In-Store Customer Experience and Customer Emotional State in the Retail Industry

AUTHORS:
Gokcen Ogruk, Ph.D.*
School of Business Administration
Texas Wesleyan University
Fort Worth, TX, 76105
Phone: 817-531-4840
gogruk@txwes.edu

Trisha D. Anderson, Ph.D., PMP
School of Business Administration
Texas Wesleyan University

Audrey Sophie Nacass
School of Business Administration
Texas Wesleyan University

ABSTRACT
This paper examines the impact of the ideal mix of atmospheric factors, including ambience factors (volume of music, type and strength of aroma, level of lighting), interaction with sales people, and store display on the in-store customer experience, used to create the in-store customer experience and emotional state in a retail market. Survey data 105 customers in an actual retail setting indicated that customers’ positive perception of interactions with sales employees is the main determinant of total customer experience. We also found that the proper blend of ambience variables triggers a customer’s positive emotional state, leading to an enjoyable, memorable store visit, more time and money spent in the store, and more products purchased.

KEYWORDS
In-store customer experience; Customer’s positive emotional state; In-store design; Partial Least Square; Path Modelling; Structural Equation Modelling
In-Store Customer Experience and Customer Emotional State in the Retail Industry

Since the 1990s, primarily due to the growth of the Internet, people have become more and more connected with the world. Customers have the ease and convenience of online shopping at their fingertips, which makes it vital for brick and mortar stores to entice customers to visit, and revisit, stores by creating an experience that is enjoyable and memorable. Today, highly connected people have led businesses to break away from the company-centric model and move to a more community-centric model (Achrol & Kotler, 1999), moving the marketing practices of firms towards a more collaborative relationship with customers that is centered around increasing in-store customers’ well-being. This led to a transition of marketing practices from products and branding to service-based relationships, then a shift to a post-product marketing focus, followed by the current post-service marketing focus, the “total customer experience” (Maklan & Klaus, 2011) and “in-store customer well-being”.

Service quality represents a critical part of the retail industry. One common definition of service quality is the extent to which a service meets or exceeds customer expectations (Lewis, 2010; Parasuraman, Zeithaml, & Berry, 1985). If perceived service matches or exceeds customer expectations, the customer is satisfied with the service delivery (Lovelock & Wright, 2001), and if performance falls short of the expectations, then perceived quality is less than satisfactory, leading to customer dissatisfaction (Dehghan, Zenouzi, & Albadvi, 2012). The current factors necessary to continually exceed consumer expectations are the total customer experience (McLellan, 2000; Pine & Gilmore, 1998) and in-store customer well-being. Today, total customer experience and well-being can be achieved by customizing the retail store.
environment to exceed customers’ needs by providing a pleasant and exciting experience through the design of the store. Our research has been motivated by one question: How to design the ‘WOW’ shopping trip; a shopping trip that creates an in-store environment that exceeds customer needs and expectations and improves the customer’s mood? To answer this question, this paper focuses on the elements of total customer experience and customer well-being measured by customer mood improvements in the store.

From an extensive review of existing literature, we identified three key in-store atmospheric factors that could potentially drive the in-store customer experience and customer positive emotional state (see Figure 1): ambiance, appearance of the store, and customer interaction with salespeople. Ambiance factors are the background conditions in a given environment, which may include temperature, scent, noise, music, or lighting, whereas store display factors engage various functional and aesthetic elements such as layout, floor space, product display (assortment), or decoration. Customer interaction, our last key factor, represents everything that may shape customers’ perception of the level of service in a retail store. This factor may include the number of employees in the store, their appearance, and their level of interaction with customers.
In regard to the ambience factors, we sought concrete answers regarding the ideal lighting, music, and so on for retail stores. We argue that the answer depends on the expectations of the customer regarding the ambience variables as they relate to the store’s image or brand. For example, customers might perceive the lighting conditions in the store as bright, and this will induce a positive shopping experience and positive emotional state only if the customer expected a brightly lit store. If the customer was expecting a dimly lit store and walked into a bright store, this would negatively affect the shopper’s experience and their mood due to a mismatch with customer expectations induced through the store image. Therefore, a brightly lit environment might work well in one store and not in another, depending on the customer’s
expectations, making customer expectations a necessary component for understanding the
customer’s in-store experience and well-being.

