

THE INFLUENCE OF AMBIENT SCENT ON HOTEL GUESTS' RESPONSES

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A Thesis

In

The John Molson School of Business

Presented in Partial Fulfillment of the Requirements

For the Degree of Master of Science in Administration
(Marketing) at

Concordia University

Montreal, Quebec, Canada

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Your file Votre référence
ISBN: 978-0-494-70989-4
Our file Notre référence
ISBN: 978-0-494-70989-4

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ABSTRACT

The Influence of Ambient Scent on Hotel Guests' Responses

Tara Crouse

In today's competitive hotel industry, strategic experiential branding has emerged as an effective approach to reach consumers' hearts, minds, and wallets. Strategic experiential branding entails the careful engineering of many factors to deliver a uniquely pleasurable and memorable guest experience. Atmospheric variables stand among the most important factors that hotel managers must attend to in creating such an experience. Recently, scent has emerged as an efficient way to create and brand a pleasurable hotel experience yet the bulk of scent research has focused only on a limited subset of responses associated with ambient scent and for the most part taken place in controlled laboratory settings. This thesis explores the use of ambient scent as a means to create a positive first impression in an urban hotel setting as well as a series of attitudinal, emotional, and behavioral responses associated with the scent. The first study is a survey of hotel managers' beliefs and opinions about the use of scent. The second study is a field experiment with three between-subject scent conditions. Findings reveal that a scent that matches the desired brand image leads to more favorable responses such as higher perception of comfort, higher perception of cleanliness and increased positive word of mouth intentions while the scent that did not match the desired brand resulted in higher levels of arousal. These findings contribute to the existing literature on scent as they aid

hotel managers and marketers in understanding how scent can be used in the hotel context.

Acknowledgements

I would like to thank the following individuals for providing continuous support through the research and development of this thesis:

Dr. Jordan LeBel, my advisor, for his incredible patience, knowledge and guidance throughout the past year.

My committee members, Darlene Walsh and Dr. Michèle Paulin for providing their time and great insight.

Geoff Hutchin, for his criticisms and optimism that pushed me through the past two years.

Finally, I would like to thank my family, especially my parents, Paul and Susan Crouse, for reminding me every day that the reward at the end of the journey is well worth the work.

Table of Contents

Introduction.....	1
Chapter 1: THE HOSPITALITY MARKETING MIX	5
Changing Times	5
New Strategies	6
The Hotel Marketing Mix.....	7
Product (or Service).....	8
Promotion	9
Price	11
Place	13
Conclusion.....	16
Chapter 2: EXPERIENTIAL BRANDING	17
Evolution of Experiential Branding.....	17
What is a Consumer Experience?	18
The Hotel Guest Experience.....	20
How Managers Create and Experience	22
Pleasurable Experiences.....	23
Branding an Experience	25
Difficulties in Creating the Branded Experience	26
Conclusion.....	27
Chapter 3: ATMOSPHERICS AND THE RESPONSES THEY CREATE	29
Atmospheric Responses – Attitudinal, Emotional and Behavioral.....	30
Visual – Lighting and the Effect on the Consumer Experience	31
Visual – Color and the Effect on the Consumer Experience	32
Other Visual Atmospherics and their Effect on the Consumer Experience	32
Aural – Pleasurable Music and the Effect on the Consumer Experience ...	33
Aural – Music Loudness and Tempo and the Effect on the Consumer Experience	34
Other Aural Atmospherics and the Effect on the Consumer Experience ...	35
Using Atmospherics as Part of the Branded Experience	37
Atmospherics and Hotel Branding	38
Chapter 4: SCENT AS AN ATMOSPHERIC VARIABLE	40
The Science of Scent	41
The Process of Choosing a Scent	43
Variables of Scent	43
Focal vs. Ambient	43
Pleasantness.....	44
Congruency (Appropriateness)	45
Responses to Scent	46
Attitudinal Responses to Scent.....	46

Emotional Responses to Scent.....	47
Behavioral Responses to Scent.....	48
Limitations of Scent Research	48
Conclusion.....	50
Chapter 5: STUDY 1 - HOSPITALITY MANAGERS' ATTITUDES AND BELIEFS TOWARDS SCENT AS AN ATMOSPHERIC TACTIC	51
Method	51
Hospitality Managers' Perception on Scent as a Branding Tactic	52
Awareness.....	53
Scent Techniques.....	53
Negative Responses to Scent	54
Congruency (Appropriateness)	55
Willingness to Pay or Recommend	55
Perceived Quality of Service Atmosphere	56
Gender and Context of Visit (Business vs. Leisure).....	56
Other Demographics	57
Discussion and Implications of Study 1 Results.....	59
Conclusion.....	60
Chapter 6: STUDY 2 – FIELD STUDY ON THE EFFECTS OF AMBIENT SCENT ON HOTEL GUESTS	62
Variables	63
Method of Study 2	63
Location.....	64
Stimulus.....	66
Data Collection	68
Analysis	69
Hypotheses	69
Attitudinal Responses – Perceived Lobby Quality	69
Attitudinal Responses – Perceived Service Quality.....	71
Attitudinal Responses – Perceived Scent Quality	72
Emotional Responses – Mood	72
Emotional Responses – Arousal	73
Behavioral Responses – Positive Word of Mouth Intentions	74
Behavioral Responses – Repeat Purchase Intentions (Loyalty)....	75
Behavioral Responses – Scent Detection	75
Results	77
Attitudinal Responses – Perceived Lobby Quality	77
Attitudinal Responses – Perceived Service Quality	80
Attitudinal Responses – Perceived Scent Quality	81
Emotional Responses – Mood.....	82
Emotional Responses – Arousal.....	83
Behavioral Responses – Positive Word of Mouth Intentions	85
Behavioral Responses – Repeat Purchase Intentions (Loyalty)	86
Behavioral Responses – Scent Detection	87
Gender	88

Age.....	88
Context of Visit (Business vs. Leisure)	89
Conclusion.....	89
Chapter 7: MANAGERIAL IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS	90
Scent Selection	91
How to Select a Scent	91
Congruent Scent and Perceived Lobby Quality	92
Congruent Scent and Perceived Service Quality	93
Congruent Scent and Perceived Scent Quality.....	94
Congruent Scent and Arousal.....	94
Congruent Scent and Repurchase Intentions (Loyalty)	95
Managerial Decisions	96
Scent Detection Abilities	97
Scent Detection and Biological Traits	97
Scent Detection and Ambient Scents	98
Scent Detection and Habituation	99
Scent Delivery	100
Limitations of Study 2	101
Future Research Directions	102
Conclusion.....	103
Appendix A: Atmospheric Table.....	105
Appendix B: Scent Table	107
Appendix C: Study 1 Questionnaire.....	108
Appendix D: Study 1 Results	110
Appendix E: Study 2 Questionnaire in English.....	117
Appendix F: Study 2 Questionnaire in French	119
Appendix G: Summary of Hypotheses	121
References	125

List of Tables and Figures

Tables:

Table 1.1: Variable Means for Perceived Lobby Quality	78
Table 2.1: Variable Means for Perceived Service Quality	80
Table 3.1: Variable Means for Perceived Scent Quality.....	81
Table 4.1: Variable Means for Mood.....	83
Table 5.1: Variable Means for Arousal (Non-congruent vs. Congruent).....	84
Table 5.2: Variable Means for Arousal (Non-congruent vs. No-scent)	84
Table 5.3: Variable Means for Arousal (Congruent vs. No-scent).....	85
Table 6.1: Variable Means for Positive Word of Mouth Intentions.....	86
Table 6.2: Variable Means for Repurchase Intentions (Loyalty).....	87

Figures:

Figure 1: Spider graph for Lobby Quality	79
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INTRODUCTION

As humans, our sense of smell leads us to automatic approach-avoidance responses including general attitudes, emotions, and behaviors. These responses can be either positive or negative, which, from an experience design and management perspective, begs the question as to how managers can use scent to create positive responses, eliminate negative ones, and thus enhance the consumer experience. Although consumer research on the effects of scent has advanced considerably, there remain few field studies investigating the range of consumer responses that are of interest to marketers of experiential products or services such as hospitality. This thesis aims to address this gap.

Beginning with a seminal study by Laird (1932), scent research has been conducted in a limited variety of settings; mostly in retail environments such as supermarkets, clothing and jewelry stores and findings therefore cannot be automatically generalized to the fast-growing experience economy sector (Pine & Gilmore, 1999). Laird discovered that women prefer pleasantly scented hosiery and while such findings are useful, they cannot clearly guide managers in using scent as they design and craft atmospheres and experiences that will appeal to their customers. Laboratory settings have been used in scent research as an attempt to understand the impact of scent on specific and usually a limited range of responses, typically by isolating specific scents without accounting for the impact of other environmental variables. Existing scent findings, while insightful, cannot guide managers who need to craft consumer experiences as a point of

differentiation over the competition. Hotel managers for example require guidance in crafting the experience across their property, including public spaces such as the lobby, which is the setting of this thesis. While scent could play an important role in shaping consumers' attitudinal, emotional, and behavioral responses to an environment such as a hotel lobby, it likely competes with other atmospheric variables. Therefore, there is an urgent need for rigorous field experiments investigating responses of interest to experience marketers.

There is also little systematic research on managers' opinions and beliefs about the use of scent. There is however sporadic coverage in the trade literature which suggests that experience marketers understand that scent is a useful marketing tactic in helping to create a positive and memorable experience for the guest. It is however unclear whether experience marketers are aware of the possible range of responses that various scents can trigger along with the issues involved in scent selection. The hotel management literature has included investigation into some atmospheric variables such as music and décor; yet the effect of scent has been largely overlooked thus far. Consumer research has offered limited and rather narrow advice to hospitality managers on how to use scent to enhance the guest experience. While the use of scent in hotel public areas is rapidly growing, key decisions are being left to chance or made on a hit-or-miss basis. It is therefore urgent that consumer researchers begin to investigate the use of scent in experiential settings such as hotels, along with the actual responses of interest to managers that scent can trigger in the field.

This thesis unfolds as follows. The first chapter examines the use of atmospherics as part of the hotel marketing mix and points to the gap in scent research that needs to be addressed. Once this gap is narrowed, experience marketers can better understand how to use scent in creating pleasurable and memorable experiences, which in turn may cause guests to recommend, return and perhaps pay a premium for a hotel and become loyal to the brand. Chapter 2 examines the key issues surrounding the rather new practice of experiential branding with a focus on understanding the eventual role that scent may play in such market strategies. Chapter 3 considers specific atmospheric elements and the responses they create. Chapter 4 focuses specifically on scent research, discussing the various settings in which it has been conducted as well as the varied types of responses that have been investigated. Chapter 5 contains the first of two studies conducted as part of this thesis. This first study examines hospitality managers' awareness and attitudes towards using scent as a marketing tool in their establishment. This study was carried out to surface managerial beliefs, hopes and hesitations towards the use of scent. Chapter 6 contains the methodology and results of a field study carried out in the lobby of a large metropolitan hotel in Montreal, part of an international chain of luxury properties. Finally, Chapter 7 discusses the managerial implications of study 2, along with the limitations and implications for future research.

Results and implications found from this thesis study involve attitudinal, emotional and behavioral responses of the hotel guest in the lobby setting. These responses are favorable to experience marketers and hotel managers as it was

found the use of scent can lead to more favorable evaluations concerning the lobby, more intense feelings of arousal and higher likelihood of positive word of mouth recommendations. Thus, this thesis sets the stage for and opens the door to further research on the use of scent as part of an experiential marketing tool in the hotel industry.

CHAPTER 1

THE HOSPITALITY MARKETING MIX

Traditional marketing mixes were introduced in the 1970's and are known as the "four P's": Product, Place, Promotion and Price (McCarthy, 1975; Bojanic, 2008). Hospitality marketing mixes however are more expanded than the traditional version as they include more elements, some of which are service oriented. Many hotel managers consider the hospitality industry to be more service-oriented rather than exclusively product, forcing custom approaches to the hotel marketing mix (Renaghan, 1981). Hotel managers have also found themselves facing more intense competition and difficulties in differentiating their brand, thus creating the need for more creative tactics to be utilized as part of the hotel marketing strategy.

Changing Times

Marketing within the hotel industry can be quite challenging, as hotel managers must remain current with guests' tastes to ensure satisfaction. Like many others, the hotel industry is facing troubled times as economic downturn around the world has severely affected consumers' spending habits and traveling behavior. As Dev (1990) points out, securing high levels of guest satisfaction is now more than ever a strategic necessity for hotels to survive in such an intensively competitive industry, marked by low occupancy rates in many regions

as consumers, business and leisure, cut back on travel expenditures. Frequent travelers especially are exposed to more experiences across industries and as a result have ongoing preference changes that can create a challenging competitive context for managers. In the past, authors discussed that hotel managers must create benchmarks, plans, aggressive objectives and remain focused on the guest when attempting to achieve guest satisfaction (Dev, 1990). Importantly, in this industry, creating satisfied guest requires more than simply meeting their needs for lodging, it's also a matter of satisfying their many, and often unspoken interests, wants, desires, and lifestyles (Leslie, 1990). Hotel marketing today requires more sophisticated approaches to creating guest satisfaction than in the past, necessitating innovativeness and an ability to blend functionality with aesthetic and experiential elements.

