A Multi-Method Exploration on Coffee Shop Atmospherics

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Abstract

A Multi-Method Exploration on Coffee Shop Atmospherics

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This thesis examines the simultaneous use of multiple atmospheric elements (e.g. lighting, scent, music, color) in the context of coffee shops. It explores the effects of ambient and design elements from both a managerial and consumer perspective in a series of field interviews, a field study, and a lab experiment.

Field interviews with ten coffee shop managers explored managers' perception of and concerns about the use of multiple atmospheric cues in small independent as well as franchise coffee shops. A field study then explored consumers' perceptions of atmospheric cues as well as their emotional and behavioral responses in an existing coffee shop. A lab experiment then contrasted two virtual coffee shop designs that included multiple atmospheric cues to validate and extend field study findings. One of the virtual coffee shop models was intended to be more contemporary while the other model reflected a more traditional design. In addition, consumers' perceptions of whether the coffee shop represented a franchise or was independently owned had an impact on perceived competence of the coffee shop. A comparison of field and lab studies suggests that consumer experiences change when human variables are considered. The field study reflects different perceptions compared to the lab experiment, and yielded higher means for arousal, environment quality, store image, sophistication and sincerity. The findings can help managers optimize design decisions, and direct spending on design and renovations by providing insight into consumer perceptions of multi-cue store environments.

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Introduction

Atmospherics is a research topic that has obtained much attention in academia. Research topics range from retail crowding (Pons, Laroche, & Mourali, 2006), background music (Vida, 2008) ambient scent (Spangenberg, Crowley, & Henderson, 1996) to influence of in-store lighting (Areni & Kim, 1994). Retail atmospheric variables have been studied individually, as well as in terms of interactions between two variables, such as ambient scent and music (Spangenberg, Grohmann, & Sprott, 2005). Furthermore, Mattila and Wirtz (2006) attempted to evaluate customer arousal expectations with a combination of three types of environmental stimuli including music, lighting, and crowding. Grayson and McNeill (2009) studied an integrative format on atmospherics element as a whole by interviewing managers and evaluated how managers use atmospherics to control consumer behavior in a bar environment.

This thesis builds on the literature on multiple atmospheric cues. From a theoretical perspective, this thesis will advance knowledge regarding the effects of multiple atmospheric elements. Most research on retail environments has focused on single elements considered in isolation. Research on the interactive effect of multiple atmospheric elements is only now emerging. From a managerial perspective, this thesis will reference coffee shop managers' opinions about the importance of atmospherics, and their motivation to use atmospherics as a marketing tool specifically in the coffee shop industry characterized by increasing competition. This thesis will also generate insights into consumers' perceptions and behaviors, which will help managers better manage atmospheric designs. Moreover, this research will compare independent coffee shops and

large corporations to question whether the most influential aspects of coffee shop atmospherics are the same for both small businesses and large corporations. In fact, it is possible that independent coffee shops imitate corporate chains or differentiate themselves from corporate chains in terms of atmospheric elements in order to influence consumer perceptions.

Motivation

The U.S. industry earned $12.27 billion in 2006 by selling coffee at approximately 15,500 coffee shops, 3600 kiosks, 2,900 carts and 1,900 retailer locations (Friedrick, 2007). It is hard to ignore the importance of coffee shop retailers in our society today. Coffee shops like Starbucks have conquered the world. In 2008, when Starbucks's chairman Howard Schultz announced difficulties in their growth, he mentioned " We have to get back to what has made this company great" referring to the in-store customer experience (Stuart, 2008).

The coffee shop industry is one that perfectly fits the four propositions stated by Kotler (1978) on the importance of atmospherics - the "conscious design of space to create certain effects in buyers" (p. 50). Atmospherics are most relevant in situations where the product is consumed and where the seller has design options (Kotler, 1978). Atmospherics are most relevant in situations where the number of competitive outlets increases, where product and price differences are small, and where product entries are aimed at distinct social classes (Kotler, 1978).

The base product offered by coffee shops has small variations in terms of prices and quality. Kopi Luwak—the most expensive coffee in the world (Indonesian) —, alongside with Blue Mountain of Jamaica are rarities in coffee shops. The average price

of an espresso-based drink is US$2.45, and US$1.38 for brewed coffee according to E-Imports (2010). Since the product itself is rather ordinary, managers gain a competitive edge by combining their product with retail atmospherics (Kotler, 1973-1974). "Starbucks revolution transformed gourmet coffee from a yuppie status symbol into a mainstream consumer good" (Thompson & Arsel, 2004, p. 631). Atmospherics influence consumer responses. Similar to coffee shops, there has been an increase in the number of atmosphere restaurants in recent years. Some restaurants are coming to the opinion that atmosphere is the primary factor to success. As owner of Pier Four said " If it weren't for the atmosphere, I couldn't do nearly the business I do." (Kotler, 1973-1974) "Customers seek a dining experience totally different from home, and the atmosphere probably does more to attract them than the food itself" (Kotler, 1973-1974, p.59).

Nature of this Research

This thesis consists of a series of exploratory studies. Literature on the joint effects of multiple atmospheric elements is very limited. Rather than testing hypotheses based on prior literature, this thesis thus seeks to contribute to the knowledge on multiple atmospheric elements by exploring how managers conceive of the design and implementation of multiple atmospheric elements and how consumers respond to retail environments that deliver multiple atmospheric cues. An investigation of the managerial and consumer perceptions of multi-atmospheric cue retail environments is relatively rare in the marketing literature on atmospheric cues, which has often focused on consumer responses. The exploratory approach taken in this thesis is aimed at raising research questions and avenues that can be examined further in future research.

Conceptual Background

Atmospheric Elements

In a competitive market, beyond merchandise, price, promotion and location, store environments play a big role influencing consumers' store choice decisions and should be considered carefully (Kotler, 1973-1974). One customer may feel differently about a store environment compared to another (Gardner, 2001; Turley & Milliman, 2000; Yalch & Spangenberg, 1993). Grayson and McNeil (2009) believe it is possible to find a general trend and understanding of what the majority of consumers enjoy in hedonic environments such as bars and coffee shops. While managers evaluate a coffee shop environment in a utilitarian and functional way, customers judge often by hedonic value, which is more subjective and personal. Arbitrary combination of elements may or may not be well received by consumers. Atmospheric elements can be categorized into store ambient factor (background conditions, such as temperature, lighting, music, scent), aesthetic design factors (store environment elements that are more visual, such as layout, comfort, privacy) and store social factor (physical presence of other people, such as crowding), and all three influence store image (Baker, Grewal, & Parasuraman, 1994).

Measurement scales used in marketing literature will help understand to what extent specific coffee shop atmospheric elements influence consumer behavior, emotions and perception of the store. The scales used are a combination of general interior variables consisting of flooring, lighting, scent, music, temperature, cleanliness, wall texture and color usage (Turley & Milliman, 2000), and store layout measure – floor space allocation, product groupings, seating arrangement, traffic flow, decoration (Turley & Milliman, 2000).

Consumer Responses

Gentile, Spiller, and Noci (2007) mention that customer experience is strictly personal and implies the customer's involvement at different levels (rational, emotional, sensorial, physical, and spiritual). Emotional responses, behavioral influence and brand experience, brand personality and store image theory are discussed.

Emotional Responses – Pleasure-Arousal, Spatial Dimensions of Crowding

Turley and Milliman (2000) asked whether distinctive types of situational (time pressure, routine of buying task) and atmospheric (e.g., bright lights, loud music, crowded aisles) qualities of a particular retail setting can enhance or inhibit different emotional experiences. In addition, managers should find an interest in understanding these issues because the emotional impact of store environment influences patronage frequency, shopping duration and purchase outcomes. Especially when managers can control these factors, it is important to understand the relationship between emotions and functional characteristics of a retail setting. The Mehrabian and Russell pleasure-arousal scale is used for the aforementioned purpose (Machleit & Eroglu, 2000). This scale helps managers calibrate their in-store environments to elicit desired emotional responses, and consequently a desired behavioral coffee shop experience.

Machleit and Eroglu (2000) mention shoppers perceive important differences in affective qualities of different stores (Darden & Babin, 1994). They examined different retail environments and mention that more than half of all emotions vary significantly based on store type. Interestingly, coffee shops were not included as one of the store type in their study. In order to increase the accuracy of their conclusion that different results are expected from more functional and task-oriented environments (such as grocery

stores and discount stores) where a lower level of pleasure and arousal is found in emotional effects, coffee shops will be tested as a store type with hedonic shopping value. Potential entertainment, emotional worth, increased arousal, heightened involvement, perceived freedom, fantasy fulfillment and escapism all may indicate a hedonically valuable shopping experience (Aaker, 1997; Bellenger, Steinberg, & Staton, 1976; Bloch & Richin, 1983b; Bloch, Brunel, & Arnold, 2003; Hirshman, 1983; Holbrook & Hirschman, 1986).

Similar to other hedonic shopping experiences, coffee shops have a fun side (Bloch & Bruce 1984). Coffee shop experiences are not evaluated exclusively on the merit of goods or services acquired; many intangible and emotional costs and benefits must be examined as well (Holbrook, 1986). "A distinction between performing an act" to get something" as opposed to doing because "you love it"" (Triandis, 1977; Babin, Darden, & Griffin, 1994, p.645) occurs to coffee shop customers, who have the option of staying in offices, at home, or purchase coffee to go, but choose to experience a coffee shop environment because they want to and gain a more intrinsic, personal and emotional reward and pleasure (Deci et al.,1981).

Behavioral Influence

Atmospherics' influence acts as a significant predictor of emotional responses and future behaviors (Fishbein & Ajzen, 1975; Kivela, Inbakaran, & Reece, 1999). Mehrabian and Russell's (1974) pleasure and arousal measures are positively related to willingness to buy (Baker et al. 1992; Hui, Dube, & Chebat, 1997), therefore we will evaluate both emotional and behavioral outcome accordingly. Customers may have approach behavior, which involves a desire to stay and explore the environment (Booms

& Bitner, 1980) or they may express avoidance behavior, which includes escaping from the environment (Donovan & Rossiter, 1982). In this thesis, we evaluate customer behavior by the time spent and the amount of money spent during each visit. Wakefield and Baker (1998) found that retail atmospherics play an important role in determining the length of time customers wish to stay in a retail area. Warshaw & Davis (1985) define behavioral intention as "the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior" (p. 214). Donovan and Rossiter (1982) were interested in understanding patronage intentions, such as willingness to return to the store and deliver good word of mouth to fellow customers, because of the need to forecast customer-buying behavior. More specifically, studies have found methods to influence consumer's attention and manipulate customer behavior: Milliman (1986) found that the use of music tempo gives managers control over consumption durations, while "specialty stores, such as bakeries, coffee shops, tobacco shops, pop corn, and nut shops (e.g., Borowsky, 1987; Shappro, 1986; Simmons, 1988) rely on the scent of their products to draw customers" (Bone & Ellen, 1992; Spangenberg, Crowley, & Henderson,1996, p. 67). In addition, satisfaction, purchase loyalty, attitudinal loyalty and word of mouth also account for customer behavioral reactions that will be evaluated in this thesis.

Brand Personality and Brand Experience

One of the most studied constructs of brand associations is brand personality (Aaker, 1997). Consumers tend to endow brands with human characteristics that result in a brand personality, which consists of five dimensions—sincerity, excitement,

competence, sophistication, and ruggedness (Aaker, 1997). In this research sincerity, excitement and sophistication measurements will be used.

Researchers suggest that brand personality increases consumer preference and usage (Sirgy, 1982), evokes emotions in consumer (Biel, 1993) and increases levels of trust and loyalty (Fournier, 1994). "Brand personality is based on inferential processes" (Gita, Sengupta, & Aaker, 2005; Brakus, Schmitt, & Zarantonello, 2009, p. 54). "That is, consumers are not sincere or excited about the brand; they merely project these traits onto brands" (Brakus, Schmitt, & Zarantonello, 2009, p. 54). In contrast, brand experiences are actual sensations, feelings, cognitions and behavioral responses. "Thus, because brand experience differs from brand evaluations, involvement, attachment, and customer delight, brand experience is also conceptually and empirically distinct from brand personality" (Brakus, Schmitt, & Zarantonello, 2009, p.54) In particular, brand experience differs from evaluative, affective, and associative constructs, such as brand attitudes, brand involvement, brand attachment, customer delight, and brand personality" (Brakus, Schmitt, & Zarantonello, 2009, p.53). Thus, brand experience are conceptualized as " subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications and environments" (Brakus, Schmitt, & Zarantonello, 2009, p.53). This thesis examines the impact of atmospheric elements on both brand experience and brand personality.