The current research not only studied the connection between the mood, or positive emotional
state, of the shopper with the atmospheric settings in the store, but also examined the influence
of customer mood on the in-store customer experience and shopping behavior (see Figure1).
We examined whether customers whose mood is improved due to an ideal mix of atmospheric
factors have a more enjoyable trip, spend more time and money in the store, and purchase more
products.

This paper contributes to the literature in two ways. First, this study is the first attempt to
examine the effect of the right combination of ambience variables that are aligned with
customer’s expectations and perceptions with the store image on customers’ in-store
experience. Second, we explored the mediating role of positive emotional state of customers
on the relationship between atmospheric factors and total customer experience and shopping
behavior. To test our hypotheses, we collected data from the customers of a specific retail store
that sells fine cheese, gourmet food products, and wine from Europe.

In the next two sections, we review the literature and develop a hypothesis to study the elements
of total customer experience and the mediating effect of a positive emotional state on the
customer in-store experience and shopping behavior. We then discuss the research design for
our empirical study, a description of our measures and the results compromising responses of

http://www.jrconsumers.com/Academic_Articles/issue_32/
105 customers of an Italian cheese retail store, allowing us to test our hypothesized effects. We conclude with a discussion of the in-store experience design and its impact on sales, address the limitations of the study, and suggest directions for further research.

**Literature Review**

We identified three key variables that have the power to influence customer reactions and build an emotional connection with shoppers. These three primary sets of cues are ambience, display, and customer interaction (social), known in retail environment research as atmospherics (Baker & Cameron, 1996). Ambience variables may include aroma (strength, type), music (tempo, type), and lighting (dimness), whereas display variables engage various functional and aesthetic elements such as layout and product display or decoration. Social variables include everything that can shape a customer’s perception of the service level within a retail store.

*Ambience Variables: Background and Conceptualization*

Milliman (1986) states that ambiance relates to the customer’s perceptions and experiences of the background conditions in the environment. Based on his description, ambiance factors may include lighting, sound, aroma, temperature, use of color, merchandise, and tidiness/cleanliness of the environment. In the literature, many studies have shown the relation between ambiance variables and customer perceptions. Music is the most widely studied ambiance variable in the literature on customer perceptions (Baker, Levy, & Grewal, 1992; Chebat, Gelinas-Chebat, & Filiatrault, 1993; Dubé, Chebat, & Morin, 1995; Hul, Dube, & Chebat, 1997; Milliman, 1986; Yalch & Spangenberg, 1990). Music can have a variety of effects on customer behaviour,
ranging from a longer time spent in the store, higher in-store traffic, and increased interaction with salespeople, to positive perception and recognition of store image and amplification of purchase decisions (Morrison, 2001; Morrison, Gan, Dubelaar, & Oppewal, 2011; Puccinelli et al., 2009; Turley & Milliman, 2000).

Aroma and lighting are the second most studied ambience variables in regard to shopping behavior and customer perceptions. Scents can influence a consumer’s desire to make a purchase (Hirsch, 1995; Mitchell, Kahn, & Knasko, 1995; Spangenberg, Crowley, & Henderson, 1996; Turley & Milliman, 2000). Morrison et al. (2011) tested the presence and absence of vanilla aroma on young shoppers in an actual retail environment and found that arousal produced by aroma increased shoppers’ pleasure, positively influencing their behavior. Previous literature has studied the single and joint effect of lighting with other ambience factors on customers’ emotional states and shopping behavior and concluded that the level of light perceived by customers in a given retail environment could influence customers’ mood either positively or negatively (Areni & Kim, 1994; Baker & Cameron, 1996; Baker et al., 1992; Butler & Biner, 1987; Puccinelli et al., 2009; Spence & Piqueras-Fiszman, 2012).

The ambience factors are not limited to music, aroma, and lighting. They also include temperature, noise, and all factors that stimulate the senses of the customer. We considered one particular retail store; therefore we limited the ambience factors and chose the ones that reflect the retail store’s unique identity: a store offering fresh cheese, gourmet food and high-quality European wine.
Customer Interaction (Social Variables) and Appearance Factors: Background and Conceptualization

Social variables include factors that might shape a customers’ perception of the service level within a retail store. These variables are measured by the number of employees in the store, the employees’ appearance, (i.e., if they are wearing uniforms), and their level of interaction with the customer. Previous studies have found that friendliness, knowledge, interaction, and suitable assistance by employees significantly influenced customers’ emotional states (Baker & Lamb, 1994; Baker & Lamb, 1992; Pine & Gilmore, 1998; Turley & Milliman, 2000). In their study, Pine and Gilmore (1998) pointed out the importance of a strong relationship between retailers and their customers for customers’ experience and demonstrated that the best relationships between customers and retailers were the ones that were emotional in nature. In our study, the customers’ perception of employee friendliness, helpfulness, level of knowledge, and their level of interaction with customers, were considered as social variables in our model (see Figure 1).