New Strategies

Corporate managers have historically used either geographical expansion, and/or aggressive market penetration strategies (Meidan & Lee, 1982). However, with drastic changes in the hotel market over the past twenty-five year, strategies such as these alone simply no longer suffice to guarantee profitability. These traditional strategies involve building more properties, cost cutting and price promotion. With overbuilding (resulting in oversupply of hotel rooms in many markets) and the fact that many properties and brands are in the maturity stage of the product life cycle, hotel marketing must be creative and carefully integrate changes in the marketing mix (Bojanic, 2008). Although building a strong growth

and competitive position remains necessary as a marketing objective (Meidan & Lee, 1982), managers must reach further to capture market segment over rivals. One method of developing a competitive edge involves creating a memorable branded experience for the hotel guest. Strategic experiential branding has the power to help hotels survive the slump in the downturn currently affecting the hotel industry (LeBel et al., 2010). However research in providing hotel managers with the necessary guidance to develop successful experiential strategies must be based on a comprehensive understanding of the hotel marketing mix.

The Hotel Marketing Mix

The hotel marketing mix differs from those of other industries. Some of the major differences that exist between service and product markets include the intangibility of services, the simplicity of replicating a service and the perishability given that services are time-dependent and cannot be stockpiled or inventoried for future use. The hotel industry is a particularly illustrative example of some of these unique service characteristics and the marketing challenges they create. In the case of a hotel stay, the actual guest experience cannot be delivered until the guest physically arrives on site. If a hotel room goes unoccupied for a night, that potential revenue is lost forever, hence the focus on occupancy and revenue management in the industry. Given these differences between products and services, additional elements are required to understand the hotel marketing mix while retaining some traditional marketing mix elements and tools (Booms & Bitner, 1982). This chapter examines marketing practice within the hotel and

identifies how it is evolving to understand where new approaches such as experiential branding fit.

Product (or Service)

The product component of the hotel marketing mix contains several aspects that managers must carefully consider. Some are less visible including the behind the scene systems necessary to operate a hotel property. Others are more visible, such as presentation, layout, fixture-furniture-equipment (known by the acronym FF&E in the industry), materials, as well as various components of a property such as room service, bar and restaurant management and numerous other variables fit within the product component (Meidan & Lee, 1982). The hotel "product" also includes a more intangible service component. The service component can be sometimes unpredictable as variability in the service performance may come from the employees themselves, supporting tangible elements (computer breakdown, etc.) or even from the guests. This makes the service element particularly difficult to manage over thousands of guest-employee interactions across thousands of properties around the world.

Many hotels have relied upon the product element of the marketing mix as a source of competitive edge, especially the tangible component. Marriott designed the concept of its Courtyard brand as one for business travelers that do not like staying at hotels by designing the rooms to feel more like home (Bojanic, 2008). Using the product element of the marketing mix in such a way is most

important in the introduction stage of the product life cycle and should be unique and of high quality during this stage (Bojanic, 2008). As the hotel grows, quality should continue to improve to remain competitive, while adding features and benefits when the hotel reached the maturity stage, especially intangible and experiential benefits.

The nature of the hotel involves intangibility, meaning that hotels cannot be inventoried as products and therefore requires more creativity when dealing with this element of the marketing mix (Bojanic, 2008). Relying on the product element of the marketing mix alone is no longer sufficient as this element can easily be replicated. A competitive edge based solely on tangible product is typically short-lived, requiring managers to creatively combine use other product mix elements and other marketing mix elements to remain competitive (Booms & Bitner, 1982) and create a memorable and pleasurable guest stay (LeBel et al., 2010).

Promotion

Promotion in the hotel marketing mix goes beyond advertising and sales tactics (Meidan & Lee, 1982). Branding the hotel to a specific image is a vital aspect of the promotion component, as hotel guests like to identify themselves with the hotel. Taking the chosen target market and creating a reflective image that matches the company's values, culture and brand is an activity that many hotels have been doing for years. Hilton Hotels and Holiday Inn owe much of

their early success to their ability to craft a clear brand identity however creating a powerful brand and a clear image in a market that is becoming increasingly competitive and an immense managerial challenge. At the root of successful branding is clear and valid market research that can help hotel brand managers understand their desired market and select appropriate brand elements and personalities (Meidan & Lee, 1982).

Although branding constitutes an important ingredient in successful hotel promotions, other promotional activities go beyond branding and are necessary to create a successful marketing mix. These activities could include price reductions or “specials” that in many cases are in the form of packages or discounts. Discounts may be given to hotel guests depending upon memberships to numerous organizations or for working with companies that have made an agreement with the hotel. Discounts can be risky in the luxury and midscale hotel market, as guests may perceive reductions in price as being associated with negative traits concerning the hotel, thus de-valuing the hotel experience. Therefore, managers require a cautious approach when using tactics such as price reductions.

Advertising is often used in the hotel industry and can be seen in many traditional forms of media as well as online. Most hotels choose to advertise in national forms of media, as local advertising is too limiting in terms of exposure (Bojanic, 2008). The concept of the advertisement varies among hotels as some choose to advertise banquet and meeting facilities while other advertise more

towards the leisure demographic and design the concept for family attractions. Again, understanding the main customer demographics is vital when choosing what concept to advertise. Advertising can be an effective mean of sending a message or brand when used properly, helping greatly in creating a successful marketing mix. As with price reductions, advertising can also pose a potential danger, as there is the possibility of wrongfully portraying the brand, which can be detrimental for the company if the promises that are communicated through the advertisement are not delivered in reality (Bojanic, 2008).

Price

Strategic pricing and pricing integrity across all channels and intermediaries are integral aspects of a hotel brand's success. Setting appropriate price points for a hotel is a critical decision and many factors must be taken into consideration when determining a proper price point and range. The target market that the hotel is looking to pursue is the most influential factor in making this decision while keeping the image that the hotel is seeking to attain in mind (Meidan & Lee, 1982). As this industry experiences fluctuations and drops in demand over different seasons, it is expected that pricing will change as well. Nonetheless, boundaries should be set with pricing to ensure that it is not going outside of what should be asked from the target market. Proper pricing is an integral component of the hotel marketing mix as guests have a variety of competitor hotels to choose from if pricing is set too high. If pricing is set too low, guests may perceive the hotel as being lesser in value. Therefore, achieving

proper pricing levels is vital for hotel managers if they are looking to be successful in such a competitive industry and great research concerning the target market should be considered before making pricing decisions (Meidan & Lee, 1982).

Pricing can be extremely difficult for hotel managers, especially when discounts or deals are given (Bojanic, 2008). The nature of the hotel pricing is typically flexible as it depends on the general rules of economics (supply vs. demand). Therefore, price fluctuations happen often and hotel guests can easily become confused. Hotels have also begun selling rooms to wholesalers' websites like Expedia, Hotwire, Hotels.com, etc. as means to guarantee a sale. Unfortunately, it can be difficult for these hotels to ensure that these wholesalers will sell the room at a price that the hotel deems appropriate. As a consequence, hotel guest may become frustrated with prices that differ on the wholesaler sites and from the hotel directly, resulting in a loss of integrity for the hotel. Pricing and dealing with wholesalers is therefore an ever-growing challenge for hotel managers, forcing creativity and not solely relying on the pricing element of the marketing mix to remain competitive with branding.

Pricing strategies vary over the course of the hotel life cycle. In the beginning, pricing should be high, however as the hotel enters the growth and maturity phases, price reduction and discounts should be given (Bojanic, 2008). If hotels do not partake in such strategies, they may face the risk of losing

revenue to the competition. As with other elements of the marketing mix, price cannot be solely relied upon to remain competitive in today's hotel market.

Place

The place component of the hotel is integral to understand when forming experiential branding strategies, as it is not only comprised of the physical location of the hotel but also the atmosphere that exists within and the cultural and historical surroundings. Factors such as accessibility and physical surroundings need to be considered when hotels decide where to place themselves (Meidan & Lee, 1982). This decision is vital and can take up a great deal of company time and resources, however resulting in long term revenue if the right decision is made (Bojanic, 2008). Many hotels choose location based on popular surroundings such as conference centers, airports, city centers, etc. Unfortunately, it is typical to see that more than one hotel chooses to build in a location where these popular landmarks exist, creating a great deal of physical side-by-side competition. Although location is a vital element to consider when forming ones branding strategy, it is not the only element that should be relied upon given the competitive nature of the industry.

Hotel guests interact with employees at the front desk, in the lobby, restaurant, or hotel room, therefore deeming them as part of the atmosphere. Since the hotel offering is service-intensive, employees are vital as they often add an important element of differentiation to the tangibility that is seen in

companies that are product oriented (Renaghan, 1981). Without high quality employees it is difficult for hotels to be successful with their marketing mix as this situation is similar to a company containing low quality product (Booms & Bitner, 1982). It can be difficult for hotel managers to use quality of service as the sole ingredient of the marketing mix as the employee element is not completely reliable. It can be extremely challenging to find employees who measure up to the standards that the hotel sets in committing to providing a memorable experience to the guest on a continuous basis. Also, service quality is not a tool that can be customized to the extent where guests realize it is different than other hotels, causing it to be less useful in creating a competitive edge (Booms & Bitner, 1982). Therefore, relying upon employees and service quality as the only elements to improve the guest experience is not an intelligent strategic choice for hotel managers in the competitive industry they find themselves in today.

Hotel managers have the ability to use the atmosphere as a marketing tool to influence experience by arranging various aspects of it in a manner that produces lasting and pleasurable impressions on the guest (Booms & Bitner, 1982). Physical evidence within the hotel is comprised of numerous environmental variables that we label as, "atmospherics" and are used consciously by managers to promote pleasurable consumer experiences in the atmosphere where purchases are made (Kotler, 1973). These variables exist within a company's environment, exterritorially or interiorly of the business, meaning the company may create them or they can exist naturally or unintentionally (Berman & Evans, 1995). Kotler (1973) introduced atmospherics

to the marketing world by defining them as “the effort to design buying environments to produce specific emotional effects in the buyer to enhance their purchase probability” (p 80). He argued they are part of the buying experience, affect purchase intentions and consumer consumption, and are an important differentiator especially for companies facing intense competition.

Atmospherics is a component of the hotel marketing mix that goes beyond the traditional elements. It relates to variables in the consumer environment, where transactions typically take place (e.g. store, hotel, bank, etc.).

Atmospherics can be visual, tactile, aural (sound) and scent in nature while collectively creating an experience for the hotel guest. Some examples include décor, lighting, music and use of space however can include any variable that is part of the hotel atmosphere. This element of the hotel marketing mix can be particularly useful in industries where intense competition exists and it remains difficult to have an edge over the competition. Consequently, the hotel industry is a perfect example of where atmospherics can be used as means to rejuvenate the competition by using them to create a branded experience.

Atmospherics exist within many areas of the hotel such as the lobby, conference or banquet spaces, restaurants and the hotel rooms. As the lobby of the hotel is typically the area where the guest or visitor will formulate their first impression, it is argued that this space is the first place hotel managers should consider when developing experiential branding strategies. First impression is vital for hotels as this may be one that last throughout the entire hotel stay or

influence thoughts concerning other aspects of the hotel, causing the lobby to be the area of interest in this thesis study.

Conclusion

Merely focusing on the traditional marketing mix with emphasis on tangible elements no longer is sufficient to guarantee survival. Creating a branded hotel experience has now emerged as a means to remain competitive (Pine & Gilmore, 1999; LeBel et al., 2010). When managers create an experience that is part of their brand, hotel guests will remember this experience and may have a series of positive responses such as positive word of mouth intentions or an increase in loyalty. Creating a branded experience involves a number of factors and can be extremely difficult to align and deliver, whether over a single night stay or across longer stays. As challenging as it may be to create a memorable and pleasant experience, experiential branding leads to noticeable differentiation. This thesis explores the use of scent as an atmospheric variable in experiential branding strategies by conducting a field experiment in a hotel lobby setting.

CHAPTER 2

EXPERIENTIAL BRANDING

Creative new strategies are required to differentiate a hotel brand and atmospherics have become a tool of choice to create pleasurable and memorable branded experiences for hotel guests. A branded experience starts with a clear and compelling promise to the targeted segments that other hotels cannot easily imitate (LeBel, et al., 2010). Markets invest greatly in creating an experience that will be attached to a brand however achieving this objective can be difficult. Hotel managers must understand their brand and its target guest before attempting to create an experience. The following chapter discusses how managers can use experiential branding and how a branded experience can be beneficial for hotels to remain competitive in the fierce market that they find themselves in today.

Evolution of Experiential Branding

Experiential branding was first uncovered in the 1980's when the concept of consumer experience was introduced in the marketing literature (Gentile, Spiller & Noci, 2007). At this point in time, it was discovered that consumers hold emotions that are connected to purchasing. Not much else was investigated and experiential branding didn't surface again until the end of the 1990's when consumer experience itself was clearly defined. Now, experiential marketing or

branding is clearly defined and seen as a vital component in many markets where product differentiation and strong brands are not enough to gain the desired level of market share (Lenderman, 2005).