Perception of the Store

Retail store environments have a major influence on consumer's inference about merchandise quality (Baker et al, 1994; Darden & Schwinghammer, 1985; Olshavsky,

1985), service quality (Gardner & Siomkos, 1985; Olson, 1977; Zeithaml, 1988) and the consumer's global store image, or overall attitude toward the store (Darden, Erdem, & Darden, 1983; Lindquist, 1974; Zimmer & Golden, 1988).

In-store elements such as color, lighting, style, or music may have more immediate effects on decision making than other marketing inputs that are not present at the point of purchase (e.g., advertising). Furthermore, store image is an important part of the store choice decision (Malhotra, 1983; Nevin & Houston, 1980; Stanley & Sewall, 1976). Darden, Ordem, and Darden (1983) found that consumers' beliefs about physical attractiveness of a store had a higher correlation with patronage intentions than did merchandise quality. Literature suggests there are linkages between store environment, merchandise, service quality, and store image. Rather than having a direct influence on store image, store environment indirectly influences store image through merchandise and service quality inferences (Baker, Grewal & Parasuraman, 1994).

Different atmospheric elements are used such that the color used within a store was found to affect consumer evaluations of the store and the merchandise it carried (Bellizzi, Crowley, & Hasty 1983). Milliman (1982) found that background music is thought to improve store image and stimulate customer purchasing. Research on the effects of color in retail environments has shown that participants inferred "merchandise in warm-colored environments to be more up-to date than merchandise in cool-colored environment" (Baker et al., 1994 p.329; Bellizzi, Crowley, & Hasty, 1983; Crowley, 1993). In another study on color effects, Baumgarten & Hensel (1987) show that patients who did not have prior knowledge of a physician's reputation appeared to depend on the physician's office to evaluate the physician's competence. We therefore explore the

possibility that customers evaluate a coffee shop's competence based on their perception of the store.

Phase I - Interviews

The objective of the field interview is to provide a qualitative review of the most up-to-date descriptions of the manager's point of view on the coffee shop industry. In addition, we would like to understand how managers use atmospheric cues to reach their managerial goals such as store traffic, store experience and increase sales.

Research Methodology

Sample

A sample of ten coffee shops was selected for the interview phase. They ranged from small independent stores to large corporations and franchises. A database of coffee shops was created using google.com. Managers were sent an invitation letter to participate in an interview. Over 100 letters were sent and the response rate was 5%. In the meantime, the researcher called each coffee shop and asked to contact the manager/owner. Managers were also approached directly in person and follow-ups were made using both phone and personal contact at coffee shops. Upon agreement, interviews were scheduled and took place in the coffee shop. The initial sample was selected from coffee shops in the center of Montreal and later expanded to other areas of Montreal in order to obtain a sample of ten interviews.

Questionnaire

The questionnaire consisted of 15 open-ended questions (Appendix F). The first questions were icebreakers. Follow-up questions pertained to when the coffee shop was created. The questions further asked manager about their use of atmospheric elements to create an overall environment, in general and by specific elements (e.g., layout, colors, lighting, music and scent). Additional topics consisted of the coffee shop's philosophy

and business goals, distinctiveness, and what atmospheric element changes managers would consider. The interview concluded with a few questions on customer behavior and the average amount spent by customers.

Study Procedure

Participant's informed consent was obtained. Semi-formal interviews lasted between 35 minutes to 1 hour and 35 minutes. Questions were asked in an order that was comfortable for the manager and allowed all questions to be answered appropriately. Interviews were recorded when permitted by the manager/owner.

Results and Discussion

Table 1 provides a summary of the more common answers obtained during the interviews.

Table 1-Summary of Interview Findings - Most Common Trends

What is the philosophy? What do you wish to accomplish?	
	Provide luxurious experience, high quality product, customized product, the best experience- mostly targeted to working class professionals
	Provide comfortable, practical environment for customers to read, study and spend time- mostly targeted to students
	Provide a comfortable, inviting environment with large variety of products for customers - targeted to everyone, including children
Describe the Environment	
	Quick (7)
	Luxurious (1)
	Easy Going (4)
	A mixture of different crowds (2)
	Strict (2)
Atmospheric Elements	
Layout	
	Same layout for every store, strict regulations – mostly large corporations

Artistic additions such as paintings, chalk boards, food product displays –flexible and unique

Colors

Neutral colors: black, brown, beige, golden, burgundy – related to coffee
Modern colors: white, black, silver, candy, purple, yellow

Lighting

LED Light which flows with the windows, Natural light
Halogen lights, dimmer but precise
Candles

Music

Jazz, Radio music
Calming – Michael Bubble style
Broadway loud, festive, party type, latin music
Customized music compilation

Scent

Espresso Coffee is the main scent
Freshly brewed coffee
Food such as cakes, cookies

Personality of the coffee shop

Strong, Quick, Active, Structured, Polite
Welcoming, Inviting, Curious, Friendly

What kind of experience do you wish customers to have?

Positive (2)
Able to spend a lot of time (2)
Enjoyable (2)
Open to suggestions (2)
Second home (2)

What role does atmospherics play in this differentiation?

Free Wifi
Bar as a center piece of attention
Natural and imperfect but practical
Less Clinical – Unique
Structure- it's the same everywhere

Comfort? Or Quick Service?

Quick service, then comfort

In addition, managers also raised some interesting additional points on the use of atmospherics: Coffee Shop # 1(the names were disguised due to competitive concerns) manager said: “The lighting is the most important element, the use of halogen lights gives comfort to customers as they are reading books. It also gives a European and Swedish feel to the atmosphere.” Coffee Shop # 2 manager gave an opposite opinion. He uses windows to bring light to customers, therefore operates with Fluorescent LED lights that blend well with natural sunlight. Coffee Shop # 3 manager gave a lot of emphasis on the importance of an imperfect environment, which is interpreted as more welcoming and open to customers. She receives regular customers who share opinion and feel at home. Coffee Shop # 4 manager is confident that the coffee shop works because she is blending it with a bakery. The scent of cookies and cakes play a large role in the success of her store. Coffee Shop # 2 manager also emphasized the importance of keeping the scent of coffee as natural as possible, where employees are not allowed to use soap or perfume because it contaminates the coffee scent. Coffee Shop # 5 manager put an emphasis on the layout, tall tables for students to study, and comfortable sofas for customers to relax and enjoy. She said it was important to diversify. Coffee Shop # 6 manager revamped the walls of the coffee shop with many pictures of food; it was his way of branding and attracting customers. He did not find paintings to be useful. On the contrary, Coffee Shop # 7 manager wished to change the painting of his coffee shop more often by asking students in Art major to provide their pieces and make the place an exhibition in order to attract younger professionals and new segment of customers. Coffee Shop # 8 manager dislikes putting promotional material and advertisement inside his coffee shop. He said it distracts customers and feels that it does not make his clients comfortable. Coffee Shop #

9 manager likes to create booths for customers to be more isolated and adapts the music to the crowd present at different times and different days. Finally, Coffee Shop # 10 manager uses modern colored furniture to attract customers, since it is a student oriented environment, he provides all material necessary to tailor it to its clientele (e.g. menu, layout, music).

Summary

After our discussions with different coffee shop managers, it was possible to create a collection of atmospheric techniques judged by managers to be appropriate in running a coffee shop business. Managers use these ideas to attract more customers, increase traffic in their store, and to increase sales. From these point of views on atmospherics, we can better understand general trends on environmental designs in downtown Montreal coffee shops.

Research Objectives

Building on Interviews and Literature

In the design of the field study and the lab experiment, both the marketing literature scales and managerial perspective are taken into account. To help define the most relevant atmospheric elements, six general interior variables such as lighting, scent, music, cleanliness, cash register placement and color usage were selected as general interior variables (Turley & Milliman, 2000). Measurement scales that are important in marketing literature will help understand to what extent, specific coffee shop models influence consumers.

Analysis Guidelines

Given the exploratory nature of this research, the following guideline will serve in the analysis of the results obtained in both field survey and lab experiment. First, the six general interior elements will serve as independent variables (IV) tested against measurement scales chosen from the marketing literature as dependent variables (DV) by conducting a regression analysis. Afterwards, the same set of general interior elements will be tested with gender in an ANOVA analysis. For laboratory experiment only, general interior elements will be tested with both virtual models (James and Samantha) as dependent variables (DV) in a regression analysis. And also, a regression analysis will be conducted to compare three models (James, Samantha and Pekarna) by combining common results from field survey and laboratory experiment. Finally, interesting managerial and theoretical hypotheses will be examined. The next chapter describes the field study conducted to follow up on the interview findings.

Phase II - Field Study

The field study is the first of two studies that looks at the customer perspective. The objective of this study is to evaluate customers' emotions, behaviors and perception of the store in a real coffee shop setting through surveys.

Research Methodology

Sample

A sample of 63 coffee shop customers completed the questionnaire. These participants were clients of the Pekarna coffee shop who provided informed consent and were asked to rate the store environment and answer questions concerning their experience in the coffee shop.

Questionnaire

The questionnaire was first written in English, and then translated into French. A translator (and Pekarna customer) volunteered to review the French version of the survey

Study Procedure

Pekarna coffee shop, a relatively successful café with a bakery was chosen for the field study because the manager expressed interest in renovating the store and updating its design. The results obtained in this study are pre-renovation findings. See Appendix 2 for photos of Pekarna coffee shop. Customers received the questionnaire while sitting in the coffee shop. They were rewarded with a 2 for 1 coffee card to be used at Pekarna upon completion of the questionnaire.

Measures

Seven-item likert scales and semantic differential scales were used to measure perceptions of general interior elements (Baker, Grewal, & Parasuraman, 1994; Turley &

Milliman, 2000). These scales consist of satisfaction and spatial dimension (Machleit & Eroglu, 2000), merchandise quality, service quality and store image adapted from Baker, Grewal, & Parasuraman (1994), purchase loyalty and attitudinal loyalty adapted from Chaudhuri and Holbrook, (2001), Fisher's environment quality scale (Spangenberg, Crowley, & Henderson, 1996) brand personality scales such as sincerity, excitement, and sophistication (Aaker, 1997) and finally Mehrabian and Russell's (1974) pleasure-arousal scale. Atmospheric design element scales such as store layout and interior display (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000) were employed. Detailed Scale Items are shown in APPENDIX C. Table 2 summarizes the reliability of the scales. Using Principal Component Analysis, scale items that loaded on the same factor were combined, and then reliability tests were conducted. Satisfaction, service quality inference, store image, Fisher's Environmental Quality scale, brand personality (sincerity, excitement, sophistication), and pleasure, and arousal all yield satisfactory Cronbach alphas above .70. The two items in Merchandise Quality inferences: "Food items from this coffee shop are high in quality" and "beverages from this coffee shop are high in quality" are significantly correlated (r=. 75). The four-item spatial dimensions of crowding scale, however, had a particularly low alpha of .59. The item " This store feels confining to shoppers" was removed due to a low factor loading. As a result, Cronbach's alpha of the three remaining items was .65. For atmospheric dimensions, the scale for general interior did not yield satisfactory reliability and as a result, the individual dimensions were used in the analysis. Store layout (alpha=. 78) and interior display (alpha= .80) were acceptable.

Table 2-Reliability tests of measurement scales used in Field Survey

Measurement scales	Alpha
Satisfaction (Machleit, Kellaris, & Eroglu 1994)	.75
Merchandise quality inferences (adapted from Baker, Grewal, & Parasuraman 1994)	
Service quality inferences (adapted from Baker, Grewal, & Parasuraman 1994)	.94
Store image (adapted from Baker, Grewal, & Parasuraman 1994)	.84
Purchase loyalty (adapted from Chaudhuri & Holbrook, 2001) I intend to keep purchasing from this coffee shop.	
Attitudinal loyalty (adapted from Chaudhuri & Holbrook, 2001) I would be willing to pay a higher price for products from this coffee shop over other coffee	
Spatial dimensions of crowding (Machleit, Kellaris, & Eroglu, 1994)	.65
Fisher' Environmental Quality Scale (Spangenberg, Crowley, & Henderson, 1996)	.90
Brand Personality - Sincerity (Aaker, 1997)	.89
Brand Personality – Excitement (Aaker, 1997)	.92
Brand Personality – Sophistication (Aaker, 1997)	.89
Pleasure-Arousal (Mehrabian & Russell, 1971)	
Pleasure	.86
Arousal	.85
General interior (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)	
Store layout (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)	.78
Interior Displays (Baker,Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)	.80

Results and Discussion

Demographics

The average customer stays about 39.89 minutes at Pekarna (M=39.89 (28.43) and spends 7.27$ (5.78) up to a maximum of 24$ per visit. Customers usually order one beverage (M=1.02 (.79)) and very often a food item (M=. 89 (.93)). The average customer is 26-35 year old with a mixture of up to 65+ years old. Their education level is at the bachelor level. Generally, consumers visit coffee shops 9.71 times a month. While the sample surveyed visit Pekarna 3 times a month. See Appendix A.1 for descriptive statistics.