There are several studies that have examined the effects of product display and found that this attribute has a significant impact on consumer behavior (Curhan, 1974; Gagnon & Osterhaus, 1985; Simonson & Winer, 1992). Kotler (1973) underlined the significance of physical design, theorizing atmosphere as “the conscious design of space to create certain effect in buyers” (Kotler, 1973, p. 1). Following his reasoning, design could be valued as an attention-creating channel by which the physical design can appeal to the shoppers’ attention. Since appearance is broadly defined in the literature, it may not be an easy task to implement all appearance
factors in a single study. Similar to our discussion earlier of ambience factors, we selected the appearance factors that are relevant to the store identity used in our study.

A Model of Total Customer Experience and Positive Emotional State

We developed a model of total customer experience and customer positive emotional state. Then, we examined the mediating role of positive emotions in the relationship between atmospheric key factors, total customer experience and shopping behavior. Within this context, we derived a set of hypotheses on the influences of atmospheric key factors on total customer experience and customer positive emotional state.

Atmospheric Key Factors, Total Customer Experience, and Positive Emotional State

The first set of atmospheric factors are ambience cues. Based on the literature on ambience, most studies that have conducted an in-store experience design and customer experience measured perceived ambience factors. In our research, instead of perceived music, aroma and lighting, we measured the existing gap between customers’ perceived and expected levels for each ambience cue and tested the impact of this gap on total customer experience and emotional states. For instance, to measure the gap between perceived and expected music volume, we asked survey participants to answer the following questions:

- “How would you describe the level of music volume in the store today?”

- “Which level of music volume would you like to encounter in the store?”

The survey participants answered these questions on a Likert scale ranging from 0 (absent) to 5 (too loud). We created a new gap variable measuring the gap between perceived and expected
volume by assigning binary numerical values of 0 or 1. We assigned 0 to the gap variable if both the customer’s chosen expected sensory item and perceived sensory item in the store were the same, and 1 otherwise. Our survey measured the four binary gap variables: volume of music, type and strength of aroma, and brightness of lighting.

We argue that the right combination of in-store ambience variables aligned with customer expectations ensures a “match” between the store image and positioning in the eyes of customers. If there is a match, this balance will result in an enjoyable and positively memorable shopping time and total customer experience, leading to improvements in the mood of the customers. Overall, this leads to the following hypotheses:

**Hypothesis 1:** The match between expected and actual ambience factors is positively related to the customer’s total experience in the store, resulting in a more enjoyable and memorable shopping time.

**Hypothesis 2:** The match between expected and actual ambience factors is positively related to the customer’s emotional state, resulting in improving the customer’s mood.

The second primary cue for atmospheric factors is social influences. We proposed that when customers perceive salespeople as friendly, knowledgeable, and interactive, they have an enjoyable shopping trip. In addition, the positive customer perception of salespeople’s service successfully evokes positive emotional states in customers. Accordingly, we tested the following hypotheses:
Hypothesis 3: Customers’ positive perceptions of social variables are positively related to their total experience in the store.

Hypothesis 4: Customers’ positive perceptions of social variables are positively related to the positive emotional state of customers in the store.

Design variables represent the last atmospheric factor in our study. Consistent with our goal of analyzing customer experience creation within a specific retail store, our study focused on product display. We claimed that a positive perception of store displays would improve the mood of customers and result in an enjoyable shopping experience for the customer. Based on our argument, we studied the following hypotheses:

Hypothesis 5: Customers’ positive perceptions of design variables are positively related to their total experience in the store.

Hypothesis 6: Customers’ positive perceptions of design variables are positively related to the positive emotional state of customers in the store.

While Hypotheses 1-6 studied the impact of the ambience factors on total customer experience and the emotional state of the customer, we will now discuss the examination of the mediating role of positive emotions in the relationship between atmospheric key factors and total customer experience and shopping behavior.