What is a Consumer Experience?

An experience is seen as a private event that arises as a response to stimuli (Schmitt, 1999). When an individual is confronted with stimuli in the purchasing environment, they are then living a consumer experience. This form of experience is induced by a company however can be created by the consumer as well. These experiences in the hotel context can range from delightful, pleasurable and memorable to the opposite and negative end of the spectrum. The challenge for managers is to focus on and create pleasurable and memorable guest experiences to use as part of the marketing mix as means to differentiate. Unfortunately, understanding the consumer experience is a complex process making it extremely difficult for managers to use it as a marketing tool (Schmitt, 1999).

When the consumer experience surfaced in consumer behavior research, it was seen as an “economic offering, which emerges as the next step after commodities, goods and services” (Gentile, Spiller & Noci, 2007, p396). Since the consumer experience was first defined, many forms have been uncovered that are either created by the consumer or by the company, with roles of each played at different levels. The holistic consumer experience is the most common form that is seen in the marketing literature. This form of regards the consumer

as a person, rather than a customer and the experience is the interaction between that person and the company or brand (LaSalle & Britton, 2003). Holistic consumer experiences are personal as they provoke a reaction from the consumer yet can be created by the person or the company.

Many other forms of experience have been uncovered by determining the components that make up the complex structure of the consumer experience. These components include sensorial, emotional, cognitive, pragmatic, lifestyle, and relational experiences (Gentile, Spiller & Noci, 2007). The sensorial component relates to how the senses are affected during the experience. Companies can play with consumers' sense of smell, taste, sound, touch and sight in providing an experience. The emotional component involves companies affecting consumers' feelings and emotions through the experience. Cognitive components engage consumers to think and be creative in the experience while pragmatic involves engaging the consumer in a practical act (Gentile, Spiller & Noci, 2007). Lifestyle involves companies creating an experience that taps into consumer beliefs and values. This could involve the creation of a product or brand that falls under the value system of a consumer. For instance, many cafés create experiences through the consumption of free trade coffee, as many consumers believe this is what is morally correct. Finally, the relational component involves the level of interaction with others in the experience. Some companies rely strongly on this component as consumers often look for companionship but do not like to look for it themselves (Gentile, Spiller & Noci, 2007).

Combining appropriate levels of each component of the consumer experience can achieve the ultimate experiential marketing objective: the creation of a pleasurable experience or the avoidance of a negative one through the transactional means of a purchase. Purchases are no longer seen as purely material in nature and experiential purchases can exist when consumers look for an experience with the purchase of a product or service as they receive more pleasure in return than a material purchase (Van Boven & Gilovich, 2003). Thus, the difference between the two forms of purchases lies completely with the intention of the consumer, where experiential purchasing intends to acquire life experience while material is merely to acquire a tangible good. Richer experiences are said to create richer lives, thus suggesting a key reason as to why consumers prefer this form of purchase and receive more pleasure from them. If consumers receive more pleasure from experiential purchases, managers must learn how to create the experience (Van Boven & Gilovich, 2003). Creating experiential purchases in the hotel context however can be extremely challenging as understanding how to create the experience is complex given that every guest and every type of hotel is different.

The Hotel Guest Experience

Numerous hotel managers have created experiences at the individual hotel level however few have succeeded in creating consistent experiences on a nation-wide or international scale. One hotel chain however that has successfully branded the pleasurable experiences it provides is Ritz Carlton, a brand owned

by the Marriott Corporation. This hotel chain has invested a great deal in delivering the pleasurable experience by determining consumer preferences for items like candies and toiletries so they will be prepared in a care package upon guest arrival. Many boutique and small hotels also focus on creating a pleasurable guest experience through personal touches that can be as subtle as calling the guest by name. Despite such attempts to deliver positive guest experiences, achieving these in this industry can be very difficult as the hotel guest carries more bargaining power in comparison to consumers in other industries and their responses to the experience may vary considerably.

As competition in the hotel industry is intense and fierce, hotel managers are beginning to create innovative strategies to achieve a competitive edge. Many managers have turned to the guest experience as means to beat the competition however there is great difficulty in creating experiences in the hotel industry. Consumers in this industry have a great deal of bargaining power as options for hotels are often plentiful causing many hotels to not being considered. Research reveals few suggestions for the industry, leaving hotels with only trial and error options. Nasution and Mavondo (2008) studied consumer experience in the hotel context and believe investing in the understanding of demographics is key in relation to creating a positive experience. If managers do not understand the segment they are targeting, the experience they are attempting to create may not be representing what their guests' desire or could de-value the hotel. Consequently, managers must focus on improving service quality and offered

services within the hotel in order to increase perceived value, and in turn create a more positive and memorable guest experience.

How Managers Create an Experience

Designing a positive experience requires a comprehensive understanding of what an experience is and its underlying dynamics and components. Most relevant to the current investigation of scent, is what Shedroff (2001) has described as the attraction, engagement and conclusion aspects of the consumer experience (Shedroff, 2001). In the attraction phase, senses play a vital role as consumers are attracted to experiences that appeal to them visually, auditory and cognitively. The more common method of achieving an attractive experience is through marketing and branding. Engagement occurs while the experience is taking place and is extremely vital as if consumers are not engaged in the experience, they will not hold incentive to choose the company over the competition. Following attraction and engagement, the conclusion occurs to provide a resolution to the consumer's initial want or need (Shedroff, 2001). If the conclusion is not part of the designed experience, the consumer will be dissatisfied and have no incentive to return.

Building an effective consumer experience can be extremely difficult as understanding the consumer demographic can be challenging for managers however with the help of atmospherics, it is possible to design a memorable guest experience. Many companies have been successful at creating their own

branded experience. Starbucks Coffee is a common example and is a pioneer of the creation of consumer experiences with atmospherics such as scent, décor and music. Hotels can take a similar approach by creating the guest experience with the help of the existing atmospherics.

Creating an experience is challenging however deeming an experience as pleasurable and memorable is the eye of every hotel guest is near impossible. Nonetheless, striving to create pleasurable experiences for the hotel's target guest, or at least avoiding experiences of displeasure is well worth the challenge as return can be extremely favorable for gaining market segment.

Pleasurable Experiences

Experiential branding strategies are only effective if the experience that is created is pleasurable, or avoids displeasure for the consumer. Humans look for pleasurable experiences and attempt to avoid painful ones by nature (Higgins, 1997), so managers must take the necessary steps to promote pleasure in the atmosphere. By relying upon categorization theory, pleasure can be broken into types involving sensory, emotional, social and intellectual characteristics (Dubé, LeBel & Sears, 2003). Sensory pleasure is the simplest form to understand as it involves the pleasure that is created by sensory contact with external stimuli. Emotional pleasure occurs typically from aesthetic stimulation or as certain aspects of an environment trigger a response that is predominantly affective. For instance, the décor of a hotel could remind one of a positive childhood

experience, which could lead to a happy mood. Social pleasure is produced from contact and interaction with others. Intellectual pleasure is typically derived from willful effort involved in an activity or the conscious exercise to appreciate a stimulus and the resulting cognitive stimulation and/or sense of accomplishment it triggers.

Every hotel guest experience can involve one form or a combination of these four pleasure types over time but in the end the guest summarizes the experience as a memory that falls under one category only (Dubé, LeBel & Sears, 2003). The type of pleasure that the guest associates with a specific experience depends on many variables including the strategic positioning of the hotel and how the experience was delivered (LeBel et al., 2010) and notably the "theme" that unites the various components of an experience (Pine and Gilmore, 1999; Dewey, 1934). In the end, if the guest perceives the experience as being pleasurable, it will be that more memorable which is the key in creating branded experiences.

Pleasure has the ability to evoke a variety of responses in the atmosphere where purchases are made. Consumers are willing to purchase more as pleasure increases (Baker, Levy & Grewal, 1992) while spend additional time in the atmosphere and partake in unplanned spending when in a pleasurable state (Donovan, et al., 1994). In the hotel industry, possible effects from pleasurable experiences are still quite unknown. This however is not stopping many hotel

managers from striving for the pleasurable consumer experience and turning it into something they can market and use as competitive edge.

Branding an Experience

Once an experience is created, it is necessary that it be marketed as means to create an edge over competitors. Tsai (2005) regards experiential marketing as a strategy that leads managers to think differently and be creative in creating a pleasurable experience. Its intention is to discover value sets and attitudes for the entire consumer population, made of up diverse demographics, as an attempt to create an enjoyable experience for all. Marketing these experiences involves specific marketing activities such as branding.

The experience a consumer encounters with a brand is an integral part of understanding experiential marketing. Brakus, Schmitt & Zarantonello (2009), believe this notion can be broken down to behavioral and attitudinal responses brought upon an individual who is confronted with stimuli that represents the particular brand. Packaging products and advertisements are the more commonly used methods to evoke brand experience; however service companies have been pushing the boundaries of brand experience for years by creating brand related environments. Industries such as food and entertainment are what come to mind when thinking of service related brand experiences yet an array of companies and industries are beginning to participate in experience marketing to become more competitive (Tsai 2005). Tsai (2005) uses examples

such as the Apple Computer brand, which contains stores where consumers experience support while learning about technologies as free classes are offered to customers. Virgin Airlines has also been known to brand its experience based on making every consumer feel unique and special (Shedroff, 2001). Despite these examples, it is rare to see marketing literatures concerning experiential branding in the hotel industry. Nonetheless, hotels have been attempting to create experiences for years as competition has become fiercer than ever before.

When companies choose to ignore experiential branding as a possible marketing strategy, great dangers can arise. Experiential branding can be a great source for competitive edge, which is necessary to survive in industries that hold a great deal of rivalry such as the hotels (Carbone, 2005). Competitors can create branded experiences that make it impossible for a hotel to succeed if one does not attempt to create its own. Creating a branded experience however can be a challenging task for many hotel managers, causing many to lag behind in competition.

Difficulties in Creating the Branded Experience

A branded experience is comprised of elements that allow it to be designed however are dependent upon understanding the brand and its main demographic, causing difficulties for many hotels that do not know or do not have a narrow target market (Shedroff, 2001). If the brand already exists, it is vital to create an experience that is not far from how guests already perceive the brand.

Managers need to understand that the brand experience should be separate from the organization itself (Sheroff, 2001), avoiding a bad company image if the brand is unsuccessful. Other difficulties in creating a branded experience include integrating the promises that were made through the branding, as it may be difficult to obtain the resources to keep up with the promise (LeBel et al., 2010). It may also be challenging for the individuals who work at the hotel to live up to and deliver the promise of the brand. Creation of a unique brand experience may also be difficult and if not creative, the experience will not be memorable. Finally, after a branded experience has been designed, it is a challenge to replicate it to all of the hotels that are part of the brand (LeBel et al., 2010), causing many hotels to not succeed with experiential branding.

Conclusion

Despite the suggestions of some researchers, many tactics have yet to be taken out of the marketing toolbox when creating the branded hotel guest experience. As mentioned previously, atmospherics can be used to help create a branded experience however research has lacked in the area of atmospherics as means to promote these experiences. Many hotel managers have used atmospherics for years to create an experience however many continue to struggle to attach the experience to their brand. The reason why branded experiences are so vital in the hotel context is that these experiences can induce responses that are attitudinal, emotional and behavioral in nature. If the experience is created correctly, these responses can be favorable for the hotel

and involve responses such as higher loyalty, higher perceived hotel quality, increased word of mouth intentions and more. The next chapter discusses the use of atmospherics when creating a branded experience in the hotel setting, followed by a focus on the use of scent as a primary atmospheric that until now has yet to be studied in the context of the hotel.

CHAPTER 3

ATMOSPHERICS AND THE RESPONSES THEY CREATE

Although numerous atmospherics are present in every environment, visual and aural (sound) atmospherics are more commonly researched. Visual atmospherics include lighting (Areni & Kim, 1994), personal space (crowding) (Bateson & Hui, 1987; Zemke & Shoemaker, 2007) and color (Bellizzi, Crowley & Haste, 1983; Bellizzi & Hite, 1992). Aural (sound) atmospherics include music tempo (Garlin & Owen, 2006; Milliman, 1982), music pleasantness (McDonnell, 2007), familiarity (Yalch & Spangenberg, 2000), genre (Areni & Kim, 1993) and volume (Smith & Curnow, 1966). Atmospherics may be used to shape an experience throughout an experience's temporal phases: before, during and after the consumer experience takes place. Atmospherics are critical during the moment of first impression as this is when consumers formulate attitudes that can color their evaluations of the remainder of the experience. Atmospheric variables are can be used functionally or aesthetically by managers (Grewal & Baker, 1995). Functionally, atmospherics make the consumers or employees life easier, while aesthetic atmospherics serve only one purpose: to create positive emotional responses, decrease negative feelings and thereby create memorable and pleasurable guest experiences.

