per construct allows for more reliable model convergence, and they were theoretically appropriate (see Bacon et al., 1995; Bagozzi and Yi, 1998). The questionnaire length constraint prohibited additional construct items from being used that would likely have allowed for even higher reliabilities and variance extracted estimates. In sum, the model is adequate for theoretical testing.

4.2. Theoretical (structural) results

Fig. 1 depicts the structural model constraints imposed on the covariance structure described above. Maximum likelihood estimation yielded the following results: the model  $\chi^2$  is 701.5 with 219 degrees of freedom; the CFI and GFI are 0.93 and 0.94, respectively; the SRMR is 0.048; and the PNFI is 0.79. All suggest a reasonably good fit and note that the PNFI actually increased suggesting that the additional con-

straints implied by the theoretical model relative to the measurement model do not diminish fit relative to the added parsimony (Mulaik et al., 1989).

Fig. 2 shows the standardized, theoretical path coefficients. H1 predicted a positive relationship between atmospheric perceived appropriateness and quality. This relationship is supported by the corresponding estimate of 0.17 ( $t = 4.36$ ,  $p < 0.001$ ).

H2 suggests direct and indirect paths linking atmospheric appropriateness and positive affect. H2a is supported by the positive estimate of 0.22 ( $t = 5.23$ ;  $p < 0.001$ ) linking perceived appropriateness and positive affect directly. H2b is also supported with an estimate of 0.51 ( $t = 13.33$ ;  $p < 0.001$ ), which alone suggests that high product quality is associated with higher shopping affect. Additionally, taken together with H1, this path suggests a significant indirect relationship between perceived appropriateness and affect (0.09;  $t = 5.03$ ;  $p < 0.001$ ).

H3a and H3b represent the direct and indirect effects of appropriateness on hedonic shopping value. The estimate for H3a is 0.19 ( $t = 4.20$ ;  $p < 0.001$ ), supporting a direct relationship between appropriateness and



hedonic value.<sup>1</sup> The estimate for H3b is 0.25 ( $t = 5.74$ ;  $p < 0.001$ ), linking affect and hedonic value, and contributing to an indirect relationship between perceived appropriateness and hedonic value of 0.06 ( $t = 5.61$ ;  $p < 0.001$ ). Likewise, the estimate for H3c is 0.52 ( $t = 8.12$ ;  $p < 0.001$ ), suggesting that quality influences utilitarian value directly. However, support for H3d, the affect-utilitarian value path, is not found as its estimate is insignificant ( $\beta = 0.03$ ;  $t = 0.67$ ).

H4 concerned respondent approach behaviors. H4a, predicting that affect is associated with approach, is supported by a path estimate of 0.30 ( $t = 6.02$ ;  $p < 0.001$ ). H4b and H4c, consistent with predictions, suggest that both utilitarian value ( $\beta = 0.20$ ;  $t = 3.40$ ;  $p < 0.01$ ) and hedonic value ( $\beta = 0.16$ ;  $t = 2.81$ ;  $p < 0.01$ ) are related positively to approach behaviors. The estimate for H4d ( $\beta = 0.37$ ;  $t = 6.68$ ;  $p < 0.001$ ) supports predictions and suggests that utilitarian shopping value is associated positively with hedonic shopping value. Taken together, H4b–H4d help facilitate a significant indirect relationship between appropriateness and approach (0.11;  $t = 5.61$ ;  $p < 0.001$ ), between quality and approach (0.30;  $t = 8.30$ ;  $p < 0.001$ ) and between positive affect and approach (0.25;  $t = 6.51$ ;  $p < 0.001$ ).

## 5. Discussion

### 5.1. Summary

This paper conceptualizes and tests a structural equations model theorizing “environmental appropriateness” as an important construct shaping retail patrons thinking, feeling and acting. Model results are generally consistent with this supposition. Respondent perceptions of appropriateness significantly affected their product quality ratings, their feelings, the perceived value of the shopping experience, and their approach-avoidance behavior.