Positive Emotions, Shopping Behavior and Mediating Effect of Positive Emotions between Atmospheric Variables and Total Customer Experience
Customer memories are triggered by two main groups of emotions: positive and negative. To create a memorable experience for the shopper, the emotions of the shopper must be triggered in a positive way, which includes the relationship between what the customer expects (related to the brand or store image) and what the customer perceives during the in-store experience. We claimed that the right mix of atmospheric variables would affect customers’ positive or negative states, and that a positive emotional state would improve their mood, whereas a negative emotional state would deteriorate the mood of the customer. Thus, we anticipated that customers, whose mood is improved due to the ideal mix of atmospheric factors, would spend more time and money in the store and purchase more products, leading to the following hypothesis:

*Hypothesis 7:* Customers’ positive emotional state, measured by improvement in customer’s mood after shopping, is positively associated with shopping behavior (longer time spent in the store, higher sales, and more money spent in the store).

We expected that the proper mix of ambience variables, combined with customer’s positive perception of social and design variables, would produce an enjoyable and positively memorable shopping time represented as the in-store customer experience, and thus lead to positive shopping behavior, as stated in the following hypothesis:
Hypothesis 8: The positive emotional state of the customer mediates the relationship between in-store atmospheric factors and total customer experience and is positively associated with shopping behavior.

Research Methodology

Procedure and Participants

This study was conducted in a cheese and wine retail store for 11 weeks from April 2015 to February 2016 on Saturdays and Sundays with customers ages 18 years and older. Respondents were approached with courtesy by an administrator who set up a stand at the store exit. Customers who had already taken the survey were not allowed to retake the survey. French candies were offered to the shoppers as an incentive for their participation. A total of 105 customers agreed to participate in the study, and a short description of the study was provided to the participants prior to the survey. Participants were also informed about the research purpose, design, and confidentiality through the written instructions on the surveys. Completing the questionnaire was voluntary, and participants were informed that answers would remain anonymous and confidential.

Measures

Measurement items were adapted from past studies in the literature. The questionnaire included six constructs: ambience gap, customer interaction (social), physical display, positive emotional state, total customer experience, and shopping behavior.
The in-store ambience gap variable was calculated based on the gap between customers’ expected and perceived ambience cues and included four items: level of music, type of aroma, strength of aroma and level of lighting. For each of these sensory variables, respondents were first asked to describe its level, type, and strength. Adapted from Pullman and Gross (2004), all responses for level of music, lighting and strength of aroma were scored using a 6-point Likert scale anchored by 0 (absent) and 5 (too loud, too bright, and too strong, respectively). The item soliciting type of aroma was sourced from Morrison et al. (2011) and offered options including “Subtle and Sugary (Baked Apple),” “Delicate and Authentic (Cheese)” “Fresh and Savory (Bread),” Salty (Olive Oil and Olives)”, and “Stuffy and Oppressive (Lavender)”. “No Aroma” was added as a response to this item. Second, to measure the gap between actual and expected ambience factors, we asked survey participants their expectations for each of the sensory variables. We created a new variable measuring the gap between expected and perceived ambience cues, and this variable was assigned a numerical value of 0 or 1.

Social variables were measured by four items, following the findings of Verhoef et al. (2009), and adopted from previous earlier studies with relevant modifications where deemed necessary. These items measured friendliness, knowledge, interaction, and suitable assistance from employees, and were answered on a 7-point Likert scale, ranging from 1 (Strongly Disagree), to 7 (Strongly Agree). Design variables were measured by three items, also using a 7-point Likert scale (1 = ‘Very Untrue of What I Believe’ to 7 = Very True of What I Believe’).

Turley and Milliman (2000) noted the importance of product displays, and Verhoef et al. (2009) and Babin and Attaway (2000) discussed the effect of the appearance of the employees on...
shopping behavior. Following their argument, we included these two items: “During my shopping trip in the store, products were nicely displayed on shelves and tables” and “To what extent do you agree with the following statement: I tend to buy more when products are nicely displayed on shelves and tables”. Another item, “I believe that the look of the employees in the store has to reflect the style of the store (Italian vibes) to make my shopping trip more enjoyable”, was adopted from Verhoef et al. (2009) and Babin and Attaway (2000).

The overall positive emotional state of the customer was measured by a single item based on earlier studies in this field (Babin & Attaway, 2000; Pullman & Gross, 2004; Yoo, Park, & MacInnis, 1998) using a 7-point Likert scale (1 = “Strongly Disagree”; 7 = “Strongly Agree”). In the literature, single-item measures of psychological constructs such as the positive emotional state of customers are considered psychometrically inferior to multiple-item scales (Diamantopoulos, Sarstedt, Fuchs, Wilczynski, & Kaiser, 2012); however, the reliability of single-item measures may suffice if a construct’s scope is precise, unidimensional, and obvious to the respondents (Sackett & Larson, 1990). In line with these arguments, the positive emotional state of customers was measured by a single item which asked participants: “To what extent do you agree with the following statement: Today, after having shopped in the store, I feel that my mood improved”. “Not applicable” (N/A) was added as a possible response to this item capturing the customer’s emotional state.