A variety of consumer responses have been linked to each atmospheric variable. The responses — attitudinal, cognitive, emotional, and behavioral —

are summarized in Appendix A. Positive responses to atmospherics can lead to customer satisfaction, brand loyalty, and numerous others that benefit the company (Areni & Kim, 1994). Thus far, research has focused primarily on visual and aural (sound) atmospheric variables. Responses to scent are less clearly understood, especially in field settings. The present chapter focuses on visual and aural atmospherics research and will also explore the types of responses in consumer settings that aural and visual atmospherics have been shown to trigger.

Atmospheric Responses – Attitudinal, Emotional and Behavioral

Consumer responses brought about by atmospherics vary from attitudinal or emotional, to behavioral. In the hotel setting, possible attitudinal and emotional responses are vital to comprehend before managers decide to use atmospherics as part of their experiential branding strategy as they can lead to specific behaviors, yet understanding the behavioral responses that atmospherics can create without triggering attitudes or emotions first is the ideal situation for managers. Attitudinal, emotional and behavioral responses are all found in the atmospheric literature and vary depending upon the type of atmospheric. These responses are discussed below.

Visual - Lighting and the Effect on the Consumer Experience

Many visual atmospherics serve purposes both functionally and aesthetically, such as the use of lighting. When considering lighting, selection is crucial as certain types of lighting can cause emotional responses such as putting consumers more at comfortable and at ease (Stroebele & De Castro, 2004). Proper illumination in the atmosphere can also cause behavioral responses in consumers such as to unconsciously linger for longer periods of time in a consumer setting (Summers & Hebert, 2001), thus increasing their possibility of spending more. Lighting has also been shown to cause attitudinal responses such as increasing a consumer's acceptability of price levels (Grewal & Baker, 1994).

Understanding the responses from lighting is a great tool for managers when considering using light as a tactic to create a branded experience; however other considerations should be made when taking on such a decision. Areni and Kim (1994) found functionality as a key component in lighting the atmosphere indicating that managers must find the perfect balance between the aesthetic and functionality of lighting as pushing limits where functionality is sacrificed results in negative consumer response. Consequently, it is a challenge for managers to use lighting effectively as illumination and functionality must be used optimally. Furthermore, lighting alone does not appear to be substantial enough to help create a branded consumer experience in the hotel lobby and other atmospherics should be considered.

Visual - Color and the Effect on the Consumer Experience

Choice of color can be vital for any company as it has the ability to promote stimulation, emotional, and even biological responses such as hunger or thirst (Stroebele, De Castro, 2004). Attitudinal and behavioral responses can also be triggered by color as Bellizzi and Hite (1992) found that more positive responses were seen with the color blue, including higher purchase intentions while warmer colors such as red draw more physical attraction (Bellizzi, Crowley & Hasty, 1983). Although attractive, warm colors create more tense atmospheres where consumers spend shorter time period.

Managers must be cautious when selecting color environment by taking into consideration how long they would like the consumer to be in the atmosphere and as with lighting, color is not substantial enough alone to create a branded hotel experience as managers can easily replicate any aspect of design in their own hotels. Therefore, color may be used as part of the package of atmospherics used in the hotel marketing mix; however other atmospherics should be used as well to create an experience that is unique to a specific hotel brand.

Other Visual Atmospherics and their Effect on the Consumer Experience

Architecture, style and design are extremely important to consider as consumers notice these much more quickly than many other variables (Turley & Milliman, 2000). These can include wall coverings, fixtures, decorations, floor

space, signage and much more. Other variables to consider visually include ones that are human in nature involving "proxemics" (Stokols, 1978), which includes level of crowdedness, privacy and personal space. Crowding and threat to personal space or privacy in the atmosphere can induce emotional responses such as stress (Michon, Chebat & Turley, 2005) or attitudinal responses such as perceiving the quality of the environment to be low (Wakefield & Blodgett, 1994). Crowding is more commonly caused by inappropriate proximity to strangers (Stokols, 1978) however the feeling of being overcrowded varies among individuals. Crowding in the atmosphere is dangerous as personal control and dominance is related to pleasure (Bateson & Hui, 1987), creating the need for visually uncluttered and larger atmospheres.

As mentioned with color and lighting, visual atmospherics may be replicated easily. Although the use of visual atmospherics is a vital element of the hotel marketing mix, other atmospherics should be considered that are not as easily replicable. Therefore, managers can face great issue when determining which atmospherics will be strong enough to help create a branded experience.

Aural - Pleasurable Music and the Effect on the Consumer Experience

Music is the most commonly used and studied type of aural atmospheric, as seen by the vast marketing literature on the subject. Selecting pleasurable music for the environment is the challenge as music research has shown that it has the ability to create an array of attitudinal, emotional and behavioral

responses such as changing emotional states, higher purchase intentions and increased price acceptability (Dubé, Chebat, Morin, 1995; Grewal & Baker, 1994). Background music is especially powerful in creating behavioral responses as consumers purchase more when it is present (Milliman, 1986). If deemed pleasurable, background music can also create attitudinal responses such as increased perception of service quality (Dubé & Morin, 2001) and positively affect mood when waiting (Hui, Dubé & Chebat, 1997).

Aural – Music Loudness and Tempo and the Effect on the Consumer Experience

Loudness and tempo of music can create numerous behavioral and cognitive responses. If music is perceived as loud, consumers spend more money and less time in the atmosphere (Smith & Curnow, 1966). More time and money is spent when the tempo is slower in the atmosphere (Milliman, 1986) while slower tempo is responsible for slower in-store traffic and higher sales volumes (Milliman, 1982). Loud music with fast tempo that is not considered pleasurable for consumers will cause longer perceived waiting time in lines (Garlin & Owen, 2006) while music itself can reduce rage and increase satisfaction for consumers waiting (McDonnell, 2007).

Other Aural Atmospherics and the Effect on the Consumer Experience

Music has the ability to bring memories to mind that may be positive in nature or not. Music holds evocative power and with its ability to bring consumers memories to mind, can create a cognitive process that leads to a variety of positive or negative responses (Chebat, Chebat, Vaillant, 2001). After a positive memory is formed by music, consumers' attitudes concerning the sales person and other atmospheric variables in the atmosphere may be influenced depending on the nature of the memory. Familiar music, whether inducing memories or not, has also been found to cause consumers to shop for shorter periods of time than unfamiliar music (Yalch & Spangenberg, 2000). In this instance, no memory being triggered from unfamiliar music is better than positive memories triggered by familiar music. Cognitive processes that bring upon negative memories on the other hand can cause consumers to be bothered by certain aspects of the sales person, such as their pitch or verbal and non-verbal cues (Dubé & Morin, 2001).

Responses to music can be created dependent upon the congruency of the music to the brand or company (Chebat, Chebat & Vaillant, 2001). This is another form of cognitive response where negative attitudes towards the employees have been shown as stronger when music does not correspond to other variables in the atmosphere. Incongruence creates a cognitive process that causes consumers to perceive an unbalanced environment, resulting in unpleasant consumer experiences and confusion (Chebat, Chebat & Vaillant, 2001).

Age and gender of the participant are factors that may moderate the effect of music on the consumer experience. Younger shoppers perceive shopping times as longer when background music is played while older shoppers perceive shopping time as longer in duration when foreground music is played (Yalch & Spangenberg, 1988). Among the young, males enjoy foreground more than females while older females enjoy background music more than older males (Yalch & Spangenberg, 1993). Consumers of all age groups on average prefer foreground music to background music and purchase less impulsively when this form of music display is present (Yalch & Spangenberg, 1990).

Hotel managers must strive to discover suitable music for their specific environment and brand. Guests may be more likely to purchase items or spend greater amounts of money in hotel public spaces if proper tempo and volume are achieved. Aural atmospherics have great marketing potential in the hotel industry yet despite most hotels using music as an atmospheric variable; studies have yet to be conducted in the hotel setting.

As with visual atmospherics, aural (sound) atmospherics should not be used solely. Although aural atmospherics have the ability to be more unique than visual atmospherics, thus less replicable, they may not be enough to create a branded experience. Other atmospheric variables should be considered to allow the package to be complete and more distinctive than what the competitor has to offer.

Using Atmospheric as Part of the Branded Experience

Experience is a process that is comprised of four steps when confronted with atmospheric (Kotler, 1973). First, consumers enter the atmosphere where the item or service they are looking to purchase is somehow nested in the environment and determined by the customers' senses. Second, consumers perceive specific qualities of the atmosphere (atmospherics) in terms of where and how the item for purchase is nested. This translates to information for the consumer thus resulting in a possible change of affective state, which may lead to a pleasurable experience. It is clear that atmospheric have the ability to trigger a variety of responses that are attitudinal, emotional and behavioral in nature, allowing the use of atmospheric to be an opportunity for competitive edge when creating a branded experience.

Understanding atmospheric is vital in creating branded experiences however as Heide, Lærdal, and Grønhaug (2007) discuss, difficulties arise when managers attempt to comprehend atmospheric and how to properly manipulate them to attain pleasurable consumer experiences. Consumers see the atmosphere as a whole (Booms & Bitner, 1982) and any inconsistent atmospheric in accordance with the existing environment can create negative response. Managers must remember that first impression is vital and remain current with the changing tastes of consumers and adapt atmospheric to new preferences in order to attain pleasurable experiences. Chosen atmospheric must also be in accordance and congruent with other company aspects such as

marketing materials and advertisements. This is to avoid consumer confusion and a non-genuine representation of the company that can lead to a dissatisfying impression (Heide, Lærdal, & Grønhaug, 2007).

Some considerations should be taken before companies consider how they will use atmospherics. First, the target demographic must be identified along with determining what these individuals are seeking from their experience (Kotler, 1973). If the range of audience members is varied, the complexity and difficulty in atmospheric selection is raised. Companies must then determine atmospherics that can reinforce the experience that the consumer is seeking and consider the competition by deciding whether its chosen methods are differentiated and strong enough to compete. If a company is deemed successful from this decision-making process, positive consumer responses will transpire. However, if companies do not take these fundamentals into consideration, a variety of responses that may not be positive in nature can occur.

Atmospherics and Hotel Branding

From the research on visual atmospherics variables, it is clear that there are many implications managers can use in helping them achieve a branded experience; however there are many considerations that must be taken into consideration before use. Appropriate lighting and color in public spaces must be in place to ensure positive consumer response (Areni & Kim, 1994). Proper illumination along with appropriate color choice that is consistent with the hotel's

branding has the possibility of leading guests to linger more in public spaces like a restaurant or lobby (Summers & Hebert, 2001). It is also necessary to sustain the least crowded atmosphere as possible in places such as the lobby as guests who are waiting to be checked in or ask questions can endure unpleasant experiences if many strangers are present.

Despite the findings concerning visual and aural atmospherics in consumer environments, it is difficult to assume that the research that has been conducted will create similar responses in the hospitality industry, thus requiring a deeper investigation of visual and aural atmospherics in the hotel setting. Also, the use of visual or aural atmospherics alone may not be enough in the increasingly competitive industry that hotels are confronted with today, as these variables are easily replicable. The use of other atmospherics, such as scent may be the answer to complete the package of atmospherics that can help create successful experiential branding strategies. Unfortunately, the responses of scent have been explored scarcely, verifying only some attitudinal, emotional and behavioral findings. The next chapter will explore the limited research on the use of scent as an atmospheric variable and the responses that scent has triggered in the consumer environment. These responses cannot be generalized in the hotel setting but can aid in the understanding of how powerful the use of scent can be. This will be followed by proceeding chapters where scent will be tested in the hotel context and results will be shown that will further the existing research by investigating attitudinal, emotional and behavioral responses of scent.

CHAPTER 4

SCENT AS ATMOSPHERIC VARIABLE

Scent has emerged as a popular atmospheric variable and tactic in creating pleasant consumer experiences in a variety of product categories. Companies have been using scent as a marketing tool for years. For instance, realtors often have the smell of baked goods in the homes they are attempting to sell to trigger positive response and beauty product marketers often rely on scent as a selling point for their products. In the hospitality industry, hotel chains such as Westin, Le Méridien and Ritz Carlton have created their own branded scents that sometimes vary by hotel. These hotels use scent by dispersing it throughout their public spaces and, in the case of Westin's proprietary White Tea scent for example, carry this scent forward into an entire line of ancillary products available for sale, thereby further contributing to the experiential branding of the chain. These hotels hope that their signature scents will become familiar to its guests and therefore part of a positive hotel experience. Other brands such as Relais & Chateaux have gone as far as designing a property in Thailand, appropriately named "The Scent Hotel" where various aromas are a core feature of the guest experience.

From the examples of hotels that use scent, it is understood that it can be a powerful tactic in marketing and branding, however research on this subject is scarce, especially in regards to utilizing it as a tactic for experiential branding

strategies. Scent has held a number of uses in an array of cultures and has been shown to induce a number of reactions or responses. Traditionally, scent has been used in the best and worst of times as a medicinal treatment to help heal, deal with death and demonstrate love (Aftel, 2001), however psychology and therapeutic research has shown that scent can cause emotional responses as well. Rose scent for instance has been found as a method to combat depression while citrus and lavender has the ability to relax those who smell it (Chebat & Michon, 2003). Peppermint has shown to lead to improved athletic performance while green apple to ease migraines (Dembling, 2005). Scientific researchers on the other hand have studied scents for consumer response that are not only emotional in nature, but also behavioral.