The model suggests important direct results of perceived appropriateness. Higher appropriateness, for example, is associated with higher product quality

ratings. Thus, when mall characteristics are perceived to be appropriate, respondents tend to rate products sold there as higher in quality. Likewise, higher appropriateness is associated with more positive reported affect and increased hedonic shopping value.

However, the model also suggests important indirect outcomes. Quality, serving as a cognitive mediator, intervenes to link appropriateness positively with utilitarian value perceptions and positive affect. In a less direct way, quality is also linked to both hedonic shopping value and approach-avoidance behaviors. Consistent with the theoretical nature of emotion, positive affect, operationalized here as up-beat affect (cheerful, lively, etc.), mediates, at least partially, relationships between appropriateness and all other constructs with the exception of utilitarian shopping value. Thus, perceived appropriateness improves affect, which in turn, helps create greater hedonic value and more approach behaviors.

Barnes and Noble stores provide a potential example. The keen attention to make sure all design elements are consistent with a cozy den or home library feel, including the aromas from the espresso machine, provides a positive halo for its products. A book off their shelves seems better than the same book in a warehouse type environment. Additionally, the consistent atmospherics and higher quality perceptions create better feelings within a customer, creating more value and more of a desire to remain, interact and return to the environment. Additionally, this is precisely the type of effect that likely pays off in converting more browsers into buyers.

### 5.2. Implications

Several contributions follow from this research. Most prominently, it calls greater attention to the notion of environmental appropriateness or the matching of environmental characteristics as an important retail patronage concept. Although previous theoretical patronage models (i.e., Darden 1979; Monroe and Gultinan, 1975) often recognize an important role for atmospherics and shopping center effects in general, they do not acknowledge a construct representing the extent to which everything seems to work together.

The research also more fully describes the role of perceived product quality and how it intermingles with retail atmospherics to create personal shopping value and encourage patronage. Although previous studies link product quality to affect (cf. Darden and Babin, 1994; Wakefield and Baker, 1998), results presented here go further. As conceptualized, higher product quality improves utilitarian shopping value. However, in addition to facilitating the shopping task, higher product quality improves hedonic shopping value through its effect on positive affect. Like brand trust or brand affect (Chaudhuri and Holbrook, 2001), the quality of the

<sup>1</sup>We explored the possibility that a nonlinear relationship between appropriateness and quality, affect and hedonic value might offer a better fit than did a linear representation. It could be argued that the nature of the matching process is better represented by a nonlinear relationship (Meyers-Levy and Tybout, 1989). We explored this with a series of analyses. First, the “linear” fit construct was replaced with a latent construct using the three mean-centered and squared indicators. This model produced overall fit statistics that are essentially equivalent (the difference in  $\chi^2$  is 4.9 with no change in the CFI). The parameter estimates are similar with the exception that the squared appropriateness—positive affect relationship is not significant in this model. In addition, a series of regression models employing a summated appropriateness squared term produced slightly higher standardized regression coefficients for the “linear” appropriateness term compared to the squared appropriateness term. However, the difference is not significant.

shopping center selection is associated with utilitarian and hedonic value. Thus, higher quality perceptions not only facilitate a consumer fulfilling specific product purchase intentions, but they also reward the customer by providing a more gratifying experience.

Additionally, the research extends atmospherics research through its context. Here, shoppers considered not just the atmospherics within a particular store where they may be making a purchase. Rather, the research takes into account the mall or common area atmospherics. Results suggest that the shopping center environment itself can affect perceived product quality, personal shopping value and approach-avoidance. An atmosphere that is appropriate for the right types of stores should logically be able to obtain higher rents as tenants enjoy the benefits of more satisfied customers. Further research might address more specifically the effectiveness of themed shopping developments (such as “The Boardwalk”) where tenant selection and atmospherics are tightly controlled for atmospheric consistency.