Total customer experience is the sum of all variables analyzed in the study and is assessed by a single item “How would you define your shopping experience in the store today?” Following Westbrook and Oliver (1981) and adapting from Mattila and Wirtz (2001), overall satisfaction
with the shopping experience was measured based on the total customer experience pyramid (1 = “disappointment” to 4 = “memorable experience”). Finally, shopping behavior was measured by money as well as time spent and number of products purchased in the store. One extreme spending value was deemed to be an outlier and deleted from the analysis.

Model Estimation and Results

After researching the best data analysis method for our study (Hair, Hult, Ringle, & Sarstedt, 2016; Wong, 2013), we find that the appropriate method is the PLS-SEM approach. Structural equation models (SEM) can be estimated by the use of covariance-based methods or the variance-based partial least square structural equation modelling (PLS-SEM) approach (Hair et al., 2016). PLS is a soft modelling approach to SEM with no assumptions about the distribution of the data (Vinzi, Trinchera, & Amato, 2010). PLS-SEM is not sensitive to small sample sizes and is applicable to medium and complex model structures, such as those in this study.

SmartPLS 3.0 (Ringle, Wende, & Becker, 2015) was used to compute the path model and parameter estimations. This algorithm is run in two stages, the first being a measurement model, followed by the structural model. A nonparametric bootstrap procedure is used to estimate the statistical significance of factor loadings and path coefficients of the structural model (Hair et al., 2016). Bootstrapping allows PLS to accommodate smaller sample sizes. We followed the guidelines for PLS-SEM given by Hair et al. (2016) in assessing and reporting findings of the measurement model prior to the structural model.

Measurement Model
The initial measurement model was first evaluated using the full sample (105 participants), with all items and dimensions. The Smart-PLS results were then used to eliminate problematic items. To assess the significance and the explanatory power of the measurement model, reliability (the construct measures’ indicator reliability and internal consistency reliability) and validity (convergent validity and discriminant validity) needed to be evaluated.

Table 1 outlines the outer factor loadings, composite reliability and average variance extracted values. All factor loadings of reflective measures except three were above the recommended 0.7 (Hair et al., 2016). Money spent, time spent and employee appearance exhibited lower loadings of 0.655, 0.626, and 0.665, respectively. Hence, all indicators in reflective measurement models exceeded the satisfactory composite reliability level of 0.7, and all average variance extracted (AVE) values were above the critical threshold value of 0.5 (Hair et al., 2016).
TABLE 1. Overview of the Quality Criteria of all Reflective Constructs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Loadings</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ambience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected and Perceived Strength of Aroma</td>
<td>0.719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected and Perceived Type of Aroma</td>
<td>0.704</td>
<td>0.799</td>
<td>0.572</td>
</tr>
<tr>
<td>Expected and Perceived Level of Lighting</td>
<td>0.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Customer Service/ Social</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salespeople were friendly and smiling</td>
<td>0.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salespeople were knowledgeable</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salespeople were truly interacting and conversing</td>
<td>0.880</td>
<td>0.914</td>
<td>0.727</td>
</tr>
<tr>
<td>Salespeople were helpful and gave advice</td>
<td>0.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products were displayed nicely</td>
<td>0.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Look of employees reflects the style of the store</td>
<td>0.665</td>
<td>0.762</td>
<td>0.517</td>
</tr>
<tr>
<td>Tend to buy more when products are nicely displayed</td>
<td>0.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shopping Behavior</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of products bought</td>
<td>0.838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent in the store</td>
<td>0.626</td>
<td>0.752</td>
<td>0.507</td>
</tr>
<tr>
<td>Money spent in the store</td>
<td>0.655</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Positive Emotional State</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After shopping my mood is improved</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Total Customer Experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define your shopping experience</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Discriminant validity is shown in Table 2 based on the methodology proposed by Fornell and Larcker (1981). The square root of the average variance extracted should be greater than the absolute value of the standardized correlations with other constructs. This analysis clearly indicated that all constructs exhibited discriminant validity.
Structural Model