The Science of Scent

As humans, we have a strong sense of smell yet are very poor at identifying scents and don't usually understand the emotional and behavioral responses that scents can produce (Zellner, Bartoli & Eckard, 1991).

Nevertheless, of the five senses, our sense of smell has the most powerful ability to trigger strong, often visceral and unconscious reactions (Wilkie, 1995). Due to the direct connection between the olfactory lobe and the limbic system, scent causes powerful responses almost immediately upon contact, and often at a pre-attentive or unconscious level (McDonnell, 2007). Therefore, due to this physical connection, scent has the ability to produce varied responses (Wilkie, 1995).

Emotional responses such as a change in mood occur due to a release of

neurotransmitters in the limbic system (Schiffman, Suggs, & Sattely-Miller, 1995) while attitudinal and behavioral responses can also occur after an individual is exposed to a scent.

Many consumers' are beginning to associate scents with products rather than memories (Aftel, 2003). For instance, individuals will think of household cleaners when they smell lemon. Consumer research has begun to explore scent however little has been explored relation to attitudes and behaviors it can provoke. Therefore, the field of consumer behavioral has provided minimal guidance to managers concerning how scent can be used to benefit their business. A summary of past studies can be seen in Appendix B where scent is seen to be linked to enhanced shopping experience, higher levels of perceived product quality, improved moods, increased spending and time spent in a store, and more favorable service evaluations. Although some of the studies are conducted in a consumer setting, one must point out that there is a strong lack of field experiments from reviewing the literature as many of the researchers were biased towards as controlled lab environment, thus lacking practical field experience. Additionally, some researchers such as aroma therapists do not include a scientific method in their studies, therefore limiting the usability of their results and causing great difficulties for managers in utilizing scent as a tactic in their experiential branding strategies.

The Process of Choosing a Scent

When managers are successful at using scent as part of their marketing, the scent in which consumers were exposed to in the atmosphere will bring upon positive responses if similar scents are ever encountered again. It is possible that successful use of scent from a marketing perspective depends on whether consumers have encountered a similar scent before and whether they have had a positive response to it (Zemke & Shoemaker, 2007). Selecting an appropriate and effective scent for hotel branding is a delicate matter and requires a comprehensive understanding of scents' impact and their ability to adequately convey the desired brand image. Numerous variables such as pleasantness, appropriateness and congruency should be considered when selecting a scent to represent a brand.

VARIABLES OF SCENT

Focal vs. Ambient Scent

The use of scent may be categorized as either focal or ambient in nature (Zemke & Showmaker, 2007). Ambient scent can be defined as one that is somewhat natural or unexpected; diffused into the atmosphere yet often unnoticed with an origin that cannot be immediately detected. Despite the nature of this scent leading it to be unnoticed, ambient scent has the ability to influence consumer response. Until recently, ambient scent was rarely discussed in the marketing literature, despite Laird (1932) first using it in the field setting in 1932.

In the banking context McDonnell (2007) found that ambient scent can reduce the perception of waiting times, a useful implications using it as a business tool. Focal scent is one that is explicitly attached to a specific object like food or flowers and is more commonly found in scent literature (McDonnell, 2007). Consumers can identify the source of a focal scent and the deliberate appreciation of such a scent is common. Companies are beginning to use ambient scent instead to positively influence consumer responses, as it is more natural and less blatant (Spangenberg, Grohmann & Sprott, 2005). Nonetheless, research continues to mostly involve focal scents, leaving managers without guidance in the selection of ambient scents.

Pleasantness

In order to create positive responses, scent must first be considered pleasant. Scent is typically categorized immediately by the smeller as pleasant or unpleasant (Chebat and Michon, 2003). Notwithstanding the cultural drivers of scent preferences, pleasant scents are rather personal (Wilkie 1995) as they often relate to private past experiences. Negative or unpleasant scents are often universal. For instance, it is extremely rare to find anyone who finds pleasantness in the smell of garbage, sewage or the spray of a skunk. Likewise, it is equally rare to find a perfume at a department store that every woman deems pleasant. Thus, due to the complexity of pleasant scents, selecting the most appropriate scent that will be coherent with the desired brand image and

please the majority of the target audience is a daunting challenge where possible attitudinal, emotional and behavioral responses should be considered.

Scent research that involves the pleasantness variable typically use focal scents that include a floral, spice or plant base such as Rosemary (Morrin & Ratneshwar, 2000) and lavender (McDonnell, 2007). Some have also used fruits such as Grapefruit (Mattila & Wirtz, 2001). Other types of scents that are ambient in nature have yet to be used in scent research.

Congruency (Appropriateness)

Congruency (or Appropriateness) of scent occurs when the scent that is chosen is representative of the company, brand or product being sold (Mitchell et al., 1995). Congruency can also occur within a particular environment. For instance, with the use of scent in the hotel lobby, congruency will only occur if the scent fits with the existing lobby atmospherics. Bone and Jantranis (1992) argued that scent, whether ambient or focal, must be congruent to the product category, environment and brand in order to create positive consumer response. Scents that have been used in the past to explore the congruency variable include coconut, lemon (Bone & Jantranis, 1992), floral and chocolate (Mitchell et al., 1995). While some responses have been shown to occur as a result of scent congruency, research requires deeper investigation.

RESPONSES TO SCENT

Consumer research first uncovered the effects of scent in 1932 when Laird discovered a link between focal scent and perceived product quality. He found that women perceived hosiery of being better quality when pleasant scent was used with the product in comparison to an unpleasant scent being used. Since Laird's seminal study, scent has been found to include a number of variables that singlehandedly and jointly produce various responses (Mattila & Wirtz, 2001). Responses that will be discussed here are attitudinal, emotional and behavioral in nature, where a major gap is seen in the behavioral section.

Attitudinal Responses to Scent

As mentioned previously, Laird (1932), a pioneer in scent research, discovered that when a pleasant scent of combined aromatic chemicals is used, perceived product quality is higher in comparison to when the less preferred scent is used. Clearly this type of response was attitudinal in nature and opened the door for scent research to come.

Other research regarding attitudinal response to scent indicates that scent can enhance one's shopping experience (Mattila & Wirtz, 2001). Scent also leads to higher product evaluations (Bone & Jantraris, 1992) and affects consumer judgments concerning the atmosphere (Gulas & Bloch, 1995). When scent is congruent with the items for sale in the atmosphere, more positive attitudinal responses can be seen. Mitchell et al. (1995) found that more favorable

responses to flowers exist in the environment where an ambient floral scent is present while increased favorable responses to candy are found in an environment where a focal chocolate scent is present. Conversely, unfavorable responses to flowers and candy exist when incongruent scent conditions are used.

Emotional Responses to Scent

Scent is associated to a variety of emotional responses such as mood. On one end, Haviland-Jones (2005) demonstrated, through the use of a specific combination of scents, how consumers experience negative mood emotions such as hostility, tension, anger, confusion and depression. On the other end, lower levels of discomfort (McDonnell, 2007) and improved moods and levels of happiness (Hirsch, 1995; Rétiveau, Chambers & Milliken, 2004) are experienced when confronted with particular scents.

Positive emotional responses are especially vital to explore in the hotel context as positive feelings towards the hotel experience (e.g. The lobby, the room, employees) can encourage guests to return or share the positive experience with friends, family, colleagues or on online communities such as blogs or travel sites. Therefore, more research is needed to further explore the emotional responses that can be derived from scent exposure as this type of research is useful for managers to enhance their skills on how to use scent as part of their marketing strategy mix.

Behavioral Responses to Scent

Morrin and Ratneshwar (2003) found consumers spend more time in the atmosphere when scent is present. McDonnell's research (2007) discovered that scent reduces perceived line waiting time. Scent has also been found to create behavioral response by increasing lingering time (Lipman, 1990) and cause stronger brand recollection even if the brand is unfamiliar (Morrin & Ratneshwar, 2000). Presence of scent has also resulted in an increase in social interaction (Zemke & Shoemaker, 2007) and more money being spent (Hirsch, 1995).

Limitations of Scent Research

With notable exceptions (e.g., McDonnell, 2007), field research on scent in service environments is rare and nonexistent in the hotel industry despite some hotel brands such as Westin and Relais & Chateaux that have been using it for years. Most researchers have chosen to focus solely on product type settings, which fail to recognize the unique challenges of using ambient scent in a service setting such as the hotel. As mentioned previously, scent research is also limited in the variety of responses it can create. Some emotional and behavioral responses in the consumer setting have been found, but too few draw conclusions to help managers in the process of scent selection. Finally, researchers tend to be biased towards using the lab environment for their research rather than field experiments. This limits the possibility of practical results that managers will be able to use when choosing a scent for branding.

Appendix B reveals that scent literature is comprised of both field and experimental settings. Despite this research, questions remain concerning how helpful the findings are to managers. Clear limitations are present when dealing with experimental settings as results can hardly be applied to the real world while results from the field setting studies contain issues as well that prevents generalization to multiple industries. For instance, the study involving the gift shop (Mattila & Wirtz, 2001) is a situation that cannot be generalized to a large and competitive industry. Gift retailing is a small sector in retailing and although scent research may be of interest to these managers, managers in industries where competitive rivalry is present are unable to use the results for their own use without taking on risk.

It is necessary to understand the emotional of scent as emotional responses can have a strong link to behavioral responses. Unfortunately, existing scent literature is limited in terms of studies concerning emotional and behavioral responses. Attitudinal response research is useful however without the behavioral component, the research is not complete. Therefore, this thesis takes on the challenge of bringing about responses that are attitudinal, emotional and behavioral in nature, as means to help managers better understand the power of scent.

Conclusion

To further research by bridging numerous gaps, this thesis study will go beyond what others have explored. A field experiment setting (hotel) will be used where an ambient scent will be the controlled variable. This study will be the first of its kind in the hotel research, as well with the scent research. Chapter 6 will explain the methods that were used in to the study, followed by the results and implications that were shown to help managers in using scent as part of their branding. However before we reach the hotel study, results from another study will be looked at in Chapter 5. This smaller study was conducted to understand how hotel managers feel about the use of scent as part of the marketing mix in their hotels.

CHAPTER 5

STUDY 1 - HOSPITALITY MANAGERS' ATTITUDES AND BELIEFS TOWARDS SCENT AS ATMOSPHERIC TACTIC

Before launching an exploratory study surveying hotel guests (study 2), an online survey was distributed as an attempt to surface hospitality managers' beliefs and attitudes concerning the use of scent as part of experiential branding. Many hotels have been using scent as part of a marketing tactic for years however questions still remain as to how managers can use scent successfully as a tactic in the experiential branding strategy. To determine the best process and guide managers in being successful, it must first be understood how managers currently perceive scent in the hotel industry specifically as every industry is different.

Method

An invitation to participate in an online questionnaire was mailed electronically to a convenience sample of 66 hotel professionals with titles such as Director of Sales and Marketing, Sales Manager, General Manager and Front Desk Manager. Responses were collected through a Survey Monkey link, which was placed in the e-mail. Each professional was found through online search engines and tourism sites, and worked within a midscale to luxury (upscale) hotel in the Montreal area (Downtown and Airport). These types of hotels were defined as those that would focus on differentiation in their marketing rather than low

cost. It was necessary to only use these hotels, as they are the ones that would invest in experiential marketing with their attempts to differentiate. Montreal is an ideal location to distribute such questionnaires due to the large number and great variety of hotels that care greatly about marketing to consumer wants and needs. Montreal is also a city comprised of numerous cultures that explore countless scents with unique perfumes, foods and other forms of fragrance, thus focusing less on issues such as scent allergies in comparison to small cities exposed to few cultures. Twenty responses were collected, resulting in a 30% response rate.

The survey contained a mix of open-ended as well as close-ended questions. Five point likert scales (1-strongly disagree, 2-somewhat disagree, 3-neutral, 4-somewhat agree and 5-strongly agree) were used for each item that the participant was asked. Items considered included managers' awareness of scent as an experiential branding tactic in the hotel industry, scent techniques most often used, the use of congruent scents, scents effect on one's willingness to pay, or recommend, perceived hotel quality, and the varying effects scent can cause on gender, context of visit and age. The survey instrument can be found in Appendix C while results are in Appendix D.

Hospitality Managers' Perception on Scent as a Branding Tactic

For each statement in the close ended section of the questionnaire, results for each item were analyzed through determining the mean score of the responses. No statistical tests were carried out given the small sample size

(n=20). When it is indicated that participants “agreed” with a particular response, it indicates the summation of those who clicked on radio button 4 on the scale (somewhat agree) and 5 (strongly agree), while results that note a disagreement include the participant who clicked on 1 (strongly disagree) or 2 (somewhat disagree). Results of open-ended questions were also considered however were not used for more than informational purposes.