Effects of General Interior Elements

As shown in Table 3, lighting, music, scent, color, layout, cleanliness do have an effect on pleasure (F (6,44) =3.57, p= .006), arousal (F (6,44) =2.96, p= .016), environmental quality (F (6,44) =2.593, p= .03), merchandise quality (F (6,44) =4.264, p= .002), store image (F (6,44) =4.60, p= .001), brand personality sincerity (F (6,44) =3.13, p= .01), brand personality excitement (F (6,44) =3.32, p= .009), and brand personality sophistication (F (6,44) =2.50, p= .04). Spatial dimension of crowding's lack of significance (F (6,44) =2.058, p= .08) can be explained by low reliability.

The pleasure dependent variable (Mehrabian & Russell,1974) yields a mean of M=2.69(.97), t (61) = -9.932, p= .00). This value is below scale mid-point (4), this means that the atmospheric elements at Pekarna influence customers pleasure negatively.

Table 3 - Summary Table of General Interior Elements (IV) on Dependent Variables (DV)

Dependent Variables	Mean	SD	Independent Variables						R^2
			Lighting	Scent	Music	Cleanliness	Colors	Cash Register	
			Means 5.04	5.18	4.16	4.68	4.69	3.88	
			Regression Coefficients						
Pleasure	2.69	.97	-.05	-.26*	-.06	-.17	-.10	-.003	.57
Arousal	4.27	1.31	-.25	-.26	-.03	-.15	.13	-.01	.54
EnvirQuality	5.12	.93	.13	.07	.10	.15	.04	.02	.51
Spatial dimension	4.19	1.15	.04	.29	.14	.10	.16	-.05	.47
Satisfaction	5.42	1.23	.14	-.15	.13	.004	-.12	-.002	.31
MercQuality	5.64	.79	.004	-.16	.14*	.16	.25***	-.05	.60
Storeimage	5.48	.89	.08	.10	.04	.27	.07**	.001	.62
Servquality	5.84	.89	-0.7	.03	-.007	.09	.05	.09	.33
Sophistication	3.90	1.29							
Excitement	4.10	1.16	.10	.12	.14	.26	-.01	.07	.56
Sincerity	4.48	1.01	.04	.03	.16	.14	.18	.07	.55
Purchaseloyalty	5.69	1.03	-.08	.06	.02	.12	.14	-.09	.24
Attloyalty	3.16	1.83	-.17	.04	.16	.24	.01	.08	.24
Time spent	40.84	30.30	-.11	-4.70	-1.09	.64	-1.83	4.05	.24
Money spent	7.27	5.96	-.93	-.29	.24	1.73*	.53	-.67	.37

Note: Significance level of regression coefficients *p < .05, ** p < .01, *** p < .001

Satisfaction (F (6,44) = .77, p= .60), service quality (F (6,44) = .88, p= .52), purchase loyalty (F (6,44) =.43, p= .85), attitudinal loyalty (F (6,44) =.43, p=. 85), and money spent (6,44)=1.16, p=.34) were not significantly affected by general interior elements. A possible reason is that interior elements alone do not completely explain consumer responses, if other factors such as human variables, service quality, or merchandise quality play a role in consumers' perceptions and behaviors.

To follow up on this question, service quality and satisfaction as independent variable were entered into a regression to test whether they influence purchase loyalty and attitudinal loyalty. Service quality and satisfaction do explain purchase loyalty (F (2,60) =16.09, p=. 00) (Table 4). In fact, service quality (b=.58, p=.00) has a stronger effect on purchase loyalty than does satisfaction (b=.22, p=.07; Table 5). However, satisfaction (b=.04, p=.83) and service quality (b=. 33, p=.13) do not explain attitudinal loyalty (F(2,60) =1.41, p=.25).

Table 4-ANOVA tested for Service Quality, Satisfaction (IV) towards Purchase Loyalty (DV)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.544	2	18.772	16.088	.000[a]
	Residual	70.012	60	1.167		
	Total	107.556	62			

a. Predictors: (Constant), servquality, satisfaction

Table 5- Coefficients table for Service Quality, Satisfaction (IV) towards Purchase Loyalty (DV)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.938	.836		1.123	.266
	satisfaction	.219	.120	.197	1.829	.072
	servquality	.580	.123	.508	4.715	.000

a. Dependent Variable: PurchaseLoyalty

Effects of Gender

In an ANOVA test with gender (independent variables) and measurement scales (dependent variable), there were no significant effects ($p > .06$), which confirms that perceptions of and behaviors toward coffee shop environments are not influenced by gender.

Additional Analyses

Developing in-store lighting as part of the store's atmospherics aids in attracting and retaining consumer patronage (Summers and Hebert 2001). Since lighting affects people's behavior in particular environments, lighting effects on pleasure and arousal were examined. Summers and Hebert (2001) state, " brightly lit rooms are more arousing than dimly lit ones" (p.146). In the context of this research, t-tests confirm that pleasure and arousal are affected by lighting. Pleasure and Arousal are negatively affected by lighting. When consumers dislike the lighting, this decreases their pleasure ($b = -.28$) and arousal ($b = -.38$; Table 6). When pleasure and arousal are affected, they in turn influence purchase loyalty and attitudinal loyalty decisions: Pleasure is negatively correlated with both purchase loyalty and attitudinal loyalty, but arousal is not (Table 7).

Table 6-T-test conducted on the Effect of Lighting (IV) on Pleasure-Arousal (DV)

		Coefficient	T-test	P-value
General Interior_02 Lighting	Pleasure	-.277	-2.945	.005*
General Interior_02 Lighting	Arousal	-.377	-3.742	.000**

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Table 7-Pearson correlations between purchase loyalty, attitudinal loyalty, pleasure and arousal

	Purchase loyalty	Attloyalty	Pleasure	Arousal
Purchase loyalty	1	.14	-.29*	-.22
Attitudinal Loyalty	.14	1	-.37**	-.08
Pleasure	-.29*	-.37**	1	.36**
Arousal	-.22	-.08	.36**	1

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Summary

This field experiment contributes to the research because it is in a real coffee shop. Atmospheric cues are realistic and the social factor – such as crowding, managerial presence and employee presence – is taken into account. Results suggest that atmospherics can affect consumer responses positively (e.g., arousal, store image) but also negatively (e.g., pleasure). The next study is a lab experiment that tests atmospheric and design factors in a more controlled setting.

Phase III - Laboratory Experiment

The laboratory experiment seeks to evaluate customers' emotions and perceptions of the store under controlled conditions. For this purpose, virtual coffee shops were designed that allowed consumers to navigate through one of two coffee shop models that differed in terms of atmospheric cues.

Research Methodology

Sample

This experiment was a one-factor (virtual coffee shop design model: Samantha, James) between-participants computer-based design. A sample of 123 participants (68.3% students and 30.1% full-time workers) completed the questionnaire online. The participants were recruited by email and classroom announcements. Emails were recorded into a database and then distributed evenly across the two coffee shop design models James and Samantha through website links (www.modeljames.cjb.net and www.modelsamantha.cjb.net). Both websites were isolated and could not be found by random Internet search. Participants were asked to view a short video, and to then answer the questionnaire about their experience in the respective virtual coffee shop.

Questionnaire

The questionnaire was created in English and implemented as an online survey using the Limesurvey survey software. The survey was administered through a server located at the John Molson School of Business.

Study Procedure

The study was created in a format of virtual animation using an interior design program. It integrated atmospherics elements used by the ten coffee shops visited in the interview phase into both models. The design also took into account changes that managers wish to make. Design items such as furniture selection and colors (tall or low tables, yellow sofas), store layout (bar upfront, sofas in the back), wall colors, lighting choices, decorations, music integration, and window displays, were all concerns brought up by managers in the interviews. Model James and Model Samantha both show similarities but also obvious differences, as shown in APPENDIX B. Overall, Model Samantha reflected a more traditional design inspired by the pre-renovation Pekarna setup, while Model James appeared more contemporary and was designed taking some of the planned Pekarna renovations into consideration.

Music was replaced by recorded noise at a real coffee shop to increase realism of the experimental manipulations. Background noise was then edited to fit with character navigation. For example, when the character passes by the bar, a customer ordering coffee can be heard. When the character leaves the coffee shop, the sound of a closing door is present. Likewise, the volume was adjusted during the visit to the bathroom, and the opening and closing of the doors.

In the virtual coffee shop clip, the navigation walks participants through the coffee shop at four different times of the day, early morning (9:00-9:30), mid day (12:30-12:00), late afternoon (18:00) and evening (22:00). The lighting is therefore adjusted with the sun position. The virtual coffee shop customers, foods, and beverages were also dynamic in order to create a realistic environment.

Measures

As in the field study, seven item scales were used to measure six general interior elements such as lighting, music, scent, color, cleanliness and cash register placement. The measurement scales are listed in APPENDIX C. Lab and field studies have common measurement scales- satisfaction, store image, spatial dimension, Fisher's Environmental Quality Scale (FEQ), brand personality scales such as sincerity, excitement, and sophistication, and pleasure-arousal. In addition, purchase loyalty has been substituted for purchase likelihood, and attitudinal loyalty has been changed to attitude toward the coffee shop. Word of Mouth (WOM), brand experience, four additional items in store layout ("high tables", "sofas", "regular tables" and "decorations"), and a measure of perceived competence were added.

Table 8-Reliability of Measurement Scales used in Laboratory Experiment

Measurement scales	Alpha
Store image (adapted from Baker, Grewal, & Parasuraman 1994)	.88
Purchase likelihood	
Attitude toward the brand	.96
Spatial dimensions of crowding (Machleit, Kellaris, & Eroglu, 1994)	.85
Fisher' Environmental Quality Scale (Spangenberg, Crowley, & Henderson, 1996)	.95
Brand Personality - Sincerity (Aaker, 1997)	.91
Brand Personality – Excitement (Aaker, 1997)	.93
Brand Personality – Sophistication (Aaker, 1997)	.88
Pleasure-Arousal (Mehrabian & Russell, 1971)	
Pleasure	.95
Arousal	.86
General interior (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)	
Store layout (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)	
WOM	
Brand experience (Brakus, Schmitt, & Zarantonello, 2009)	
Affective Sensory	.78
Behavioral	.56
Intellectual	.74
Coffee Shop Scale	
Color impression	.60
Lighting	.66

All measurements taken from the literature are reliable (alpha > .70) (Table 8), with the exception of brand experience behavioral alpha=.56.

Besides the scales used from the literature, four sets of measurement items were created to adapt to the coffee shop scenario. These consisted of 7 point descriptive adjective scale (1=not descriptive at all and 7=extremely descriptive) including eleven items (i.e., imperfect, clinical, clean, inviting, calming, ordered, unified, coordinated, diverse, intricate and complex) to understand coffee shop experiences better. This set of questions was followed by an eight-question set of importance ratings of promotions, prices, consistency in store, novelty, consistency in menu, novelty in menu. Willingness to pay for a small size filtered coffee and for a small size specialty coffee was also measured to assess consumers' price expectations as a function of atmospheric cues. Finally, consumers' perceptions of lighting and color were measured on a seven-point eight-item Likert scale (e.g., "the colors are modern", "the colors seem light").

After recoding "the colors are heavy" and "the colors are traditional", we related the colors that are heavy (recoded) with the colors that seem light. A correlation between the 2 statements was significant. The colors are modern and the colors are traditional (recoded) did not however yield a correlation with each other. Similarly, "the lighting is comfortable" and "the lighting is suitable to what I want to do in the coffee shop" as well as "the lighting is dim" (recoded) and "the lighting is bright" are combined. Both yield correlation between items. Table 9 shows a summary of the correlations obtained.