A step-by-step analysis was employed to test Hypotheses 1 to 8. We explored the relations between positive emotional state, total customer experience and atmospheric factors in the first step. Subsequently, in Step 2, we tested the mediating effect of the positive emotional state of the customer on the relationship between atmospheric factors and total customer experience, all while including shopping behavior as a latent variable in order to assess the full PLS path model. We followed the guidelines provided by Hair et al. (2016).
Figure 2, Table 3 and Table 4 illustrate the results of Step 1 of the PLS-SEM analysis. The outcomes of the structural model estimation and assessment of the relationship between total customer experience and atmospheric factors are shown in Figure 2 and Table 4 (Hypotheses 1, 3 and 5). Table 4 displays the results of PLS-SEM and evaluation of the relationship between customers’ emotional state and the atmospheric factors (Hypotheses 2, 4 and 6). The key criterion when assessing the quality of the structural model is the percentage of variance explained in the key target construct, namely the coefficient of determination, $R^2$. With values of 0.367 (total customer experience) and 0.346 (positive emotional state), the explanatory power of the model was moderate. The key constructs in the model were only able to explain less than half the variance in customers’ positive emotional state and 37% of the variance in total customer experience. The Stone–Geisser criterion, $Q^2$, values are obtained from running blindfolding procedures by following guidelines provided by Hair et al. (2016). $Q^2$ values
scores were above the threshold level of zero (0.313 and 0.284 for total customer experience and positive emotional state, respectively) indicating the predictive relevance of the PLS path model.

**TABLE 3. Structural Model Estimation of Total Customer Experience (Model 1)**

<table>
<thead>
<tr>
<th>Endogenous Constructs</th>
<th>R-Squared</th>
<th>Q-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Customer Experience</td>
<td>0.367</td>
<td>0.313</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relation</th>
<th>Path Coefficient</th>
<th>P-value</th>
<th>Bias-Corrected 95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambience ➔ Total Customer Experience</td>
<td>0.224</td>
<td>0.070</td>
<td>[0.04;0.46]</td>
</tr>
<tr>
<td>Social ➔ Total Customer Experience</td>
<td>0.391</td>
<td>0.000</td>
<td>[0.18;0.59]</td>
</tr>
<tr>
<td>Appearance ➔ Total Customer Experience</td>
<td>0.182</td>
<td>0.069</td>
<td>[0.08;0.38]</td>
</tr>
</tbody>
</table>

Notes: $Q^2$ is derived from blindfolding procedure with an omission distance of 7. P-values were calculated by bootstrapping. The bias-corrected 95% (two-tailed) confidence intervals were computed using Shi’s double-bootstrapping method.

The effect of perceived customer interaction (social) with employees had a positive and significant value of 0.391 ($p < 0.01$). Thus, Hypothesis 3 was empirically substantiated. We found a weak positive link between ambience and total customer experience (Figure 2), and the direct effect of ambience yielded a value of 0.224 ($p < 0.10$). The relation between customer’s positive perception of design variables and total customer experience was weak compared to other key constructs ($p < 0.10$), indicating weak support for Hypothesis 5. When assessing the drivers of customers’ positive emotional state as measured by mood improvement, we found ambience and social factors significantly influenced customers’ positive emotional state. The direct effect of ambience was 0.350 ($p < 0.01$) and social was 0.267 ($p < 0.05$). Our results confirmed Hypotheses 2 and 4 (Table 4). However, we did not find a significant relation between customers’ positive perception of design variables and positive emotional state of the customer; therefore, Hypothesis 6 is rejected.
Two further findings are worth mentioning. First, the results indicated that positive perception of social variables has a strong effect on customer’s positive store experience, whereas ambience variables that are consistent with customer’s expectations have a much stronger effect on customers’ positive emotional state. Second, positive perceptions of design variables do not have a significant impact on either total customer experience or positive emotional state of the customer.
TABLE 4. Structural Model Estimation of Shopping Behavior (Model 2)

<table>
<thead>
<tr>
<th>Endogenous Constructs</th>
<th>R-Squared</th>
<th>Q-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Emotional State</td>
<td>0.346</td>
<td>0.284</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relation</th>
<th>Path Coefficient</th>
<th>P-value</th>
<th>Bias-Corrected 95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambience → Positive Emotional State</td>
<td>0.350</td>
<td>0.001</td>
<td>[0.22;0.57]</td>
</tr>
<tr>
<td>Social → Positive Emotional State</td>
<td>0.267</td>
<td>0.007</td>
<td>[0.03;0.38]</td>
</tr>
<tr>
<td>Appearance → Positive Emotional State</td>
<td>0.159</td>
<td>0.147</td>
<td>[0.04;0.41]</td>
</tr>
</tbody>
</table>

Notes: $Q^2$ is derived from blindfolding procedure with an omission distance of 7. P-values are calculated by bootstrapping. The bias-corrected 95% (two-tailed) confidence intervals were computed using Shi’s double-bootstrapping method.