5.3. Future research and limitations

This research suggests numerous opportunities for further developing patronage theory. Obviously, this study does not include all important patronage constructs. Various individual difference characteristics may moderate relationships suggested here. These include consumer self-regulation (state versus action orientation), shopping orientations, optimum stimulation level or target-arousal level, among others (Babin and Darden, 1995; Childers et al., 2001; Wirtz et al., 2000). Perhaps the positive effects of appropriateness are mitigated among consumers with relatively high tendencies to seek out an out of the ordinary experience. In the extreme, among consumers strongly motivated by a desire to experience something totally new, a negative perceived appropriateness–affect relationship may be observed.

Likewise, future research may address consumers’ price perceptions. How does perceived appropriateness influence price fairness? Further, what is the role of price relative to product quality in influencing important outcomes like shopping value and approach-avoidance behavior?

Perhaps there are other appropriateness elements that need be considered. For example, research on self-congruity suggests that consumers seek out experiences that fit their own self-schema (Sirgy et al., 2000). Although perceived appropriateness is operationalized as subjective here, self-congruity theory takes this further suggesting not only perceptions of how an environment fits with a particular type of place, but also how it fits with one’s self-image.

Several limitations of this study design also suggest further research. As mentioned above, we were limited with respect to the length of the questionnaire. A longer questionnaire may allow not only for the use of full scales from pervious research, but also for a more exhaustive measurement of perceived appropriateness itself. More attention should be given to developing more exhaustive perceived appropriateness scales. Likewise, a simple, general quality measure is used here. Perhaps the model could be improved by adopting a more comprehensive and multi-dimensional quality measure. Additionally, the results here are for one type of shopping experience. Specifically, the shopping center used here is best representative of a typical mall shopping experience consisting of a high portion of quality oriented merchants as opposed to discount or variety stores. Future research might consider examining perceived appropriateness in understanding food shopping or even in understanding nonstore shopping.

Appendix A. Individual item key and description

For details please see Table 3.

Table 3

| Construct       | Label       | Items   | Description  |
|-----------------|-------------|---|--|
| Quality         | Q1          | <i>Please rate the product selection available today using the following items:</i><br>The product selection in this shopping center is ... | Inadequate(1)–adequate (7)                             |
|                 | Q2          |   | Outdated (1)–up to date (7)                            |
|                 | Q3          |   | Low (1)–high (7)                                       |
| Positive affect |             | <i>Please indicate which of the two adjectives best describe the shopping center’s environment today:</i>                                   | 7-point semantic differential for all adjective pairs. |
|                 | Cheerful    | Depressing—cheerful   |  |
|                 | Colorful    | Drab—colorful   |  |
|                 | Stimulating | Boring—stimulating  |  |
|                 | Lively      | Unlively—lively   |  |
|                 | Bright      | Dull—bright   |  |
|                 | Interesting | Uninteresting—interesting   |  |

Table 3 (continued)

| Construct                  | Label      | Items   | Description                                       |
|----------------------------|------------|---|---|
| Utilitarian shopping value |            | <i>Please express your agreement with the following statements based on how they describe today's shopping:</i> | Strongly disagree (1)–strongly agree (5) for all. |
|                            | UV1        | I accomplished just what I wanted to on this shopping trip  |   |
|                            | UV2        | I couldn't buy what I really needed today.  |   |
| Hedonic shopping value     | UV3        | While shopping, I found just the item(s) I was looking for  | Strongly disagree (1)–strongly agree (7)          |
|                            | HV1        | This shopping trip was truly a joy.   |   |
|                            | HV2        | This shopping trip truly felt like an escape.   |   |
|                            | HV3        | Compared to other things I could have done, the time spent shopping was truly enjoyable.                        |   |
|                            | HV4        | I enjoyed being immersed in exciting new products.  |   |
| Approach/avoidance (A/A)   | HV5        | While shopping, I felt a sense of adventure.  | Strongly disagree (1)–strongly agree (7)          |
|                            |            | <i>How much do you agree with the following statements?</i>   |   |
|                            | AA1        | This shopping center is a place where I would feel comfortable speaking to store salespeople                    |   |
| Appropriate-ness           | AA2        | I like being in this shopping center very much  | Strongly disagree (1)–strongly agree(7)           |
|                            | AA3        | This is a kind of place where I would spend more money than I expected  |   |
|                            |            | <i>How much do you agree with the following statements?</i>   |   |
|                            | App. music | The background music in this center is appropriate right now.   |   |
|                            | App. odor  | The odors in the center are appropriate right now.  |   |
|                            | App. decor | The decor of the center is appropriate right now.   |   |