Table 9- Summary of correlations in the attempt to reduce Color and Lighting items

Statement # 1	Statement # 2	Correlation	Pearson correlation
Colors seem light	Colors are heavy	.00	.48**
Colors are modern	Colors are traditional	.10	.15
Lighting is comfortable	Lighting is suitable	.00	.79**
Lighting is bright	Lighting is dim	.00	.36**

**. Correlation is significant at the .01 level (2-tailed).

Results and Discussion

Demographics

Participants represent a random sample of the coffee shop consumer population in Montreal with a majority of 18-25 year old, up to the age of 56-65 years old (Appendix B). The sample's average education is a bachelor degree. When going to a coffee shop, participants bring an average of 1.30 person with them and visit coffee shop 9.12 times a month. Which means they visit coffee shops about twice a week (see Appendix B.3).

ANOVAs were conducted with models James and Samantha (independent variable) and the measurement scales (dependent variables). All measures were non-significant (p's >.06), meaning both models evoke similar perceptions of the environment and perceptions of the store. With exception, a marginally significant difference emerged for brand personality sincerity ($F(1,121)= 3.60$, $p = .06$) between Samantha ($M=3.64(1.31)$) and James ($M=4.31(1.19)$). James is seen as more sincere than Samantha.

The models were designed with differences in atmospheric cues. Nevertheless, they were perceived relatively positive by consumers in terms of store image, attitudinal likelihood and purchase likelihood, spatial dimension and environmental quality because they have means above the scale mid-point 4 on a seven-point scale. Thus, there appears

to be a certain range of atmospheric elements that can result in high levels of positive emotions and store image perceptions.

In a second phase of the analysis, regressions were run across both models with general interior items serving as the independent variables, and emotions, attitudes, and perceptions as the dependent variables. Means and regression results are summarized in Table 10. Perceptions of interior elements significantly influenced most dependent variables, with the exception of brand experience behavioral and brand experience intellectual. The six interior elements were tested with perceived competence, customers' perception of the store being clinical, franchise, and independently owned for managerial relevance. Accordingly, interior elements affect the perceived competence of the coffee shop ($F(1,121)=16.12$, $p =.00$). Although, based on atmospheric cues, customers do not evaluate a certain model as a franchise ($F (1,121)=1.30$, $p =.26$) or an independently owned shop ($F(1,121)=1.28$, $p =.27$) solely based on general interior components.

Impact of Coffee Shop Model Names

One of the issues observed was that identifying model James and model Samantha with gender oriented names may have influenced the perceptions of the store among male and female participants. To rule out this possibility, a MANOVA was conducted to see whether there is an interaction between the dependent variables and model and gender. The results state no name × gender interaction ($p = .66$).

Table 10- Summary Table of Regression Tests on General Interior Elements (IV) and Dependent Variables

Dependent Variables	Mean	SD	Independent Variables					R^2
			Lighting	Music	Cleanliness	Colors	Cash Register	
			Means 4.59	3.63	5.60	4.07	4.58	
			Regression coefficients					
Pleasure	3.69	1.41	-.15	-.20**	.01	-.15*	-.34***	.72
Arousal	3.86	1.08	.02	.06	-.02	-.11	-.20**	.42
Environmental Quality	4.46	1.28	.07	.18***	.05	.19***	.25***	.77
Spatial Dimension	4.82	1.43	.05	.17*	.29*	-.14	.23*	.45
Store image	4.86	1.23	.10	.18***	.19**	.16**	.21***	.77
Sophistication	3.72	1.28	.03	.17**	-.04	.17**	.21**	.69
Excitement	4.17	1.27	-.02	.02	.22**	.13*	.24***	.66
Sincerity	4.11	1.17	.12	.20*	.11	.11	.16*	.61
Purchase likelihood	4.13	1.76	.26**	.09	.21	.19*	.26**	.72
Attitude	4.54	1.48	.06	.22**	.03	.28***	.30***	.73
WOM	4.22	1.62	.11	.22**	.14	.28***	.28***	.74
Brand Experience_AS	3.85	1.14	.03	.04	-.09	.21***	.09	.57
Brand Experience_BE	3.64	1.03	-.01	.03	-.09	.08	.05	.23
Brand Experience_IN	3.95	1.21	.06	-.05	.03	.11	.02	.30
Competence	4.90	1.26	.04	.20**	.34***	.002	.26***	.64
Clinical	3.81	1.82	.07	.11	-.04	.10	-.20	.22
Franchise	4.15	1.71	-.13	.06	.15	.04	-.21	.25
Independently Owned	4.45	1.64	.03	.05	.09	.14	.09	.25

Note: Significance level of regression coefficients *p < .05, ** p < .01, *** p < .001

Impact of Design Color

A test was also conducted to see whether there was a difference in color perceptions between the two models. As expected, the models differed in terms of color perceptions; James is considered to be more modern than Samantha ($F(1, 121) = 10.62$, $p < .001$).

Competence of Franchise or Independently Owned Coffee Shops

When a customer believes the coffee shop is a franchise or independently owned based on interior elements, how does this affect their competence perceptions? A median split was used for franchise perception (Median = 4.00, M_{low} =2.74, M_{high} = 5.77, $t(121) = -21.050$, $p=.00$) and the independently owned shop perceptions (Median = 5.00, M_{low} = 3.52 , M_{high} = 6.11 , $t(121) = -12.82$, $p=.00$). The results showed that coffee shops perceived to be independently owned are perceived as more competent ($M_{\text{strong perceptions of independent ownership}}$ = 5.27 (1.04), $M_{\text{weak perceptions of independent ownership}}$ = 4.70 (1.32); $t(121)= -2.489$,$p =.014$). Consumer's belief that the coffee shop is a franchise does not affect their perception of the coffee shop's competence ($t(121)= -1.234$,$p =.22$).

Coffee Shop Models and Competence of the Store

The two models (James and Samantha) were compared with regard to beliefs of the coffee shop as an independently owned ($F(1,121)=.19$, $p = .66$) or franchise ($F(1,121)=1.39$, $p = .24$). No significant difference emerged. General interior design does not determine whether a store is perceived as independently owned or a franchise.

Store Image and Competence of the Store

Baumgarten and Hensel (1987) conducted a study where patients who did not have prior knowledge of a physician's reputation appeared to depend on tangible attributes (the physician's office) to evaluate the physician's competence. This thesis therefore explored whether consumers' perceptions of store image increases their perception of the coffee shop's competence. A linear regression showed a positive association between store image and the perceived competency of the store ($b = .68$, $t(121) = 9.84$, $p =. 00$; $R^2 = .44$).

Pricing expectations might change when a customer perceives a store to be independently owned or a franchise. Participants indicate that they are willing to buy a regular small size coffee for the cost of 1.85$ and an espresso based drink for 3.26$. No significant differences in prices were found for customers who perceived the models to be independently owned or a franchise.

Summary

The lab experiment tests the effects of atmospheric factors in a controlled context, using virtual coffee shop models. This approach allows for a change in different atmospheric cues (e.g., lighting, wall colors, music) across experimental conditions. This experiment showed that the selected atmospherics cues influence consumer responses relatively positively. This experiment also allowed researchers to demonstrate that consumers perceive coffee shops as more competent if they believe they are independently owned.

General Discussion

This thesis contributes to the emerging literature on the effects of multiple atmospheric cues by considering multi-sensory atmospheric effects in a coffee shop context, using a multi-method approach (interviews, field study, and lab experiment).

The interviews with coffee shop managers generated many pertinent ideas and concerns about the use of multiple atmospheric cues. The interview sample consisted of five independent and five-franchise/large corporations. Interestingly, both independently owned and large corporation seek customers with an experience that is luxurious, comfortable or inviting. Large corporations have access to customized promotional material and financial support. Although they are restricted by strict protocols that support standardization, franchises and large corporations managers are provided with guidelines to make profit oriented changes. On the other hand, independent coffee shops have the flexibility to change music choices, lighting, colors, and scent according to their customers. However, they may increase their risks of failing by making modifications that are not carefully researched. Although independently owned coffee shops wish to become larger, they do not feel the need to mimic existing larger corporations.

Both field and lab experiments have yield significant results in common measurement scales (e.g., pleasure, arousal, environmental quality, satisfaction, store image, sophistication, excitement and sincerity) used in the questionnaires. Therefore Pekarna coffee shop, James and Samantha have similar coffee shop environment exposure.

Differences between Field and Lab Studies

The field study conducted at Pekarna coffee shop indicates that pleasure, arousal, environment quality, merchandise quality, store image, brand personality sophistication, excitement and sincerity are influenced by general interior elements provided. While spatial dimension did not have a significant effect on consumer responses in the field study, it did in the laboratory experiment. In addition, purchase likelihood, attitudinal likelihood, word of mouth, brand experience affective and sensory are also influenced by general interior design elements in the lab experiment (but not in the field survey).

Moreover, customers' experience change when human variables are considered as part of coffee shop atmospherics. The field study reflects different perceptions compared to the lab experiment. When comparing the two virtual and the real coffee shop (Model James, Model Samantha, and Pekarna), Pekarna yields a higher mean for arousal, environmental quality, store image, sophistication, and sincerity. These measurements are therefore more important when customers are exposed in a real setting and consequently tests for internal and external validity of the project (Table 11).

Differences between Virtual Coffee Shops

Although both models had similarities and influenced customers equally, certain key differences were shown. Through color manipulation James is perceived as more modern than Samantha. Overall, general interior elements of James created a difference in the perceived sincerity of both models. James is seen as more sincere than Samantha. Although both are acceptable designs, they also have controllable components that can alter the perception of customers towards the store.

Researchers as well as managers can use the six general interior elements (lighting, music, scent, color, cash register placement and cleanliness) to modify the level of pleasure, arousal, environment quality, store image and sincerity in a coffee shop. Other variables are also relevant but may be better influenced with additional atmospheric variables. No differences emerged with regard to perceptions of a store being clinical, franchise, or independently owned based on its atmospheric design.

Competence

Furthermore, when customers rate the environment as having a good store image, it positively influences the perceive competence of the store. When a customer believes the store is independently owned, they expect a higher level of competency. Although when they believe the store is a large corporation, it does not affect their perceived competence of the shop.

In 2010, E-imports reports an espresso based drink is US$2.45 and for a brewed coffee is US$1.38. In this project, different expected price ranges are found for downtown Montreal in the year 2011. On average, customers wish to pay $1.85 for filtered coffee and $3.26 for espresso-based drinks (E-imports, 2010). Using such information can help managers adjust prices to maximize profit without overcharging which may cause customers to leave.

Demographics

Similar in lab and field studies, the average times consumers visited a coffee shop is 9.71 (field) and 9.12 (lab). Also, more women participated in both studies, because women metabolize caffeine quicker, it may explain greater attendance in coffee

shops (Weinberg & Bealer, 2002). In this thesis, there were no particular differences in gender across dependent variables.

Table 11- Summary of Model James (1), Samantha (0) and Pekarna (2) and Dependent Variables

Independent Variable	Dependent Variable	Mean	Standard Deviation	F-value	p-value
Model	**Pleasure**				
Samantha		3.64	1.30	11.59	**.00**
James		3.75	1.52		
Pekarna		2.73	1.01		
		3.37	1.36		
	Arousal				
Samantha		3.85	.95	3.38	**.036**
James		3.87	1.21		
Pekarna		4.3	1.26		
		4.02	1.16		
	FEQ				
Samantha		4.44	1.25	7.04	**.001**
James		4.49	1.33		
Pekarna		5.14	.87		
		4.69	1.20		
	Store Image				
Samantha		4.92	1.16	3.97	**.02**
James		4.80	1.31		
Pekarna		5.37	1.10		
		5.03	1.21		
	Sincerity				
Samantha		3.91	1.05	4.76	**.01**
James		4.32	1.11		
Pekarna		4.49	1.04		
		4.24	1.09		

Contribution

Managerial Implications

This project's most important contribution is to provide an examination of the joint effects of multiple atmospheric elements. Also, this research concentrates on one type of retail store (coffee shops) and takes into account both managerial and consumer perspectives, both in laboratory and field settings. Retail management can create atmospheres to induce consumers to behave in certain manners (Smith & Curnow, 1966).

Formalized Decisions

As stated by Turley and Milliman (2000), retailers still make arbitrary decisions about the environments they create. These authors feel a need for managers to become more formalized in their decision making especially medium and smaller retailers. This project contributes in interviewing a sample of managers both independently owned and large corporations. Previous research has not explicitly examined the views and constraints of managers in these two types of retail stores, even though supermarkets, specialty stores are studied (Vida, 2008). Sharing their thoughts with other managers is the start of providing more generalized ideas about coffee shop atmospherics guiding them in decisions making.