In Step 2 of the PLS-SEM model, we evaluated the full path model, adding shopping behavior as a latent variable and including the simultaneous presence of the positive emotional state of the customer and total customer experience. The positive emotional state of the customer mediated the relation between atmospheric factors and total customer experience (see Figure 3). We found a $R^2$ value of 0.468 for the key target construct of total customer experience, validating the moderate predictive ability of the model. There was an increase in the coefficient of determination when we compared Model 1 (Figure 2) and Model 3 (Figure 3). This finding was also supported by a $Q^2$ value of 0.35, which is well above zero, signifying the predictive relevance of the path model.
TABLE 5. Structural Model Estimation of Total Customer Experience and Shopping Behavior: Mediating Effect of Positive Emotional States (Model 3)

<table>
<thead>
<tr>
<th>Endogenous Constructs</th>
<th>R-Squared</th>
<th>Q-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Emotions</td>
<td>0.351</td>
<td>0.263</td>
</tr>
<tr>
<td>Total Customer Experience</td>
<td>0.468</td>
<td>0.346</td>
</tr>
<tr>
<td>Shopping Behavior</td>
<td>0.169</td>
<td>0.065</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relation</th>
<th>Path Coefficient</th>
<th>P-value</th>
<th>Bias-Corrected 95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambience → Positive emotions</td>
<td>0.362</td>
<td>0.002</td>
<td>[0.16;0.60]</td>
</tr>
<tr>
<td>Social → Positive Emotions</td>
<td>0.230</td>
<td>0.043</td>
<td>[-0.03;0.40]</td>
</tr>
<tr>
<td>Appearance → Positive Emotions</td>
<td>0.170</td>
<td>0.183</td>
<td>[-0.06;0.39]</td>
</tr>
<tr>
<td>Ambience → Total Customer Experience</td>
<td>0.055</td>
<td>0.728</td>
<td>[-0.41;0.36]</td>
</tr>
<tr>
<td>Social → Total Customer Experience</td>
<td>0.389</td>
<td>0.007</td>
<td>[0.09;0.66]</td>
</tr>
<tr>
<td>Appearance → Total Customer Experience</td>
<td>0.088</td>
<td>0.452</td>
<td>[-0.12;0.27]</td>
</tr>
<tr>
<td>Positive Emotions → Total Customer Experience</td>
<td>0.322</td>
<td>0.027</td>
<td>[0.06;0.72]</td>
</tr>
<tr>
<td>Positive Emotions → Shopping Behavior</td>
<td>0.411</td>
<td>0.000</td>
<td>[0.31;0.64]</td>
</tr>
</tbody>
</table>

Notes: $Q^2$ is derived from blindfolding procedure with an omission distance of 7. P-values are calculated by bootstrapping. The bias-corrected 95% (two-tailed) confidence intervals were computed using Shi’s double-bootstrapping method.

To test Hypothesis 7, we added customer shopping behavior to the model as a latent variable.

We found the positive emotional state of the customer had a significant positive impact on customers’ shopping behaviour as measured by time and money spent and number of products bought. The value for the direct effect of the customer’s positive emotional state was 0.411 (p < 0.01). At the same time, there was a positive significant relationship between the positive emotional state of customers and their store experience (path coefficient of 0.322, p < 0.05).

This result supports Hypothesis 7.

<table>
<thead>
<tr>
<th>TABLE 6. Mediating Effect of Positive Emotional State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Emotional State</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Ambience → Total Customer Experience</td>
</tr>
<tr>
<td>Social → Total Customer Experience</td>
</tr>
</tbody>
</table>

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Regarding Hypothesis 8, we checked the significance of indirect effects first before assessing the mediating effect of positive emotional state between atmospheric factors and total customer experience. None of the indirect effects were significant, thus we could not substantiate the mediating effect of the positive emotional state of the customer on the relationships between atmospheric factors and total customer experience, and we rejected Hypothesis 8\(^1\).