Awareness

To assess participants' awareness of the use of scent as a marketing tool, the first question asked the participant whether or not they were aware of the use of scent as an experiential branding tactic in the hotel context. Although the use of scent as a marketing tool in hotels is rather new, 75% of participants indicated that they had heard of the use of scent as a marketing tool in the hotel industry. This indicates a high awareness of scent marketing in this setting. One participant even indicated that he had learned about scent from training provided by his hotel chain.

Scent Techniques

Diverse and unique methods to expel scent in the atmosphere are now available from commercial providers for companies that wish to use scent as part of its marketing mix. It was found that 60% of participants had heard of Dry Air Diffusion technologies while 55% were familiar with Vaporization.

Nebulization, which involves technologies that turn liquid into aerosol, was familiar to only 15% of participants while Scented Sticks (scented oil) was more known to 35% of participants. One participant however noted in the “Other” option that they had also heard of Ozone machines. Twenty percent indicated that they were unfamiliar with any of the scent technologies listed.

Negative Responses to Scent

Fifteen percent of participants indicated they disagreed with the statement; “Guests would be bothered by the use of scent in the public spaces of the hotel” while 11% disagreed that “Guests would be bothered by the use of scent in the guest rooms”. It is interesting to see that a greater amount of the hotel professionals that responded to the questionnaire indicated that guests would be more bothered by scent used in the rooms rather than in public spaces. 15% of participants agreed with the statement “If scent is present in the guest room, guests should have the ability to control it”.

As for the statement, “Using scent to influence consumers' responses is manipulative”, 55% of participants disagreed, 20% agreed and 25% neither agreed nor disagreed. Similar results were seen when participants were asked to express how they felt in relation to “Consumers would react negatively if they knew a hotel was trying to influence their perceptions by using scent”. Half of participants disagreed that consumers would react negatively while 25% agreed

and the final 25% neither agreed nor disagreed. Results can be seen in Appendix D.

Congruency (Appropriateness)

Results for “Hotel guests would enjoy scent in hotel public spaces if the scent is appropriate to the environment” demonstrated a heavier response on the agreed side as 75% indicated opinions here. 20% of participants on the other hand felt that guests would not enjoy the scent, even if it were deemed appropriate to the atmosphere.

Willingness to Pay or Recommend

Managers' beliefs about consumers' willingness to pay and willingness to recommend a hotel product that uses scent marketing were assessed as an attempt to understand how powerful hotel professionals believe scent marketing can be in shaping commercially-relevant behavioral responses. Studies reveal a link between atmospherics and willingness to pay as participants indicated they accept higher prices when décor and ambient dimensions are used strongly in the retail environment (Grewal & Baker, 1994). When hotel professionals were asked how they felt about scent having an effect on how much consumer are willing to pay, responses indicated mixed results: 65% of participants disagreed (somewhat disagreed and strongly disagreed) and only 20% agreed (somewhat agreed and strongly agreed) with the statement "Scent in hotel's public spaces

can make customers willing to pay more” However, managers believed in the power of scent in generating word of mouth: 45% of participants agreed with the statement “Scent in hotel public spaces can have an impact on whether or not a guest would recommend the hotel”.

Perceived Quality of Service Atmosphere

Perceived quality of the service atmosphere is deemed as vital as consumers are more satisfied when quality is perceived as high (Wakefield & Blodgett, 1994). Marketing research has demonstrated that hotel guests measure quality by taking into account variables such as cleanliness, service, reputation and security (Choi, 2001). Questions concerning perceived hotel and lobby quality in relation to scent were asked to the hotel professionals and displayed greatly favorable results for participants that agreed that scent can have an effect on perceived lobby (85% agreed) and hotel (70% agreed) quality.

Gender and Context of Visit (Business vs. Leisure)

Participants faced some demographical questions concerning gender and context of visit. Context of visit refers to whether guests traveled on business or leisure. 55% of participants believed that leisure guests react differently to scent than business guests while 75% believe that women would react differently than men. Research has been conducted in relation to gender and context of visit, displaying a multitude of results.

Women and men alike report a decrease in ability to smell as they age (Wycoski and Gilbert, 1989.) As teens, females and males report similar ability to smell however when entering their forties, self-reported abilities to smell decrease. In terms of odor identification, both men and woman show similar drops in recognition as they age yet with women still demonstrating slightly higher levels of recognition than men at all ages.

When investigating effects dependent upon context of visit, gender is no longer a factor. It is possible that guests who are traveling on business will not be in the same emotional state than ones that are traveling on leisure, thus not responding as strongly to scent. Many participants (55%) indicated they felt scent could create different responses among hotel guests dependent upon their context of visit. As research has not been conducted with using the context of visit variable, further exploration is required.

Other Demographics

Demographic questions were asked in relation to the current state of the hotel's scent marketing program and revealed 45% of participants worked in a hotel that currently uses scent diffusion technologies and 50% indicated that they do not and have no plan of using them in the future. Among the 45% indicating that scent technologies are used in their hotels, areas such as corridors, bathrooms, gym, lobby and guestrooms were listed as where scent is diffused. Listed methods of diffusion included dry-air diffusion, vaporization and liquid

forms of scent. Only one participant indicated that they knew how much was spent on scent diffusion technologies a month while others were not aware.

General Managers were primarily listed as the individual who makes the decisions concerning scent technologies, followed by the Director of Marketing. When asked how one would select an appropriate scent for the public space in the hotel, participants indicated that guest and staff feedback would be used while testing a variety of scents. One user expressed that the scent used would be chosen by its appropriateness and consistency with the hotel's brand, an important factor that is consistently found in scent literature. When asked whether they agreed that scent research and its effects on consumers should be pursued more actively, participants indicated mixed results where 45% agreed, 15% disagreed and 40% nor agreed or disagreed.

Despite literature involving the use of scent in the hotel industry lacking, the use of scent as a marketing tool is becoming a prominent subject in the industry. It is also important to note however that an interesting response was reported where one participant indicated that they were familiar with using scent in hotels, however not as a marketing tool. This speaks volumes, as it understood that hotels have been using scent in hotels for years while not understanding the marketing implications it may hold. Therefore, if managers were to become aware of how scent can be used as a marketing tool, competitive advantage may be achieved.

Discussion and Implications of Study 1 Results

From the exploratory study of managerial beliefs, scent marketing meets with reviews from hospitality managers in terms of its possible effects on guest attitudes and behaviors. Scent is expected to influence some variables such as perceived quality; however others responses seem out of the question for hotel professionals.

The results from study 1 coincide greatly with the existing scent literature. Managers believe that scent can increase perceived quality, which supports studies such as Laird's (1932). Managers also demonstrated that they believed that if the scent is congruent (appropriate) with the environment, they would enjoy the scent more, supporting the research on scent congruency (Bone & Jantrani, 1992; Mitchell & Knasko, 1995). Although the studies mentioned here are imperative for the progression of scent research, they did not take place in the hotel setting and all but Laird's took place in the lab, leaving questions of whether or not similar results would occur in the field. These gaps in the research will therefore be addressed in study 2.

Hotel managers in study 1 had mixed opinions on whether scent had the power to influence a guests' willingness to recommend. Unfortunately, research using the willingness to recommend variable and scent has yet to be conducted in any setting and therefore will be addressed in study 2. More hotel managers indicated that they believed leisure guests would react different to scent than business, yet again research on the context of visit variable has yet to be done

despite context of visit existing as an imperative demographic in the hotel industry. Therefore, the context of visit variable will be tested in relation to scent for the first time in this thesis. Finally, most hotel managers believed that men and women would react different to scent in the hotel setting, however once again, research on gender and scent has not been conducted in the field context. These gaps, along with other variables that lack in the research will therefore be addressed in study 2.

Other findings from study 1 will not be considered in study 2 such as using the hotel room as the chosen field and testing variables such as willingness to pay. Although we examined the opinions on the use of scent in guest rooms, research conducted in the hotel room proves too invasive and as some managers (30%) feel that guests would be bothered by scent on the hotel room. Willingness to pay is also a variable that would be difficult to test as measuring it proves to be relatively impossible in the hotel setting. A question could be asked directly to hotel guests who have not stayed at the hotel however most guests in the lobby have already made a reservation. Therefore, these variables will not be tested in study 2.

Conclusion

Through the design of study 1, it was learned that there are a great number of questions that remain unanswered such as whether or not scent can have varying effects on different contexts of visit. A major gap in the research is

therefore uncovered, as the possible responses scent can create in the hotel setting remain unfound. Hotel professionals agree to some extent that scent can create responses on hotel guests yet specific guidelines on how scent should be used have not been created in the marketing literature. Therefore, study 2 was designed by taking the unanswered questions from study 1 to determine what attitudinal, emotional and behavioral responses can arise from the use of scent, while also taking into consideration different demographics such as context of visit, age and gender.

As mentioned previously, congruency (appropriateness) is vital for atmospherics and can aid greatly in consumer's acceptance of atmospherics. Congruency (appropriateness) of scent is also seen in study 1 as a strong variable to consider in the selection of scent, however research lacks in the hotel setting, leaving some managers believing congruency is an imperative factor while some do not believe it is necessary to consider. To address this gap, study 2 was conducted with the idea that congruent and non-congruent scents used with the existing lobby environment may create different responses, therefore used this variable as the independent for congruent, non-congruent and no scent conditions.

The next chapter reports on a field experiment designed to test the impact of scent on actual hotel guests.

CHAPTER 6

STUDY 2 - FIELD STUDY ON THE EFFECTS OF AMBIENT SCENT ON HOTEL GUESTS

Scent has been used by many midscale and luxury hotels for a number of years either on its own or as part of comprehensive experiential branding strategies. Westin Hotels and Mandarin Oriental Hotels, for example, introduced proprietary scents in their guest rooms and public spaces. However, little research has been conducted to determine the effect scent has on the first impression aspect of their experience. The lobby, in particular, is often the area of choice to diffuse ambient scents as means to create a positive first impression since it is the first visible point of physical service contact between guests and the hotel space. Apart from studies on scent simulation in controlled environmental settings, field studies focusing on scent and first impression in a real hotel context seem to be lacking, leaving a gap in scent research where responses to scent have yet to be determined. As scent becomes a strategic tactic in experiential branding, this field study is vital to provide managers with strategic recommendations and advance knowledge in using scent. Therefore, this field study focuses on the use of ambient scents in a hotel lobby assesses a wider range of guest responses. More specifically, the congruency variable that has yet to be tested outside of a controlled setting will be used to determine hotel guests' attitudinal, emotional and behavioral responses to scent.

The purpose of testing congruency is to determine whether the effects of scent vary depending on whether the scent fits with the existing environment. Therefore, this study is conducted using conditions that involve a congruent and non-congruent scent to allow manager and marketers to understand whether this variable should be taken into consideration when choosing scent as part of the marketing mix. Congruency is a difficult variable to test. Congruent and non-congruent scents are assigned based on a matter of opinion. Therefore, no formal tests can be used to choose a congruent or non-congruent scent; rather those who understand the brand or company are the most optimal source for choosing congruent and non-congruent scents.

Variables

Along with congruency, other variables will be tested as an attempt to discover the attitudinal, emotional and behavioral responses to scent. From the results of study one, attitudinal variables such as perceived lobby quality, perceived service quality and scent quality are tested. Emotional variables tested include mood and arousal while behavioral variables are scent detection abilities, repurchase intentions (loyalty) and word of mouth intentions.

METHOD OF STUDY 2

The complete methodology process of this type of study is quite challenging and can explain the lack of "real context" research. Nevertheless,

this challenge was taken on with confidence as the principal instigator who conducted this study has more than three years experience in the hotel and hospitality services. Thus, she was able to foresee many important issues that can simultaneously occur and must be considered when performing a field study in a hotel lobby setting using scents. Some of these issues include: elements that can be controlled and some that cannot while conducting this type of survey, the approval of the Hospitality Managers for the setting as well as their behavior during the conduction of the study, the free, confidential and anonymous contribution of guests and their potential unpredictable behaviors, the set-up of the area where the scent would be diffused and controlled, and the amount of time that must be spent on sight and control the quality of the data collection process.

Location

This field study was conducted in the lobby of a large upscale downtown urban hotel, part of an international chain. As differences in results did not occur between the hotels that were midscale and luxury (upscale) in nature from study 1, it is acceptable to use a hotel that is upscale in nature rather than using both midscale and upscale hotels. This hotel caters to both business and leisure travelers and is over 50,000 square feet in size with over 1,000 rooms. An upscale hotel was chosen as the field setting since hotels in lower market segments have not yet invested in scent diffusion. These hotels focus their marketing efforts on low cost strategies rather than differentiation though

experiential branding in. Scent therefore would not be used as a tactic in these hotels.

The lobby of the hotel was chosen as the ideal space to conduct the experiment as this area marks the guests' first impression of the hotel. First impression is important for the hotel, as this experience is one that may last throughout the guests' entire stay. If a guest does not have a good experience in the lobby as part of their first impression, they may find it difficult to forget this negative experience for the remainder of their stay. It is therefore vital for the first impression of the hotel to be positive and this study aims to understand whether scent can be a positive aspect of this lobby experience as means to amplify the guests' first impression.