Independent Stores and Franchises

Independent store managers feel they cannot establish a desired atmosphere similar to chain and large corporations because of financial restrictions. Consequently, independently owned coffee shops are forced to develop economical atmospheric design techniques. For example, managers use black boards and liquid chalk as menu displays, they use ipods to create music compilations and customize their brand products by

stamping their logo onto regular white cups, while others use student paintings to create an exhibition style coffee shop. As a result, independently owned coffee shops become more artistic and unique. Additionally, large corporations who have access to a better budget use similar techniques. For example, one of the most successful corporations also uses black board as menu displays. However, this research shows that general interior elements do not tell whether a coffee shop is a franchise or an independently owned coffee shop. However, when customers believe the coffee shop is independently owned, they perceive a higher level of competence. Managers who wish to highlight that their coffee shop is independently owned need to use additional cues (other than atmospherics), such as logos, signage, or the statement "independently owned" to communication materials.

Reactions of Customers

As seen in lab and field studies, customers do not always analyze the details of each atmospheric element, but they incorporate multiple atmospheric cues into their perceptions. Although much detail was put into both models in the virtual simulation, participants may not have noticed small differences (explained by the lack of significant findings when comparing responses to both models), yet some perceptions of the coffee shops were influenced (e.g., sincerity perceptions). Managers therefore gain a competitive edge in improving customer's coffee shop experience by choosing designs carefully like the use of fluorescent lights near the bar and halogen lights at the tables present in lab models. Sometimes, understated and subtle changes to the retail environment are all that is required to change how shoppers behave inside a store (Turley and Milliman 2000).

Potential of Coffee Shops Today and in the Future

Another managerial motivation is the future business potential of coffee shops. Because consumer behavior has evolved, marketers have responded by integrating restaurants and cafes into the retail mix (Sternquist, 2007). Developing an understanding of coffee shop integration into different retail environments can be an extension to this project. There is a consistent growth in combining different types of retail stores together, and often consist of a coffee shops and other retail outlets. For example, Starbucks coffee shops are present in Chapters bookstores, or Café Depot is often located next to a Couche Tard convenience store. Therefore, coffee shops not only have their clientele to consider, but can become part of other retail environments' atmosphere creation.

Validity of the Models

When models James and Samantha were tested with consumers, both yielded non-significant behavioral and emotional effects but were perceived relatively positively by consumers. This finding provides managers with a repertoire of different but similarly effective atmospheric models. In addition, given the difference in sincerity perceptions, results suggest that altering atmospheric elements in a certain way can influence consumers' perceptions of the store.

Using the Program

The protocol of virtual simulations used in this project can be beneficial to managers to lower their renovation risks by constructing a model with the changes they wish to make and survey their customers. Doing so, will help coffee shops manager better understand the needs of their customers, therefore increase customers satisfaction and

save time, effort and money by predicting what works and what does not before attempting the real changes.

Tolerance of Customers and Feeling at Home

Customers feel at home when they are comfortable with the atmosphere of a coffee shop. In the field experiment, it was obvious that customers notice wall defects, lack of cleanliness, messy tables which are part of the atmosphere, but are willing to tolerate imperfections to a certain extent. While many coffee shops focus on serving a perfect, clean environment, it does sometimes lessen the communication between clients and managers, making the environment less approachable. Customers are willing to offer their opinion and contribute to making a coffee shop better when they are regulars. The closer to home the customer feels about the environment, the more likely they will return. A key suggestion to managers is to not only implement quick service, but also a welcoming and honest environment.

Monotone Environment

It is important that managers create an exciting environment. Certain customers tend to sit at the same place every time they visit; others like to experience different locations of the coffee shop atmosphere. Increasingly, coffee shops create multi area environments with tall tables to work, comfortable sofas to relax while offering newspapers, and the coffee bar. Customers travel within the coffee shop depending their mood on a particular day. Therefore, many atmospheric elements (lighting, music, scent, layout) have to be designed to fit the purpose of clients. Some customers prefer open spaces for friendly encounters, others like isolated areas to read books. The environment needs to be accessible and comfortable for customers to move around.

Theoretical Implications

This project's most important contribution is to provide an examination of the interactive effects of multiple atmospheric elements. Also, to concentrate on one type of retail store and take into account both managerial point of view through field interviews and marketing literature in its experimental designs in controlled environment and applied settings. In this section, theoretical implications regarding the contribution in marketing literature and research methods will be discussed.

Store Exteriors

The laboratory study takes into account the exterior variable of the coffee shop. This study was conducted in downtown Montreal for both field interview and field survey. Therefore it is important to create a simulated downtown exterior for the laboratory study. It fills the gap in considering exterior variable, which may influence customer's perception of the store (Turley & Milliman, 2000).

Confirmation of the Findings

The models James and Samantha took into account a combination of real coffee shop layout for the purpose of validating the design choices. There is consistency between field survey and lab experiment in demographics and common scales used. In addition to Models James and Samantha, Pekarna was considered as a third model to the research and were compared by ANOVA. Additional findings were therefore available across lab and field studies.

Generalization

This research contributes by confirming marketing literature questions while discovering the specific use of atmospheric elements in the coffee shop industry. For

example, general interior elements alone alter the perception of customers towards certain aspects, like store image but less on others like pleasure and arousal.

With a focus in one particular store type, it brings direction to multi-sensory atmospheric cues to be researched further. Certain aspect can be generalized towards all retail contexts (e.g. color usage, music), while others are tailored specifically to coffee shop industry (e.g., scent, layout, lighting) and cannot be applied to other retail settings (e.g., scent of coffee).

Multi-Model Comparisons

Although little significance between the 2 models was found, its implication can be debated. The models were similar enough to result in common and positively affecting customer behavior, emotion and perception of the store. On the other hand, we have not conducted a model different enough to alter the taste of customers, which is sometimes subjective.

Experimental Control: Methodology Contribution

The laboratory experiment design was in the format of a virtual navigation through a coffee shop. Within the video created, six atmospheric elements (e.g., music, lighting, color, layout, time of the day as well as exterior variable) were controlled for. Using an intuitive and economical interior design program such as Live interior 3D pro can give researchers a control over many variables that is not seen with video and photography. A simulated navigation can help marketing researchers develop imaginary settings and change the lighting, colors, and layout very easily. In addition, this particular program controls for the time of the day. Moreover, music was considered carefully by recording noise, which added to the realism of the experiment. By editing the music with

Garage Band software gave researchers the ability to control for the shift of frequency of the sound waves produced towards the character inside the coffee shop, which is not considered when playing direct music.

A combination of different softwares can help create more realistic settings in the context of a laboratory experiment. This method contributes in generating more controlled environments for sensory research. In addition, the videos let participants navigate the entire environment in the span of 2:30 minutes, therefore making laboratory research more efficient and less tiring for participants. The goal of this research was to concentrate on one specific context (i.e., coffee shops) to understand joint effects of atmospheric cues through multiple research methods.

Limitations

Realism

Using virtual simulation does help with realism, however it still has many limitations. Better software can create better graphics with more details. Three-dimensional customer avatars were placed in the coffee shop environment, but they stayed static throughout the character navigation. Animated customers with realistic faces can affect results while adding a human variable to the simulation.

Scent

Scent was not tested in the lab experiment. While there is a lot of work that can be done with olfactory cues in coffee shops (e.g., scent of freshly brewed coffee and pastries), monitoring the level of coffee scent as low, medium, high and none in a laboratory while participants are viewing the simulation should be done as a future project. Scent can help in drawing customers into the store (Bone and Ellen, 1994) and increase lingering time in stores (Lipman, 1990).

Sample

The recruited sample of the lab experiment was created by word of mouth, which explains that the majority of participants was in the age category of 18-25. However it can be argued that word of mouth is a realistic way of marketing for a coffee shop.

Merchandise Quality

Merchandise quality was not tested in the laboratory setting. In future research, more realistic simulations can be done such that customers will approach and evaluate a virtual product.

Future Research

Across Industry, across Countries

The same procedure can be developed for specific atmospheric models in particular industries. This project focused on coffee shop industry because retails stores are smaller, easier to control. Although, the same protocol can be used to access other types of retail stores such as bakeries, yogurt shops, and other small size retail stores to later expand towards larger retail stores in a virtual shopping experience. Future research can be conducted in a different area of Montreal to be compared with downtown area of Montreal.

A general limitation in this project is the presence of culture and geographic position. As stated by managers, chain coffee shop adapt to different cultures in different countries. Such that in America, the size of a coffee is particularly larger than the size of a coffee served in Australia. In Asia, coffee shops sells full cakes, whereas in America, coffee shops sell cake slices.

Store Layout

Layout was taken into account in the lab experiment, the layout was chosen based on visited coffee shops and most common coffee shops designs such as having the bar up front, comfortable couches in isolated areas, and tall tables in the front area of the

store. Future research can test for a change of layout by using simulation, and then execute the changes in the field.

Pekarna Renovated

Due to time constraints, post- renovation phase of the field survey at Pekarna did not occur. Future research has yet to evaluate the Pekarna coffee shop after renovation as the manager have expressed the wish to change her burgundy, brown, Broadway styled coffee shop into a purple, silver and white store. See APPENDIX E for the potential post-renovation design.

Crowding

One of the main variables we did not take into account is the crowding as well as the attire of employees. Future research, using an animated 3 dimensional moving avatars to control for crowding and employees appearance can be possible. Details can be adjusted even further, with the crowding level during each time of the day, the opening and closing hours, and even show replicas of real life coffee shop employees.

Conclusion

This research has contributed both in managerial and theoretical fields. With the application of different measurement scales used in marketing literature, multi-sensory atmospheric elements selected in this project do affect customer behaviors, emotions and perception of the store. The combination of multi-research methods with an exploratory purpose creates a platform for managers to become more informed in their decision-making when designing their coffee shops. This should lower business risks, where they

can mock desired atmospheric changes, survey customers, and understand the general coffee shop trends in today's society.

The comparison of both field and lab has come up with interesting results. While the laboratory experiment often gave satisfactory and neutral results, the field survey has heightened senses that push customer's opinion more accurately. Although both virtual models are different, it also showed that using atmospheric designs could alter customer perception, in this research, the brand personality of a coffee shop. Yet, varying different combinations of atmospheric cues can results in other effects.

This project contributes in advancing marketing literature by focusing on one store type and therefore realizing certain measurements are better tailored to specific types of store. Despite the fact that certain notions of scent, colors, music, layout, and lighting can be generalized in different retail environments, certain uses of these atmospherics elements are tailored specifically to the coffee shop industry (e.g., scent of coffee and cookies). It also gives a lot of potential to expand in the field of multi-sensory atmospheric cues, across countries in the same industry, across industry starting with small and medium stores. Research methodology can also improve by using more advance software, adding human crowding and scent variables. With consistent results across field and lab experiments, this research is solid in manipulation, provides space to expand and have results that are applicable in both industry and literature.