## References

- Alford, B., Sherrell, D.L., 1996. The role of affect in consumer satisfaction judgments of credence based services. *Journal of Business Research* 37, 71–85.
- Areni, C.S., Kim, D., 1993. The influence of background music on shopping behavior: classical versus top-forty music in a wine store. In: McAlister, L., Rothschild, M.L. (Eds.), *Advances in Consumer Research*, Vol. 20. ACR, Provo, UT, pp. 335–340.
- Babin, B.J., Attaway, J.S., 2000. Atmospheric effect as a tool for creating value and gaining share of customer. *Journal of Business Research* 49, 91–99.
- Babin, B.J., Babin, L., 2001. Seeking something different? A model of schema typicality, consumer affect, purchase intentions and perceived shopping value. *Journal of Business Research* 54, 89–96.
- Babin, B.J., Darden, W.R., 1995. Consumer self-regulation in a retail environment. *Journal of Retailing* 71, 47–70.
- Babin, B.J., Darden, W.R., Griffin, M., 1994. Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of Consumer Research* 20, 644–656.
- Babin, B.J., Boles, J.S., Darden, W.R., 1995. Salesperson stereotypes, consumer emotions, and their impact on information processing. *Journal of the Academy of Marketing Sciences* 23, 94–105.
- Babin, B.J., Darden, W., Babin, L., 1998. Negative emotions in marketing research: affect or artifact? *Journal of Business Research* 42, 271–285.
- Babin, B.J., Hardesty, D., Suter, T., 2003. Color and shopping intentions: the intervening effect of price fairness and perceived affect. *Journal of Business Research* 56, 541–552.
- Bacon, D.R., Sauer, P.L., Young, M., 1995. Composite reliability in structural equations modeling. *Educational and Psychological Measurement* 55, 394–406.
- Bagozzi, R.P., Yi, Y., 1998. On the evaluation of structural equation models. *Journal of the Academy of Marketing Sciences* 16, 74–94.
- Baker, J., Grewal, D., Levy, M., 1992. An experimental approach to making retail store environmental decisions. *Journal of Retailing* 68, 445–460.
- Baker, J., Grewal, D., Parasuraman, A., 1994. The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science* 22, 328–339.
- Baron, R.M., Kenny, D.A., 1986. The moderator–mediator variable distinction is social psychological research: conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology* 51 (6), 1173–1182.
- Beatty, S.E., Ferrell, E.M., 1998. Impulse buying: modeling its precursors. *Journal of Retailing* 74, 169–182.
- Bell, P., Holbrook, M., Solomon, M., 1991. Combining esthetic and social value to explain preferences for product styles with the incorporation of personality and ensemble effects. *Journal of Social Behavior and Personality* 6, 243–273.
- Bellenger, D.N., Korgaonkar, P., 1980. Profiling the recreational shopper. *Journal of Retailing* 56, 77–82.
- Bellizzi, J.A., Hite, R.A., 1992. Environmental color, consumer feelings and purchase likelihood. *Psychology and Marketing* 9 (5), 347–363.
- Bellizzi, J.A., Crowley, A.E., Hasty, R.W., 1983. The effects of color in store design. *Journal of Retailing* 59, 21–45.
- Bloch, P.H., Sherrell, D., Ridgeway, N.H., 1986. Consumer search: an extended framework. *Journal of Consumer Research* 13, 119–126.
- Bitner, M., 1992. Servicescapes: the impact of physical surroundings on customers and employees. *Journal of Marketing* 56, 57–71.
- Bone, P.F., Jantraris, S., 1992. Olfaction as a cue for product quality. *Marketing Letters* 3, 89–96.
- Chaudhuri, A., Holbrook, M.B., 2001. The chain of effects from brand trust and brand affect to brand performance. *Journal of Marketing* 65, 81–93.
- Chebat, J.C., Chebat, C.G., Vaillant, D., 2001. The interplay of emotion and cognitions of consumers in the retail environment. *The Journal of Business Research* 54, 115–122.
- Childers, T., Carr, C.L., Peck, J., Carson, S., 2001. Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing* 77, 511–535.
- Clow, K., Fischer, A.K., 1995. Patient expectations of dental services. *Journal of Health Care Marketing* 15 (3), 23–32.