The field context was chosen over the lab setting for study 2 as it was felt that unanswered questions that were unveiled by study 1 would not be able to be addressed if the study took place in an artificial setting. Challenges were brought about by selecting the field setting such as numerous distractions that could not be controlled such a temperature, noise, number of people (crowding) and lighting. Despite the challenges, utilizing a field setting it well worth the struggle as unlike most scent research, implications can be used to a real environment rather than assuming results in the lab will translate to reality as well.

Stimulus

Focalized scents are more frequently used in scent studies as means to influence consumer response through promotional methods (Zemke & Shoemaker, 2007). Although Laird began using ambient scents in 1932, research that followed mostly used focal scent. In this study, ambient scents developed by scent professionals at Scent Air, one of the leading providers of commercial scent diffusion products was used. The scents developed by Scent Air are labeled as ambient rather than focal as they are comprised of a variety of scents mixed into one and diffused over large surface areas, therefore not allowing the nose to assign the scent to one particular object.

This study involved three scent conditions: no-scent, congruent scent and non-congruent scent. As Mattila and Wirtz (2001) pointed out congruency of a scent depends on whether a scent fits within the existing environment and other branding elements. A congruent scent has been linked to impulse buying and more favorable product evaluations than an incongruent scent (Bone & Jantrani, 1992), especially when the scent is considered appropriate with the existing retail environment (Mattila & Wirtz, 2001). Scent congruency has not been tested in settings such as hotels where and the resulting attitudinal, emotional and behavioral responses have yet to be assessed. In this study takes prior research as its point of departure insofar that environments with ambient scent are hypothesized to produce more favorable responses than non-scented

environments. Further, this study builds upon past research by exploring the responses associated with congruent scent in a field setting.

Two scents were used for this study and chosen with the help of the managers at the participating hotel and with the expert advice of the license holder for Scent Air products in Canada. Managers smelled a variety of scents provided by Scent Air until collectively selecting one that they believed was congruent with the hotel's branding strategy and existing lobby atmosphere. The chosen congruent scent, named "White Tea Thyme" (in the Scent Air catalog), was described by managers as appropriately classic and conservative, in keeping with the property's desired positioning and image. The non-congruent scent was chosen to provide an opposite reaction to the congruent scent, one that would not be expected in that particular hotel's lobby. This scent was named "Nevada Sunset" and smelled of coconut, vanilla and citrus fruit.

Contrary to prior scent studies performed in controlled laboratory settings, this study which was conducted in a large lobby, thus creating certain challenges. Eventual allergies, strength and coverage had to be considered carefully. The scents used in this study were diffused through Scent Air's patented dry air technology system where a fan circulates air through a cartridge containing wax scented with natural essential oils. No residue or particles are projected in the air (hence the name "dry-air") no known allergic reactions have been linked to the use of this system. It was also necessary to set and monitor the volume or strength of the scent diffused (by controlling the setting of the fan) since research

has shown that strongly present or intense scents lead to more negative responses (Richardson & Zucco, 1989). Therefore, the scents were diffused by setting the flow of air through the fan at the mid-range power level, allowing for the scent to be barely detectable without being overpowering in the existing environment. Finally, because of the size of the lobby, coverage was also an issue. To ensure that the lobby was appropriately covered, two scent diffusers were used, one hidden from view in each opposite corner of the lobby.

Data Collection

Hotel guests were invited in person to participate in the study by filling out a short questionnaire (see English version in Appendix E, French version in Appendix F). The primary instigator of the study invited guests who were in the section of the lobby, that was in close proximity to where the scent was being diffused. Some guests had been sitting in the section of the lobby for long periods of time while others had not. Guests who agreed to participate were made to understand that their participation was voluntary by reading the terms of the study at the beginning of the questionnaire. Data collection occurred over a six-week period in April, May and June of 2010. Ninety-two completed surveys were collected in total: thirty-two in the no-scent condition, thirty in the congruent scent condition and thirty in the non-congruent scent condition.

Analysis

Except for scent detection, analysis strategy relied on t-tests to compare variable means across scent conditions. Two-tailed t-test values for significance (p) were used depending on whether the variances are assumed to be equal. This was tested with each variable through Levene's Test for equality of variances with SPSS. Reliability (Cronbach's Alpha) was also assessed for variables including more than two items. The overall sample size for the study was n=92. To avoid data distortion, empty responses in all analyses and where necessary were assigned to a score of 4 as this was the central response on the 7-point scales. However, empty responses were a rare occurrence and when there were numerous, the survey was considered incomplete. In all, two incomplete surveys were not used data entry.

HYPOTHESES

Attitudinal Responses – Perceived Lobby Quality

Product quality has been explored in scent research and evaluated more favorably in the presence than in the absence of scent (Laird, 1932; Bone & Jantranis, 1992). Unfortunately, perceived quality of an environment such as a lobby has yet to be tested in the scent literature and therefore an attempt to further the research was made in this study. The following variables were tested as they each represent lobby quality as deemed by the managers at the hotel:

Comfort, cleanliness, organization, noise, warmth and appropriateness of décor. These variables were chosen after a literature review (Appendix B) and discussion with the hotel's managers. As past research has shown, the presence of ambient scent tends to create more favorable evaluations than the absence of such conditions. This study builds upon such prior research and also considers the congruency of the scents. Based on past research on scent congruency (Mitchell & Knasko, 1995; None & Jantranis, 1992), it is expected that the congruent scent will result in more favorable evaluations of lobby quality than the non-congruent and no scent conditions. Thus, the following is hypothesized:

- H1a) Hotel guests will be more comfortable in the congruent scent condition than the no-scent condition**
- H1b) Hotel guests will be more comfortable in the congruent scent condition than the non-congruent scent condition**
- H1c) Hotel guests will perceive the lobby as being cleaner in the congruent scent condition than in the no-scent condition**
- H1d) Hotel guests will perceive the lobby as being cleaner in the congruent scent condition than in the non-congruent scent condition**
- H1e) Hotel guests will perceive the lobby as being better organized in the congruent scent condition than in the no-scent condition**
- H1f) Hotel guests will perceive the lobby as being better organized in the congruent scent condition than in the non-congruent scent condition**
- H1g) Hotel guests will perceive the lobby as being less noisy in the congruent scent condition than in the no-scent condition**
- H1h) Hotel guests will perceive the lobby as being less noisy in the congruent scent condition than in the non-congruent scent condition**

- H1i) Hotel guests will perceive the lobby as being warmer in the congruent scent condition than in the no-scent condition**
- H1j) Hotel guests will perceive the lobby as being warmer in the congruent scent condition than in the non-congruent scent condition**
- H1k) Hotel guests will perceive the lobby as having a more appropriate décor in the congruent scent condition than in the no-scent condition**
- H1l) Hotel guests will perceive the lobby as having a more appropriate décor in the congruent scent condition than in the non-congruent scent condition**

Attitudinal Responses – Perceived Service Quality

Service quality has been tested in a number of studies (Carmen, 1990; Parasuraman, Zeithaml, & Berry, 1996); however research on scent's impact on perceived service quality is scarce. A notable exception is McDonnell's finding (2007), in a bank setting, that a relaxing lavender, sage or nutmeg scent can lead to favorable service quality evaluations, in particular reducing perception of waiting time. As with lobby quality, the scent conditions combined will not be tested against the no-scent condition as it has been demonstrated in past research that scented conditions bring about more favorable results. Congruency however will be tested in terms of comparing means between the congruent scented condition and the non-congruent and then the congruent scent condition and the no scent conditions. Although it is important to test the congruent versus the non-congruent scent, it is also necessary to understand whether the congruent scent has an effect over the condition where no scent is used to

prevent the ensure that the no-scented condition would not have more favorable results from participants than the congruent condition. The following is hypothesized:

- H2a) Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the non-congruent scent condition**
- H2b) Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the no-scent condition**

Attitudinal Responses – Perceived Scent Quality

Seven items were used to assess participants' perception of the chosen scents: Likeability, pleasantness, appropriateness for lobby, fit with the brand, classiness, modernism and uplifting. Each item was assessed with the use of a 7-point scale with opposing ends. For instance, with the likeability scale, "I dislike it" has a score of one while "I like it" has a score of seven. Participants completed those seven items only if they indicated that they were able to detect the scent. Therefore:

- H3) Hotel guests will perceive scent to be of higher quality in the congruent scent condition than the non-congruent scent condition**

Emotional Responses - Mood

Consumers' existing emotional state can influence their responses to an environment (Donovan & Rossiter, 1982). Therefore, to measure participants'

existing emotional state, a short mood scale with four items was used (Gardner & Hill, 1988) where participants select a number on a 7-point likert scale (1-Strongly Disagree to 7-Strongly Agree). Mood represents a combination of emotions an individual feels at once and has been shown not to be affected by ambient scent (Chebat & Michon, 2003). It has yet to be determined if ambient scent can affect mood in the hotel context under congruent and non-congruent scent conditions. Therefore, as an attempt to help managers in determining if congruency of scent has an effect on mood or if scent in general proves different mood results than when scent is not used, the following is hypothesized:

H4a) After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the non-congruent scent condition

H4b) After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the no-scent condition

Emotional Responses – Arousal

When an environment induces arousal (i.e., alertness or excitement), consumers are likely to spend longer periods of time in the setting (Donovan & Rossiter, 1982). As arousal can have implications in the retail context, it would be interesting to explore whether similar effects are seen in the hotel context. Since the non-congruent scent condition should be unexpected for hotel guests, it is believed that this condition will demonstrate higher levels of arousal. Therefore, the following is hypothesized:

- H5a) Hotel guests will be more aroused in the non-congruent scent condition than the congruent scent condition**
- H5b) Hotel guests will be more aroused in the non-congruent condition than the no scent condition**
- H5c) Hotel guests will be more aroused in the congruent scent condition than the no scent condition**

Behavioral Responses – Positive Word of Mouth Intentions

If hotel guest have a pleasurable experience, there is a high likelihood that they will tell others (Brown et al., 2005). Too often though, consumers are willing to express negative word of mouth intentions and forget to pass on any positive impressions. Avoiding negative experiences is just as vital as creating positive ones. Scent has been used as a tool to create positive experiences however research has yet to empirically show whether it can generate positive word of mouth intentions. Further, the impact of scent congruency on word of mouth intentions has yet to be investigated. By virtue of the fact that a congruent scent complements the existing brand identity and positioning, it is likely that:

- H6a) Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the non-congruent scent condition**
- H6b) Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the no scent condition**

Behavioral Responses - Repeat Purchase Intentions (Loyalty)

Scent has been shown to influence behavioral responses such as time (Morrin & Ratneshwar, 2003) and amount of money spent in a store (Hirsch, 1995). Given such consequences, other behavioral responses of relevance in a hotel context should be explored. Given the relatively high costs of acquiring a new customer, repeat purchase is particularly important within the hospitality industry. Although the relationship between experiential branding and market-relevant behavioral responses (such as repeat purchase) has yet to be empirically proven, there is ample observational evidence that brands that provide a better experience enjoy greater loyalty and are able to charge a price premium (Pine and Gilmore, 1999; Schmitt, 1999; Interbrand Forum 2002). Thus, it was expected that:

- H7a) Hotel guests will report greater likelihood of repeat purchase in the congruent scent condition than in the non-congruent scent condition**
- H7b) Hotel guests will report greater likelihood of repeat purchase in the congruent scent condition than no scent condition**

Scent Detection

Men and women react differently to atmospherics especially scent. Department and clothing stores are classic examples of this as these retailers typically choose varying décor and design depending upon the items of that section and whether they are targeted towards men or women (Spangenberg, et

al., 2006). When dealing with scent specifically, gender differences exist as women are more sensitive to scents and rate them at more intense levels than men (Wysocki & Gilbert, 1989). This brings about the expectation that women will be more likely to recognize that a scent is present in a study. Research has demonstrated important differences in scent detection and recognition ability between men and women, with women reacting more intensely than men to scents (Wycoski & Gilbert, 1989). Thus, extending such laboratory results to the context of the current field study, it is hypothesized that:

H8a) Women will be more likely able to detect the scent overall (regardless of condition) than men

Self reported scent ability and recognition decreases as age increases (Wycoski & Gilbert, 1989). However, contexts for which this has been tested are limited therefore it is necessary to test whether younger hotel guest are able to detect scent better than older guests as results can be very useful for hotels with a particular age target market. Therefore, based on past research, the following is hypothesized:

H8b) Younger guests (under 45 of age) will have an overall greater capacity to detect the scent (regardless of condition) than older guests (45 and older)

The industry broadly categorizes the context of hotel visits as either business or leisure. Each context of visit brings a different type of customers who is likely to react differently to atmospheric manipulations such as scent diffusion.

As leisure travelers are typically more relaxed and discovery-oriented than time-constrained business travelers, it is expected that:

H8c) Leisure travelers will detect scent more readily than business travelers (regardless of scent condition)

RESULTS

A summary of hypotheses can also be found in Appendix G.