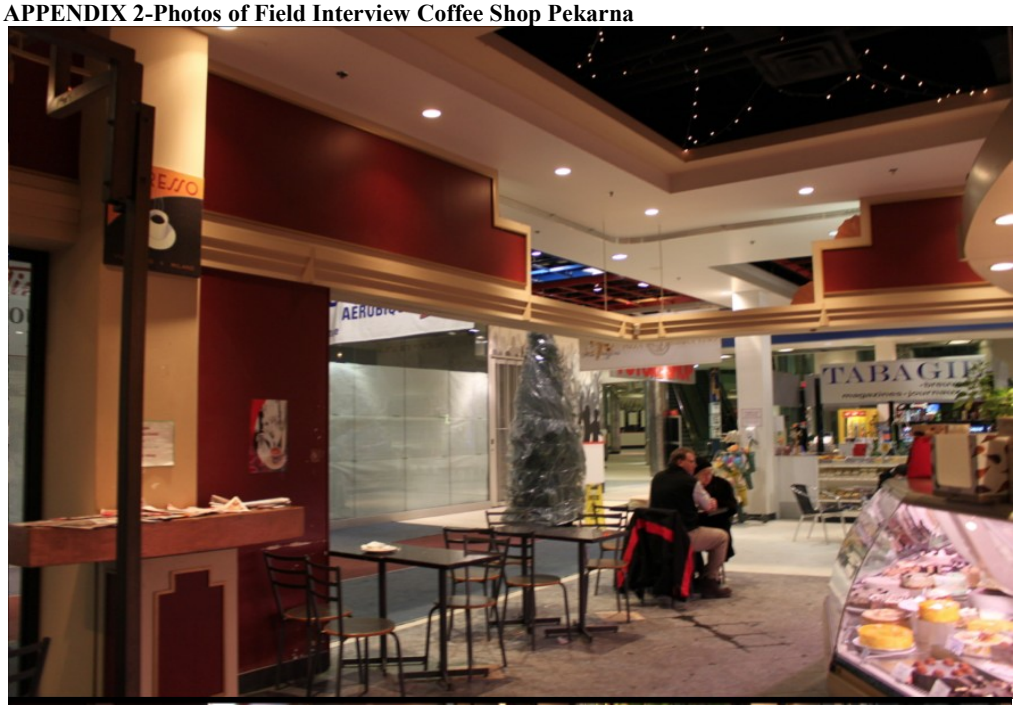
APPENDICES

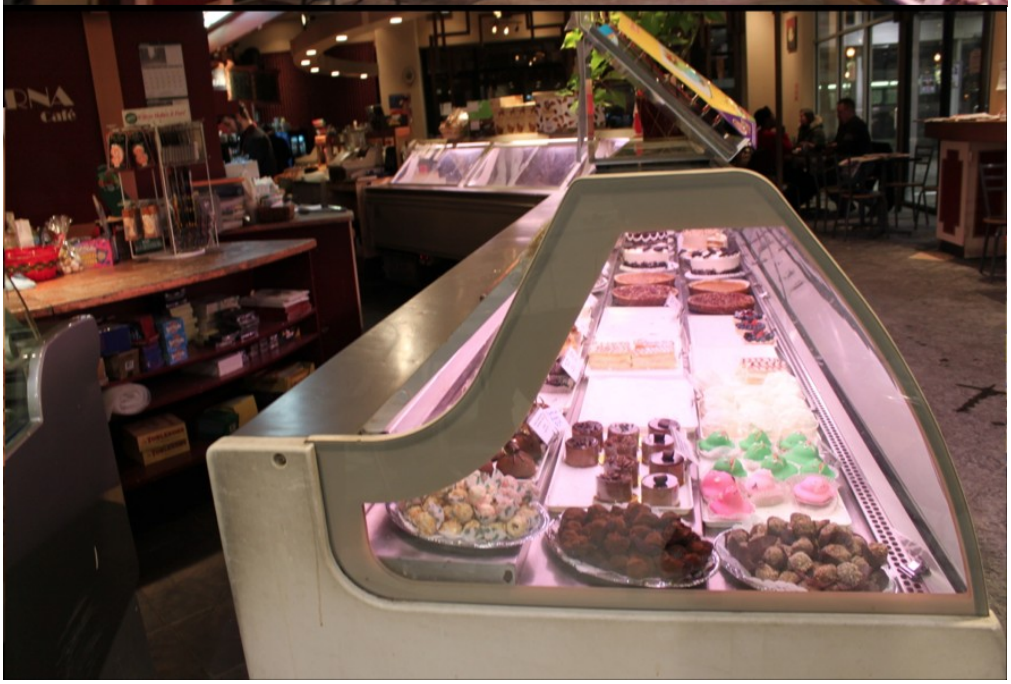
Appendix A- Field Study

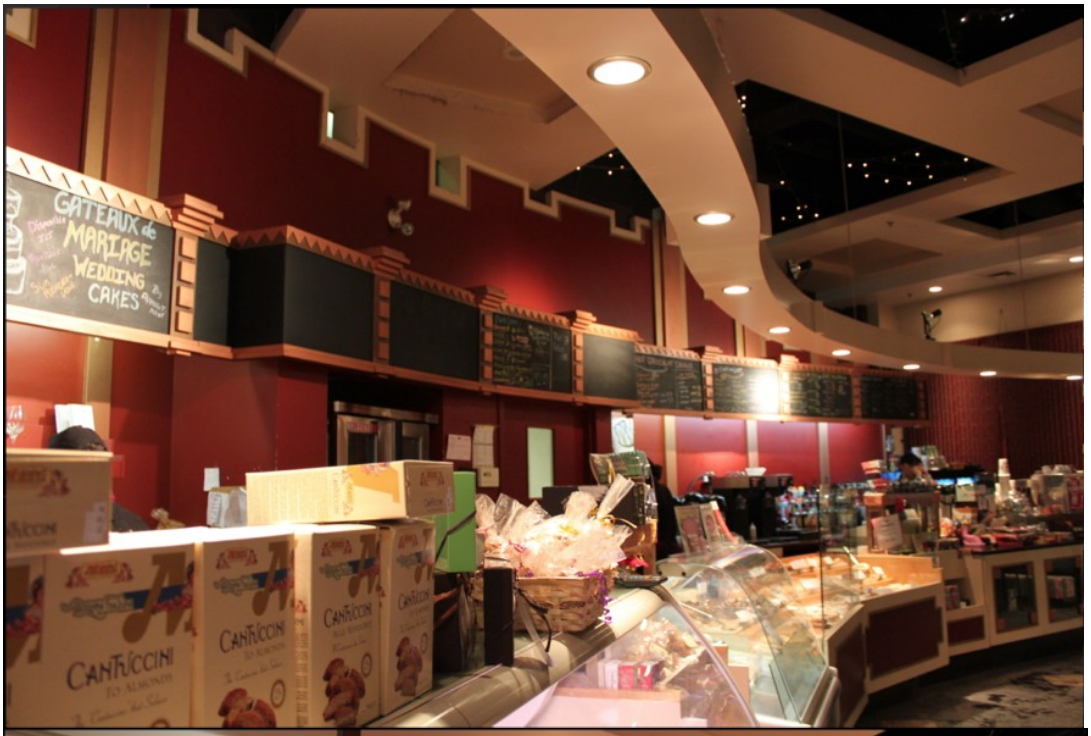
APPENDIX 1- Demographic Statistics for Field Study

	Frequency	Percent	Mean	Std. Deviation	Sample Size
Age					58
Less than 18	4	6.3			
18-25	17	27.0			
26-35	24	38.1			
36-45	4	6.3			
46-55	1	1.6			
56-65	5	7.9			
65+	3	4.8			
Education					59
High school	3	4.8			
College (CEGEP)	10	15.9			
Undergraduate	27	42.9			
Master	14	22.2			
Doctorate	4	6.3			
Other	1	1.6			
Gender					60
Male	20	31.7			
Female	40	63.5			
Visits/Month			9.71	8.895	61
Visits at Pekarna/Month			2.98	4.514	61
Company			1.30	1.03	123
Time Spent			39.89	28.14	63
Money Spent			7.27	5.78	63