- Cohen, J.B., Basu, K., 1987. Alternative models of categorization: toward a contingent processing framework. *Journal of Consumer Research* 13, 455–472.
- Crowley, A.E., 1993. The two dimensional impact of color on shopping. *Marketing Letters* 4, 59–69.
- Darden, W.R., 1979. A patronage model of consumer behavior. In: Stampfl, R., Hirschman, E. (Eds.), *Competitive Structure in Retail Markets: The Department Store Perspective*. American Marketing Association, Chicago.
- Darden, W.R., Babin, B.J., 1994. Exploring the concept of affective quality: expanding the concepts of retail personality. *Journal of Business Research* 29, 101–110.
- Dawson, S., Bloch, P.H., Ridgeway, N.M., 1990. Shopping motives, emotional states and retail outcomes. *Journal of Retailing* 22, 408–427.
- Donovan, R.J., Rossiter, J.R., 1982. Store atmosphere: an environmental psychology approach. *Journal of Retailing* 58, 34–57.
- Fiske, S.T., 1982. Schema-triggered affect: applications to social perception. In: Clark, M.S., Fiske, S.T. (Eds.), *Affect and Cognition*. Erlbaum, Hillsdale, NJ, pp. 55–78.
- Fornell, C., Larcker, D.F., 1981. Evaluating structural equations models with unobservable variables and measurement error. *Journal of Marketing Research* 18, 39–50.
- Griffin, M., Babin, B.J., Modianos, D., 2000. Shopping values of Russian consumers: the impact of habituation in a developing economy. *Journal of Retailing* 76 33–52.
- Hoch, S.J., Deighton, J., 1989. Managing what consumers learn from experience. *Journal of Marketing* 53, 1–20.
- Hoch, S.J., Ho, W.H., 1986. Consumer learning: advertising and ambiguity of product experience. *Journal of Consumer Research* 13, 221–235.
- Holbrook, M.B., 1986. Emotion in the consumption experience: toward a new model of the human consumer. In: Peterson, R.A., Hoyer, W.D., Wilson, W.R. (Eds.), *The Role of Affect in Consumer Behavior: Emerging Theories and Applications*. D.C. Heath, Lexington, MA, pp. 17–52.
- Holbrook, M.B., Gardner, M.P., 1998. How motivation moderates the effects of emotions on the duration of consumption. *Journal of Business Research* 42, 241–252.
- Holbrook, M.B., Chestnut, R.W., Oliva, T.A., Greenleaf, E., 1984. Play as a consumption experience: the roles of emotions, performance, and personality in the enjoyment of games. *Journal of Consumer Research* 11, 728–740.
- Hui, M.K., Dube, L., Chebat, J.C., 1997. The impact of music on consumers' reactions to waiting for services. *Journal of Retailing* 73, 87–104.
- Isen, A.M., 1987. Positive affect, cognitive processes and social behavior. In: Berkowitz, L. (Ed.), *Advances in Experimental Psychology*. Academic Press, New York, pp. 203–251.
- Kotler, P., 1974. Atmospherics as a marketing tool. *Journal of Retailing* 49, 49–64.
- Kubory, M., Pomerantz, J.R., 1981. *Perceptual Organization*. Lawrence Erlbaum Associates, Hillsdale, NJ.
- Machleit, K.A., Eroglu, S., 2000. Describing and measuring emotional response to shopping experience. *Journal of Business Research* 49, 101–111.
- MacInnis, D.J., Park, W.C., 1991. The differential role of characteristics of music on high- and low-involvement consumers' processing of ads. *Journal of Consumer Research* 18, 161–173.