**Discussion and Managerial Implications**

Our results indicate that customers’ positive perception of in-store service is the main determinant of the in-store customer experience, more so than ambience cues and store display. When customers perceive that sales personnel are friendly, knowledgeable, conversing, interacting and providing suitable assistance, that is, when sales team performance exceeds expectations, this leads to the creation of a positive and memorable shopping experience. Stores aiming to create a unique shopping experience for their customers might focus on establishing a friendly, communicative, and helpful customer service.

\(^1\) In a sensitivity test, we also tested the mediating effect of the emotional state of the customer on shopping behavior and the effects of total customer experience on shopping behavior. However, we did not find any significant effects regarding total customer experience and the mediating effect of the emotional state of the customer on shopping behavior.
Turning to the relation between atmospheric factors and the emotional states of customers, our results indicate the most significant determinant of the positive emotional state of customers was the ideal mix of ambience variables. This outcome suggests that the closer the match between existing ambience cues and customers’ expectations of these cues, the more customers develop a positive emotional state, leading to greater in-store customer well-being. Retail store managers who are hoping to improve in-store customers’ well-being might frequently gather data on customer expectations of in-store ambience factors.

Research has shown that if memories are very emotional, then they are more likely to be retained. If the customer experiences a change in their emotional state, especially a significant change, then there is a greater chance that the customer will create a lasting memory of their experience. Our results indicate a strong and statistically significant relation between customer’s positive emotional state and overall customer experience. When atmospheric variables exceed customer satisfaction by going beyond customer needs, they create value, which in turn creates perceptions of worth. This perception of worth triggers a customer’s positive emotional state. When positive emotions arise, they induce desirable and enjoyable memories in customers’ minds, resulting in successfully producing a positive total customer experience.

We also find that the positive emotional state of the customer has a strong positive link with the customer’s shopping behavior. This outcome is vital to retailers who want to gain a competitive advantage and achieve long-term profitability. Our findings indicate that
customers whose moods are improved due to a proper blend of atmospheric factors spend more time and money in the store and purchase more products.

**Future Research Implications**

While our study provides important insights into research on total customer experience and positive emotional states of customers, it also offers ideas for further research. First, it is important to understand which factors affect emotional states of both repeat and new customers and the dynamics behind in-store experience design for these groups of customers. Ambience factors might influence repeat customers’ store experiences differently than new customers. New customers might be more interested in the physical display of the store, while sales personnel interaction might be the most important factor in creating repeat customers’ store experience and well-being. Future research may further explore our model by considering the differences between new and repeat customers.

Second, in-store sampling within the retail environment is a relatively under-researched area in the academic field. In-store tasting might enhance customer’s emotional state with the help of knowledgeable, friendly, and engaging employees. For future research, it might be interesting to explore the mediating role of in-store sample-tasting between customer interaction variables and customer’s positive emotional state. Lastly, it would be particularly promising to study the design of the in-store customer experience and well-being with different types of retail stores. However, the researcher should be careful when creating a model, since the model should reflect the retail store’s unique identity and understand the importance of including customer perceptions and expectations of the in-store design.
Conclusion

With the increase in community-centric marketing models, the creation of in-store customer experience and customer well-being is becoming more and more important. This paper investigates how key atmospheric factors affect the in-store customer experience, positive emotional state, and shopping behavior of customers in a retail setting. In the literature, studies have highlighted the positive relation between key individual atmospheric variables and the customer experience, yet there is limited research investigating the impact of the right combination of atmospheric variables on the customer in-store experience and positive emotional state. To fill this gap, we tested the impact of the customer’s positive perception of in-store customer service and store design, along with ambience factors (studied as the match between actual and expected strength and type of aroma and level of lighting) and their effect on the in-store customer experience and positive emotional state. Using path analysis, we found that customers’ positive perceptions of salespeople’s service results in a positive in-store customer experience.

Additionally, we tested the impact of the match between actual and expected strength and type of aroma and level of lighting and the effect of customers’ positive perception on the mood of the customer, studying how the mood of the customer affects the in-store experience and shopping behavior, as measured by time and money spent and number of products bought. Interestingly, having the ideal blend of ambience factors (volume of music, type, strength of aroma and level of lighting), combined with a positive perception of salespeople’s interaction during the shopping trip, results in the enhanced mood of the customer. Improvements in
customer mood leads to customers remaining longer in the store, buying more products, spending more money, and having an enjoyable and memorable shopping trip experience.
References


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