APPENDIX 2-Photos of Field Interview Coffee Shop Pekarna






GATEAUX de MARIAGE
WEDDING CAKES
CANTUCCINI

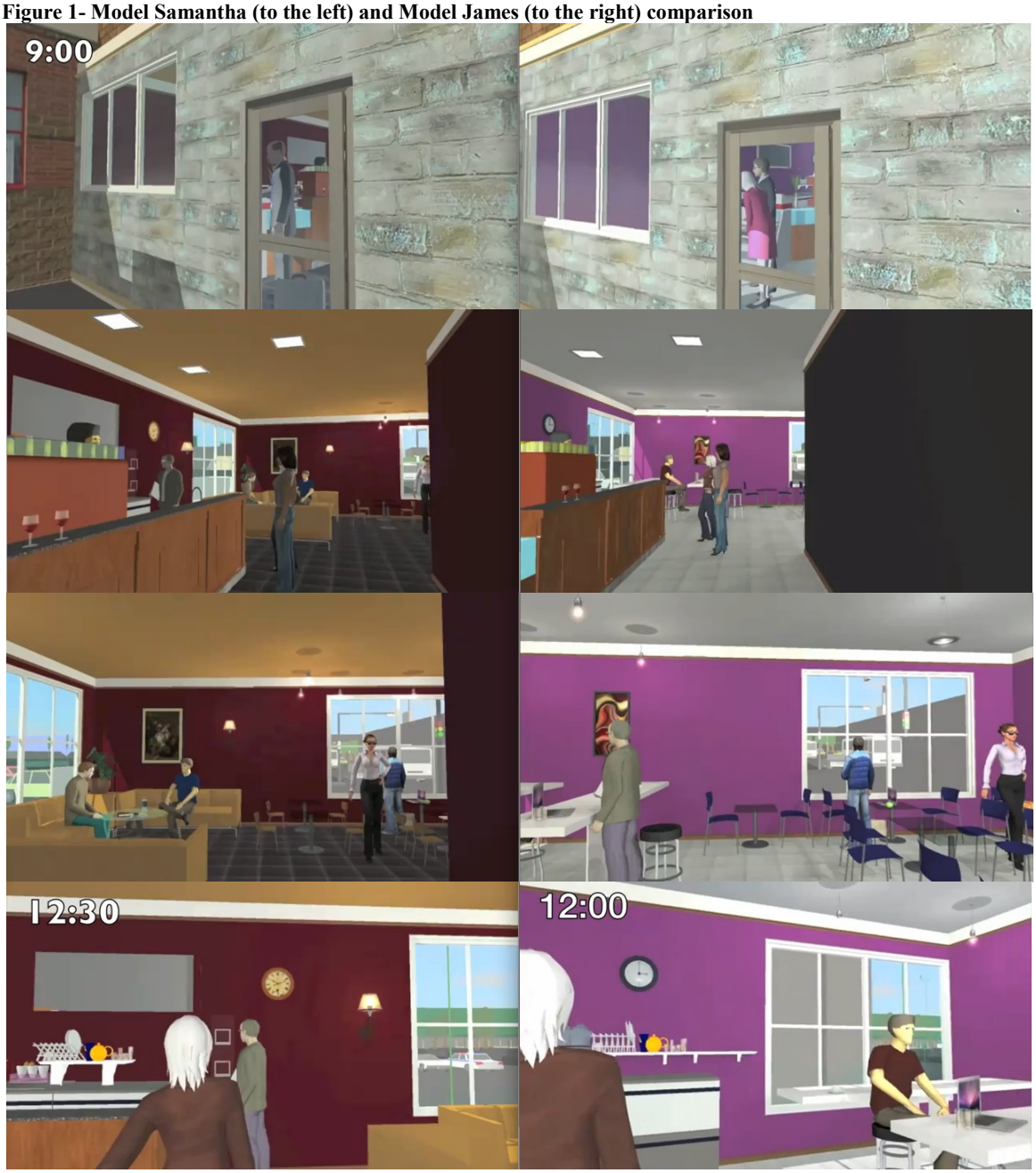
Appendix B- Laboratory Experiment

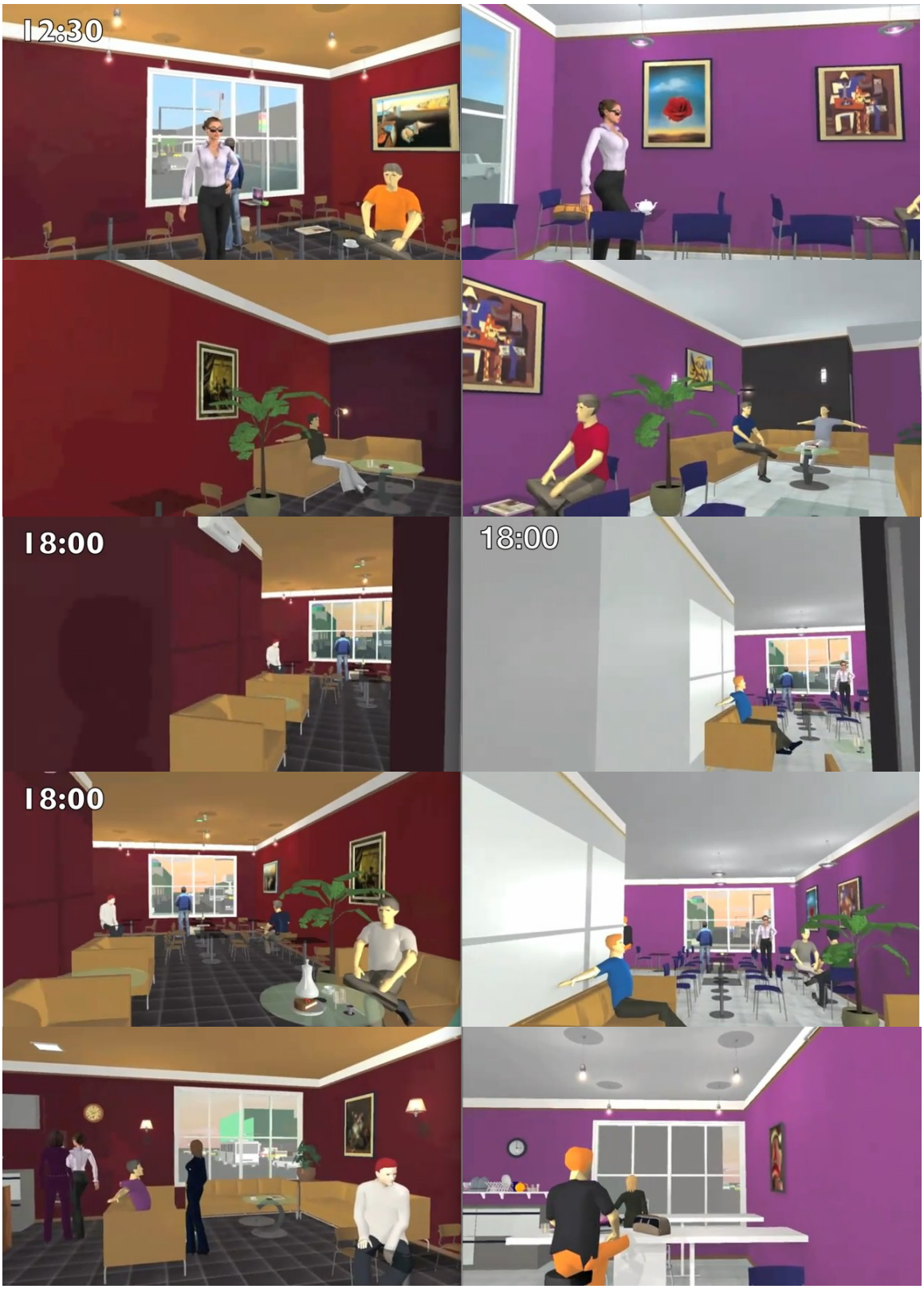
APPENDIX 3- Demographic Statistics for Laboratory Experiment

	Frequency	Percent	Mean	Std. Deviation	Sample Size
Student	84	68.3			123
Full-time Worker	37	30.1			123
Age					123
18-25	73	59.3			
26-35	35	28.5			
36-45	5	4.1			
46-55	8	6.5			
56-65	2	1.6			
65+	0				
Education					119
High school	4	3.3			
College (CEGEP)	10	8.1			
Undergraduate	61	49.6			
Master	34	27.6			
Doctorate	6	4.9			
Other	4	3.3			
Gender					123
Male	44	35.8			
Female	79	64.2			
Visit/Month			9.12	10.42	122
Company (person)			1.30	1.03	123

Model James and Model Samantha

Figure 1- Model Samantha (to the left) and Model James (to the right) comparison

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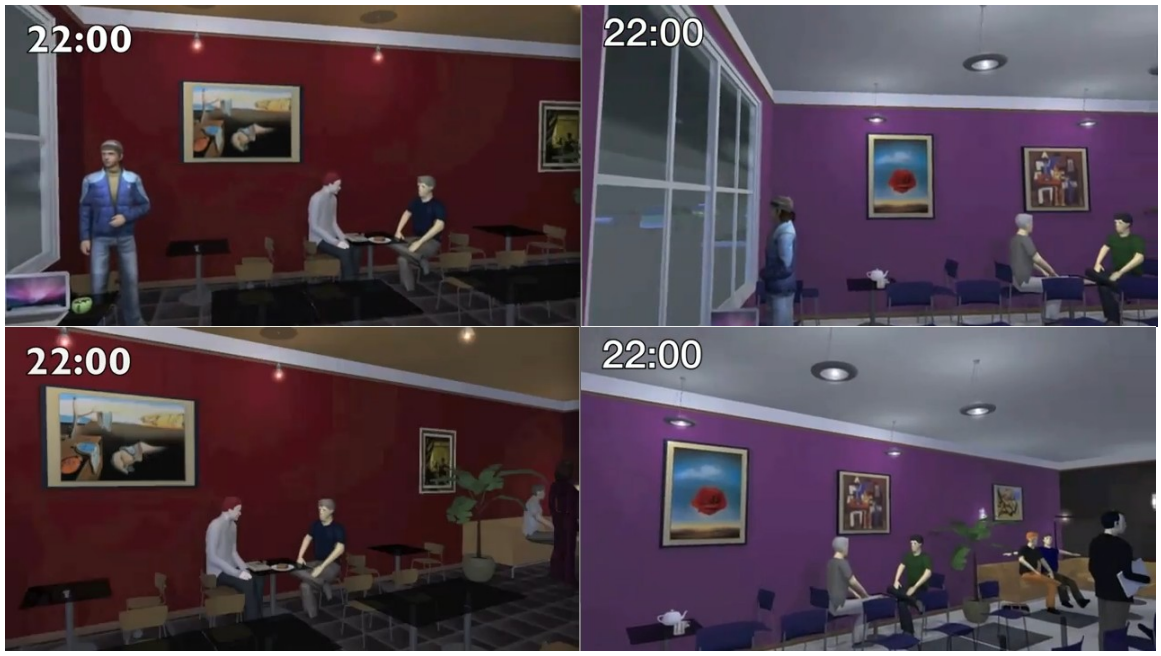
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Appendix C- Measurement Scales

Field Survey Items and Scales used

Satisfaction (Machleit, Kellaris, & Eroglu 1994)
(1:Strongly disagree – 7:Strongly agree)

- I enjoy shopping at this store.
- I am satisfied with my shopping experience at this store.
- Given a choice, I would probably not come back to this store.
- I would recommend this store to other people.

Merchandise quality inferences (adapted from Baker, Grewal, & Parasuraman 1994)
(1:Strongly disagree – 7:Strongly agree)

- Food items from this coffee shop are high in quality.
- Beverages from this coffee shop are high in quality.

Service quality inferences (adapted from Baker, Grewal, & Parasuraman 1994)
(1:Strongly disagree – 7:Strongly agree)

- Customers can expect to be treated well in this store.
- This store's employees are willing to help customers.
- This store offers high quality service.

***Store image (adapted from Baker, Grewal, & Parasuraman 1994)**
(1:Strongly disagree – 7:Strongly agree)

- This store is a pleasant place to shop.
- This store has a pleasant atmosphere.
- This store is clean.
- This store is attractive.
- This store is expensive.

***Spatial dimensions of crowding (Machleit, Kellaris, & Eroglu, 1994)**
(1:Strongly disagree – 7:Strongly agree)

- The store seems very spacious.
- The store has an open feeling to it.
- I would feel cramped shopping in this store.
- This store feels confining to shoppers.

Purchase loyalty (adapted from Chaudhuri & Holbrook, 2001)
(1:Strongly disagree – 7:Strongly agree)

- I intend to keep purchasing from this coffee shop.

Attitudinal loyalty (adapted from Chaudhuri & Holbrook, 2001)
(1:Strongly disagree – 7:Strongly agree)

- I would be willing to pay a higher price for products from this coffee shop over other coffee shops.

***Brand Personality - Sincerity (Aaker, 1997)**
(1:Not at all Descriptive - 7:Extremely Descriptive)

- Down-to-earth
- Family-oriented
- Small-town
- Honest
- Sincere
- Real
- Wholesome
- Original
- Cheerful
- Sentimental
- Friendly

***Brand Personality – Excitement (Aaker, 1997)**
(1:Not at all Descriptive - 7:Extremely Descriptive)

- Daring
- Trendy
- Exciting
- Spirited
- Cool
- Young
- Imaginative
- Unique
- Up-to-date
- Independent
- Contemporary

***Brand Personality – Sophistication (Aaker, 1997)**
(1:Not at all Descriptive - 7:Extremely Descriptive)

- Upper class
- Glamorous
- Good looking
- Charming
- Feminine
- Smooth

***Fisher' Environmental Quality Scale (Spangenberg, Crowley, & Henderson, 1996)**
(anchors 7 likert scale)

- Unpleasant Pleasant
- Negative Positive
- Unattractive Attractive
- Tense Relaxed
- Uncomfortable Comfortable
- Bad Good
- Boring Stimulating
- Unlively Lively
- Dull Bright
- Unmotivating Motivating
- Uninteresting Interesting
- Outdated Modern

***Pleasure-Arousal (Mehrabian & Russell, 1971)**
(anchors 7 likert scale)

- Happy Unhappy
- Pleased Annoyed
- Satisfied Unsatisfied
- Contented Melancholic
- Hopeful Despairing
- Relaxed Bored
- Stimulated Relaxed
- Excited Calm
- Frenzied Sluggish
- Jittery Dull
- Wide awake Sleepy
- Aroused Unaroused

***General interior (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)**
(1:dislike - 7:like)

- Flooring
- Lighting
- Scent
- Music
- Temperature
- Cleanliness
- Wall Coverings (Texture, material)
- Colours
- Cash Register placement

Store layout (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)
(1:dislike - 7:like)

- Floor space allocation
- Product groupings
- Seating arrangements
- Traffic flow

Interior displays (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)
(1:dislike - 7:like)

- Product displays
- Posters
- Signs
- Wall decorations

Lab experiment measurement scales

Purchase likelihood
(7 likert scale- anchors)
How likely are you to purchase from this coffee shop in the near future?

unlikely	likely
improbable	probable

Attitude toward the brand
(7 likert scale- anchors)
How do you evaluate this coffee shop?

negative	positive
dislike	like
favorable	unfavorable

WOM
How likely are you to recommend this coffee shop to others?

unlikely	likely
improbable	probable

Brand experience (Brakus, Schmitt, & Zarantonello, 2009)
(1:Strongly disagree – 7:Strongly agree)

- This coffee shop makes a strong impression on my visual sense and other senses.
- I find this brand interesting in a sensory way.
- This brand does not appeal to my senses.
- This brand induces feelings and sentiments.
- I do not have strong emotions for this brand.
- This brand is an emotional brand.
- I engage in physical actions and behaviors when I use this brand.
- This brand results in bodily experiences.
- This brand is not action oriented.
- I engage in a lot of thinking when I encounter this brand.
- This brand does not make me think.

- This brand stimulates my curiosity and problem solving.

Independent ownership, franchise, competence.
(1:Strongly disagree – 7:Strongly agree)

- This coffee shop seems efficient, I will get my order quickly.
- This coffee shop looks like a franchise/large corporation.
- This coffee shop looks independently owned.
- This coffee shop seems competent.

How descriptive are the following adjectives?
(1:Not at all Descriptive - 7:Extremely Descriptive)

- Imperfect
- Clinical
- Clean
- Inviting
- Calming
- Ordered
- Unified
- Coordinated
- Diverse
- Intricate
- Complex

How important are the following to you?
(1:Not at all Important - 7:Extremely Important)

- Promotions
- Prices
- Consistency in store
- Novelty in Store
- Consistency in Menu
- Novelty in Menu
- How much are you willing to pay for a regular small size filtered coffee? _____$
- How much are you willing to pay for a specialty small size coffee? (latte, mocha, cappuccino) _____$

More details on specific managerial aspects.
(1:Strongly disagree – 7:Strongly agree)

- The colors are modern
- The colors seem light
- The colors are traditional
- The colors are heavy
- The lighting is comfortable
- The lighting is bright
- The lighting is dim

- The lighting is suitable to what I want to do in the coffee shop

Store layout (Baker, Grewal, & Parasuraman, 1994; Turley & Milliman, 2000)
(1:dislike - 7:like)

- Floor space allocation
- Product groupings
- Seating arrangements
- Traffic flow
- High tables
- Sofas
- Transparent tables
- Decoration