- Mattila, A.S., Wirtz, J., 2000. The role of postconsumption affect in postpurchase evaluation of services. *Psychology and Marketing* 17, 587–605.
- Mattila, A.S., Wirtz, J., 2001. Congruency of scent and music as a driver of in-store evaluations and behavior. *Journal of Retailing* 77, 273–289.
- Mehrabian, A., Russell, J.A., 1974. *An Approach to Environmental Psychology*. MIT Press, Cambridge, MA.
- Monroe, K.B., Guiltinan, J.P., 1975. A path-analytic exploration of retail patronage influences. *Journal of Consumer Research* 2, 19–28.
- Mulaik, S.A., James, L.R., Val Alstine, J., Bennett, N., Lind, S., Stilwell, C.D., 1989. Evaluation of goodness-of-fit indices for structural equations models. *Psychological Bulletin* 105, 430–445.
- Meyers-Levy, J., Tybout, A.M., 1989. Schema congruity as a basis for product evaluation. *Journal of Consumer Research* 16, 39–54.
- Perdue, B.C., Summers, J.O., 1986. Checking the success of manipulations in marketing experiments. *Journal of Marketing Research* 23, 317–326.
- Ratneshwar, S., Shocker, A.D., 1991. Substitution in the use and the role of usage context in product category structures. *Journal of Marketing Research* 28, 281–295.
- Reynolds, K.E., Beatty, S.E., 1999. Customer benefits and company consequences of customer–salesperson relationships in retailing. *Journal of Retailing* 99, 11–33.
- Russell, J.A., Pratt, G., 1980. A description of the affective quality attributed to environments. *Journal of Personality and Social Psychology* 38, 311–322.
- Sirgy, J., Grewal, D., Mangleburg, M., 2000. Retail environment, self-congruity, and retail patronage: an integrative model and a research agenda. *Journal of Business Research* 49, 127–138.
- Spangenberg, E.R., Crowley, S.E., Henderson, P.W., 1996. Improving the store environment: do olfactory cues affect evaluations and behavior? *Journal of Marketing* 60, 67–80.
- Stayman, D., Alden, M.D., Smith, K.L., 1992. Some effects of schematic processing on consumer expectations and disconfirmation judgments. *Journal of Consumer Research* 19, 240–255.
- Sujan, M., Bettman, J.R., Sujan, H., 1986. Effects of consumer expectations on information processing in selling encounters. *Journal of Marketing Research* 23, 346–353.
- Turley, L.W., Chebat, J.-C., 2002. Linking retail strategy, atmospheric design and shopping behaviour. *Journal of Marketing Management* 189 (1/2), 125–145.
- Van Osselaer, S.M.J., Janiszewski, C., 2001. Two ways of learning brand associations. *Journal of Consumer Research* 28, 202–224.
- Wakefield, K.L., Baker, J., 1998. Excitement at the mall: determinants and effects on shopping response. *Journal of Retailing* 74, 515–540.
- Ward, J.C., Bitner, M.J., Barnes, J., 1992. Measuring the prototypicality and meaning of retail environments. *Journal of Retailing* 68, 194–200.
- Wirtz, J., Mattila, A., Tan, R.L.P., 2000. The moderating role of target-arousal on the impact of affect on satisfaction—an examination in the context of service experiences. *Journal of Retailing* 76, 347–365.
- Yalch, R.F., Spangenberg, E., 1990. Effects of store music on shopping behavior. *Journal of Consumer Marketing* 7, 55–63.