Appendix D -Nominal Data Coding

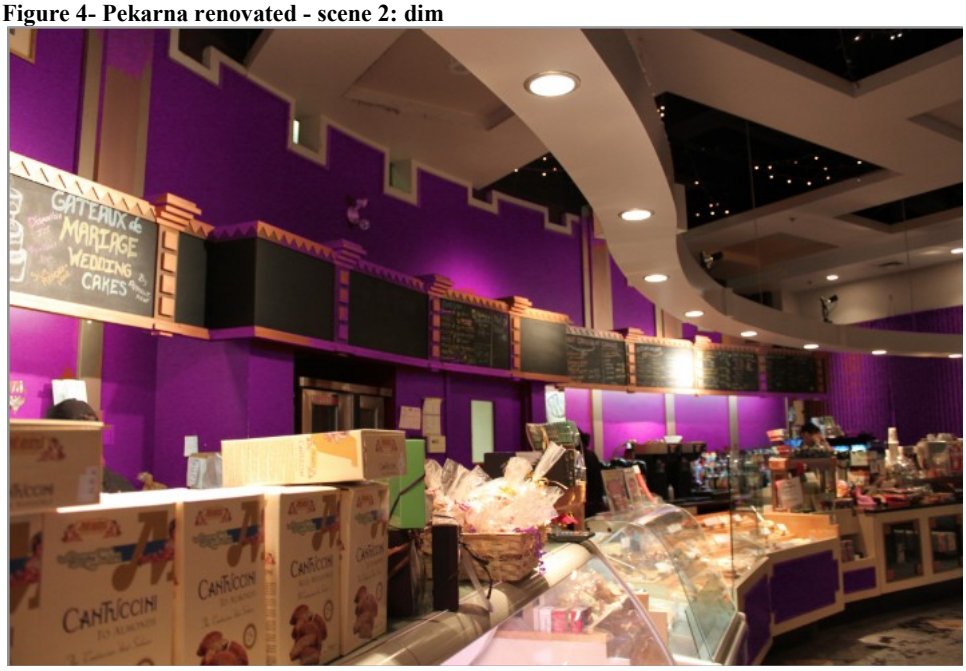
Questionnaire Item	Nominal Variable Coding
Age- Field	**1**: less than 18, **2**: 18-25, **3**: 26-35, **4**: 36-45, **5**: 46-55, **6**: 56-65, **7**: 65+
Age- Lab	**1**: 18-25, **2**: 26-35, **3**: 36-45, **4**: 46-55, **5**: 56-65, **6**: 65+, **7**: other
Education- Field	**1**: High School , **2**: collegial (CEGEP), **3**: bachelors, **4**: master, **5**: doctorat, **6**: other
Gender	**0**: male, **1**:female
Models	**0**: Samantha, **1**: James, **2**:Pekarna

Appendix E – Future Research

Figure 2- Pekarna renovated- scene 1

Figure 3- Pekarna renovated - scene 2: bright

Figure 4- Pekarna renovated - scene 2: dim



Appendix F - Interview Questions

1. When was this coffee shop created?
2. When you created it, what was the philosophy, what did you wish to accomplish.
3. Describe the environment of your coffee shop.
4. As a manager, are you satisfied with the environment (ambiance)
    a. The overall package of lighting, music, scents, design in this coffee shop?
    b. Please describe
        i. Layout
        ii. Colors
        iii. Lighting
        iv. Music
        v. Scent
5. In a few words, could you describe the personality of your coffee shop?
6. What kind of experience do you wish your customers to have?
7. What are the goals you wish to accomplish as a manager in this coffee shop? (Store Traffic, profit)
8. How do you differentiate your coffee shop from others?
9. What role does atmospheric design/environment play in this differentiation?
10. If you were to make changes to your coffee shop design, what would you change?
11. After these changes, which aspects of your coffee shop performance do you believe will be enhanced? (Store traffic, money spent per visit)
12. What elements would you trade off from your profit to satisfy your customers? (Spend money on wifi, hire a band)
13. Is it your priority to provide your customer with comfort? Or it is more important to provide them with quick service?
14. How long do you expect your customers to stay?
15. How much do you believe customers spend per visit? (Maybe breakdown by food/beverage)

References

Aaker, J. L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research , 34* (3), 347-356.

Areni, C. S., & Kim, D. (1994). The influence of in-store lighting on consumers' examination of merchandise in a wine store. *International Journal of Research in Marketing , 11*, 117-125.

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.

Baker, J., Grewal, D., & Parasuraman, A. (1994). The Influence of Store Environment on Qualify Inferences and Store Image. *Journal of the Academy of Marketing Science , 22* (4), 328-339.

Baumgarten, S. A., & Hensel, J. S. (1987). Enhancing the Perceived Quality of Medical Service Delivery Systems. In C. Suprenant (Ed.), *Add Value to Your Service* (pp. 105-110). Chicago, IL: American Marketing Association.

Bellenger, D. N., Steinberg, E., & Staton, W. W. (1976). The congruence of Store Image and Self Image. *Journal of Retailing , 52*, 17-32.

Bellizzi, J. A., Crowley, A. E., & Hasty, R. W. (1983). The Effects of Color in Store Design. *Journal of Retailing , 59*, 21-45.

Biel, A. (1993). Converting Image into Equity. In D. A. Aaker, & A. Biel, *Brand Equity and Advertising.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Bloch, P. H., Brunel, F. F., & Arnold, T. J. (2003). Individual Differences in the Centrality of Visual Product Aesthetics: Concept and Measurement. *Journal of Consumer Research , 29*, 551-565.

Bone, P. F., & Ellen, P. S. (1992). Olfaction as a Cue for Product Quality. *Marketing Letters , 3*, 289-296.

Booms, B. H., & Bitner, M. J. (1980). Marketing Services by Managing the Environment. *Cornell Hotel and Restaurant Management Quarterly , 23*, 35-39.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand Experience: What is it? How is it Measured? Does it Affect Loyalty? . *Journal of Marketing , 73*, 52-68.

Crowley, A. E. (1993). The Two Dimensional Impact of Color on Shopping . *Marketing Letters , 4*, 59-69.

Darden, W. R., & Babin, J. B. (1994). Exploring the Concept of Affective Qulity: Expanding the Concept of Retail Personality. *Journal of Business Research , 29*, 101-109.

Darden, W. R., & Schwinghammer, J. K. (1985). Effects of Price, Brand and Store Information on Buyers' Product Evaluations. In J. Jacoby, & J. Olson, *Perceived Quality: How Consumers View Stores and Merchandise* (pp. 161-172). Lexington, MA: Lexington Books.

Darden, W. R., Erdem, O., & Darden, D. K. (1983). A comparison and Test of Three Causal Models of Patronage Intentions. In W. R. Darden, & R. F. Lusch (Eds.), *Patronage Behavior and Retail Management* (pp. 29-43). New York, North-Holland.

Deci, E. L., Betley, G., Kahle, J., Abrams, L., & Porac, J. (1981). When Trying to Win: Competition and Intrinsic Motivation. *Personality and Social Psychology Bulletin , 7*, 79-83.

Donovan, R. J., & Rossiter, J. R. (1982). Store Atmosphere: An Environmental Psychology Approach. *Journal of Retailing , 58*, 34-57.

E-Imports. (2010). *Espresso Business Solutions*. Retrieved March 8, 2010, from Coffee Statistics: http://www.e-importz.com/Support/specialty_coffee.htm

Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An introduction to theory and research.* MA: Addison-Wesley.

Fournier, S. (1994). A Consumer-Brand Relationshiop Framework for Strategy Brand Management.

Friedrick, J. (2007). Building a successful coffee program, one cup at a time. *Gourmet news , 72* (5), S3-S4,S10.

Gardner, M. (2001). Mood states and consumer behaviour: a critical view. *Journal of Consumer Research , 12*, 281-300.

Gardner, M. P., & Siomkos, G. J. (1985). *Toward a Methodology for Assessing Effects of In-Store Atmosphere.* (R. Lutz, Ed.) Chicago, IL: Association for Consumer Research .

Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the Customer Experience: An Overview of Experience Components that Co-create Value with the Customer. *European Management Journal , 25* (5), 395-410.

Gita, J., Sengupta, J., & Aaker, J. (2005). Two Roads to Updating Brand Personality Impressions: Trait Versus Evaluative Inferencing. *Journal of Marketing Research , 42*, 458-469.

Grayson, R. A., & McNeill, L. S. (2009). Using atmopsheric elements in service retailing: understanding the bar environment. *Journal of Services Marketing , 23* (7), 517-527.

Holbrook, M. B., & Hirschman, E. C. (1986). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research, 9*, 132-140.

Hui, M., Dube, L., & Chebat, J. (1997). The impact of music on consumers' reactions to waiting for services. *Journal of Retailing , 73* (1), 87-104.

Kivela, J., Inbakaran, R., & Reece, J. (1999). Consumer Research in the restaurant enironment, part 1: a conceptual model of dining satisfaction and return patronage. *International Journal Contemporary Hospitality Management , 11* (5), 205-222.

Kotler, P. (1973-1974). Atmospherics as a Marketing Tool. *Journal of Retailing , 49* (4), 48-64.

Lindquist, J. D. (1974). Meaning of Image. *Journal of Retailing , 50*, 29-38.

Machleit, K. A., & Eroglu, S. A. (2000). Describing and Measuring Emotional Response to Shopping Experience. *Elsevier Science Inc , 49*, 101-111.

Malhotra, N. K. (1983). A Threshold Model of Store Choices. *Journal of Retailing , 59*, 3-21.

Mattila, A. S., & Wirtz, J. (2006). Arousal expectations and service evaluations. . *International Journal of Service Industry Management , 17* (3), 229.

Mehrabian, A., & Russel, J. A. (1974). *An Approach to Environmental Psychology.* Massachusetts Institute of Technology, Cambridge, MA.

Milliman, R. E. (1986). The Influence of Background Music on the Behavior of Restaurant Patrons. *Journal of Consumer Research , 13*, 286-289.

Nevin, J. R., & Houston, M. (1980). Images as a Component of Attractiveness to Intra-Urban Shopping Areas. *Journal of Retailing , 56*, 77-93.

Olshavsky, R. (1985). Perceived Quality in Consumer Decision-Making: An Intergrated Theoretical Perspective. In J. Jacoby, & J. Olson, *Perceived Quality: How Consumers View Stores and Merchandise* (pp. 3-29). Lexington, MA: Lexington Books.

Olson, J. (1977). Price as an Informational Cue: Effects on Product Evaluations. In A. G. Woodside (Ed.), *Consumer and Industrial Buyer Behavior* (pp. 267-296). New York, North-Holland.

Pons, F., Laroche, M., & Mourali, M. (2006). Consumer reactions to crowded retail settings: Cross-cultural differences between North America and the Middle East. *Psychology & Marketing , 23* (7), 555-572.

Shim, S., Eastlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. *Journal of Retailing , 77* (3), 397.

Sirgy, J. (1982). A Self-Concept in Consumer Behavior: A Critical Review. *Journal of Consumer Research , 9*, 287-300.

Spangenberg, E. R., Crowley, A. E., & Henderson, P. W. (1996). Improving the store environment: Do olfactory cues affect evaluations and behaviors? *Journal of Marketing , 60* (2), 67.

Spangenberg, E. R., Grohmann, B., & Sprott, D. E. (2005). It's beginning to smell (and sound) a lot like Christmas: the interactive effects of ambiant scent and music in a retail setting. *Journal of Business Research , 58* (11), 1583-1589.

Stanley, T., & Sewall, M. (1976). Image Inputs to a Probabilistic Model: Predicting Retail Potential. *Journal of Marketing , 39*, 48-53.

Stuart, J. E. (2008). Making growth make sense for retail and franchise businesses. *The Journal of Business Strategy , 29* (3), 48-50.

Thompson, C. J., & Arsel, Z. (2004). The Starbucks Brandscape and Consumers' (Anticorporate) Experience of Glocalization. *Journal of Consumer Research , 31* (3), 631-642.

Triandis, H. C. (1977). *Interpersonal Behavior.* CA, Monterey: Brooks/Cole.

Turley, L. W., & Milliman, E. R. (2000). Atmospheric Effects on Shopping Behavior: A Review of the Experimental Evidence. *Journal of Business Research , 49*, 193-211.

Vida, I. (2008). The impact of atmospherics on consumer behaviour: the case of the music fit in retail stores. *Economic and Business Review for Central and South , 10* (1), 21-35,70.

Wakefield, K., & Baker, J. (1998). Excitement at the Mall: Determinants and Effects on Shopping Response. *Journal of Retailing , 74* (4), 515-539.

Warshaw, P. R., & Davis, F. D. (1985). Disentangling behavioral intetion and behavioral expectation. *Journal of Experimental Social Psychology , 21*, 213-218.

Weinberg, B. A., & Bealer, B. K. (2002). *The world of caffeine: The science and culture of the world's more popular drug.* London: Routledge.

Yalch, R., & Spanenberg, E. (1993). Using store music for retail zoning; a field experiment. *Advances in Consumer Research , 20*, 632-636.

Zeithaml, V. (1988). Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing , 64*, 265-293.

Zimmer, M. R., & Golden, L. L. (1988). Impressions of Retail Stores: A Content Analysis of Consumer Images. *Journal of Retailing , 64*, 265-293.