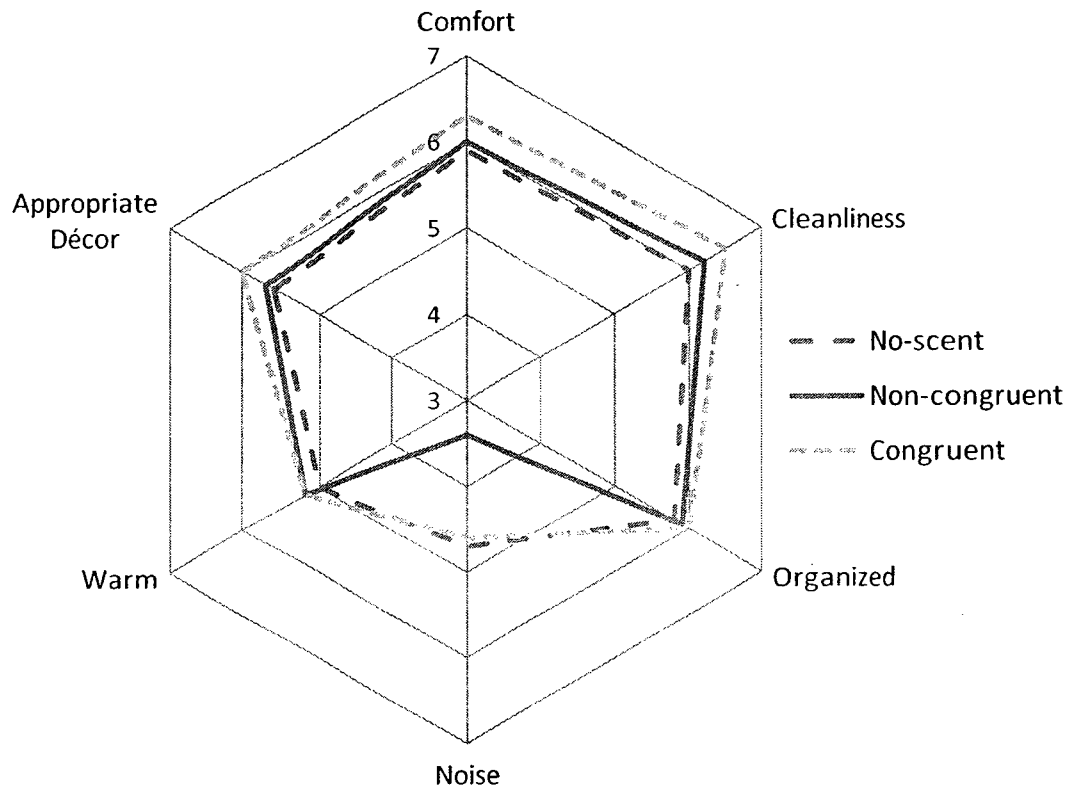
Attitudinal Responses – Perceived Lobby Quality

All hypotheses related to perceived lobby quality were not fully supported as all p values were >0.05 . However, comfort and cleanliness were shown to have significantly higher scores for the congruent scent condition than the no-scent conditions ($p=0.08$ for comfort and $p=0.05$). Therefore at $p < 0.1$, hypotheses for comfort (H1a) and cleanliness (H1c) were marginally supported. When comparing the variables in the congruent condition with the non-congruent condition, no significant results were found other than Noise being significantly high in the congruent scent condition than the non-congruent condition. Variable means appear in Table 1.1 and are illustrated through a spider graph in Figure 1.

Table 1.1: Variable Means for Perceived Lobby Quality

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Comfort	6.3	5.88	0.08	-1.8
Cleanliness	6.5	6.03	0.053	-1.97
Organized	6	5.78	0.41	-0.82
Noise	4.6	4.72	0.78	0.28
Warmth	5.23	5.03	0.53	-0.63
Appropriate décor	5.97	5.56	0.17	-1.39
	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Comfort	6.3	6	0.18	-1.36
Cleanliness	6.5	6.23	0.18	-1.37
Organized	6	5.93	0.8	-0.254
Noise	4.6	3.37	0.003	-3.1
Warmth	5.23	5.23	1	0
Appropriate décor	5.97	5.73	0.43	-0.8

Figure 1: Spider graph for Perceived Lobby Quality



Attitudinal Responses – Perceived Service Quality

Service Quality was assessed via three items (Parasuraman, Zeithaml & Berry, 1986 & 1988; Carmen (1990). Cronbach's Alpha revealed satisfactory reliability with a value of 0.829. Results revealed no significant differences between scent conditions and H2a (Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the non-congruent scent condition) and H2b (Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the no scent condition) were rejected as seen in Table 2.1.

Table 2.1: Variable Means for Perceived Service Quality

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Service Quality	5.88	5.58	0.21	-1.28
	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Service Quality	5.88	5.98	0.69	0.41

Attitudinal Responses – Perceived Scent Quality

Seven items were used in the questionnaire to test scent quality however after results were achieved and reliability tests were performed, only four of the items were deemed acceptable for statistical testing. Likeness, pleasantness, appropriateness and the level the scent is uplifting were each used for the scent quality variable.

Twenty participants of the questionnaire were able to rate the quality of the scent on 7-point scales, as these individuals were able to detect a scent. Eleven of the participants were in the non-congruent condition while nine were in the congruent scent condition. Results revealed that H3 (Hotel guests will perceive scent to be higher quality in the congruent condition than the non-congruent scent condition) was confirmed as participants in the congruent scent condition (mean = 5.14) demonstrated significantly higher scores than the non-congruent scent condition (mean = 4.23, $p < 0.05$) as seen in the table 3.1.

Table 3.1: Variable Means for Perceived Scent Quality

	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Scent Quality	5.14	4.23	0.046	-2.15

Emotional Responses – Mood

Mood was assessed using three items from Gardner's (1985) 4-item short mood scale. This scale is ideal to obtain an overall evaluation of one's mood quickly on a level that is not as in-depth as other mood scales can achieve.

Results from the mood variable however left only two of the items in the static analysis as one was not considered reliable by the Cronbach Alpha test. When testing the effect of scent on mood, only two of the items were again used from Gardner's (1985) scale due to reliability measures. Results from the independent sample t-test demonstrate no significant differences between mood ratings between conditions when 95% and 90% confidence intervals are used.

Therefore, H4a (After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the non-congruent scent condition) was and H4b (After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the no scent condition) were rejected as seen in the table 4.1.

Table 4.1: Variable Means for Mood

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Mood	5.82	6	0.58	0.55
	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Mood	5.82	5.88	0.87	0.17

Emotional Responses – Arousal

Three items were used in the questionnaire to represent arousal, however after performing the reliability test using the Cronbach Alpha, it was found only two items should be used. Results for the arousal variable showed significantly higher scores for the non-congruent condition (mean=4.18, $p<0.05$) than the congruent scent condition (mean=3.22, $p<0.05$) at the 95% confidence interval as the two-tailed value of $p=0.02$ (where equal variances are assume as Levene's test showed $p=0.14$). Therefore, the null hypothesis was rejected and H5a (Hotel guests will be more aroused in the non-congruent scent condition than the congruent scent condition) was confirmed as $p<0.05$ as seen in table 5.1.

Table 5.1: Variable Means for Arousal (Non-congruent vs. Congruent)

	Non-congruent (n=30)	Congruent (n=30)	p-value	t-value
Arousal	4.18	3.22	0.02	-2.46

The congruent condition (mean=4.18) is not significantly higher than the no scent condition (mean=3.53) at the 95% confidence interval level as the two-tailed value of $p > 0.05$. However when using a confidence interval of 90%, it is seen that the non-congruent scent has a significantly higher mean (4.18, $p < 0.1$) than the no-scent (3.53, $p < 0.1$) as $p = 0.07$ (where equal variances are assume as Levene's test showed $p = 0.75$). Therefore, H5b (Hotel guests will be more aroused in the non-congruent scent condition than the no scent condition) was marginally supported as $p < 0.1$ as seen in table 5.2.

Table 5.2: Variable Means for Arousal (Non-congruent vs. No-scent)

	Non-congruent (n=30)	No-scent (n=32)	p-value	t-value
Arousal	4.18	3.53	0.07	-1.87

No significant results were seen when comparing the means of the congruent scent and the no scent (mean=3.53) conditions as the two-tailed t-test showed that $p=0.42$, thus $H5c$ (Hotel guests will be more aroused in the congruent scent condition than the no scent condition) was rejected and $p>0.05$ and 0.1 as seen in Table 5.3.

Table 5.3: Variable Means for Arousal (Congruent vs. No-scent)

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Arousal	3.22	3.53	0.42	-0.81

Behavioral Responses – Positive Word of Mouth Intentions

Two items were used for the word of mouth intentions from Parasuraman, Zeithaml and Berry's (1988) study concerning behavioral responses in the service context. Despite the reliability analysis showing the two items used for the word of mouth intentions were reliable as the Cronbach Alpha test showed $0.93>0.7$, results were only significant for one of the items which concerned the likelihood for hotel guests to recommend. This item demonstrated significantly higher scores in the congruent scent condition (mean=6.07) than in the no scent condition (mean=5.47) when a 90% confidence interval is used as $p=0.09$ (assuming equal variances are not assumed with Levene's Test). Results were

not shown for the congruent scent in comparison to the non-congruent scent. Therefore, H6a (Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the non-congruent scent condition) and H6b (Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the no scent condition) were rejected as seen in table 6.1.

Table 6.1: Variable Means for Positive Word of Mouth Intentions

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Word of Mouth	6.02	5.53	0.15	-1.47
	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Word of Mouth	6.02	5.47	0.69	-0.41

Behavioral Responses – Repurchase Intentions (Loyalty)

Items to test loyalty involved likelihood to return to the hotel and likelihood to choose that particular hotel over other in the future. No significant results were seen among conditions when 95% or 90% confidence intervals were used as p

values were >0.1 , therefore H7a (Hotel guests will report greater likelihood of repeat purchase in the congruent scent condition than in the non-congruent scent condition) and H7b (Hotel guests will report greater likelihood of repeat purchase in the congruent scent condition than the no scent condition) was rejected as seen in table 6.2.

Table 6.2: Variable Means for Repurchase Intentions (Loyalty)

	Congruent (n=30)	No-scent (n=32)	p-value	t-value
Loyalty	5.33	5.06	0.49	-0.7
	Congruent (n=30)	Non- congruent (n=30)	p-value	t-value
Loyalty	5.33	5.42	0.83	0.22

Behavioral Responses - Scent Detection

A cross tabulation of variables was used for scent detection where the data set was limited to the two conditions where scent was present (n=60). A chi-square test, as well as the likelihood ratio test (as samples were relatively small) was conducted for the detected scent variable. Nine participants were able to detect the scent in the congruent scent condition, while eleven detected the scent

in the non-congruent condition. Gender, age and context of visit were also explored to see if they could be moderators in scent detection and the following was found.

Gender

No significant differences were seen between males and females in terms of detecting the scent when both scent conditions are combined (congruent and non-congruent) however significantly more males in the congruent scent condition were able to detect the scent (43%) than females (0%) when 95% a confidence interval was used and when considering the congruent scent only (n=30) as the Chi-square value was $p=0.19$ and the likelihood ratio was $p=0.01$. Unfortunately, this is not the expected result and H8a (Women will be more like able to detect the scent overall [regardless of condition] than men) was rejected.

Age

When grouping the non-congruent scent and congruent scent conditions into one, significantly more young participants (under the age of 45 – 43%) were able to detect the scent than old participants (45 years and older – 11%) when using a 95% confidence interval. These results were confirmed with a chi-square significance of 0.02 and a likelihood ratio of $p=0.01$. Therefore, H8b (Younger guests [under 45 of age] will have an overall greater capacity to detect [regardless of condition] than older guests [45 and older] was confirmed.

Context of Visit (Business vs. Leisure)

No significant changes were seen among business vs. leisure travelers in levels of scent detection when using both 95% and 90% confidence intervals as $p > 0.1$ both with the Chi-square and likelihood ratio tests. Therefore, H8c (Leisure travelers will detect scent more readily than business travelers [regardless of scent condition]) was rejected.

Conclusion

This chapter has looked at the statistical results of study 2. Results revealed a marginally supported effect of scent on some aspects of hotel quality (comfort and cleanliness) while no effect on perceived service quality. The final attitudinal variable tested included scent quality where the congruent scent was found to be significantly higher in quality than the non-congruent scent. Emotional responses were found involving the non-congruent scent rating higher in arousal than the congruent scent while scent did not demonstrate an effect on mood. Behaviorally, it was discovered that while no results were determined linking scent and higher word of mouth intentions or re-purchase intentions, one item (likelihood to recommend) was marginally supported in the congruent scent condition in comparison to the no scent condition. The next chapter will discuss the implications these results can have for hotel managers.

CHAPTER 7

MANAGERIAL IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Study 1 was designed to assess hotel marketers' beliefs about using scent as atmospheric variables. The trade literature reveals a growing use of ambient scent within experiential branding strategies. Yet, hotel professionals' opinion and beliefs about the use of such atmospheric elements have never been assessed. Surveying hotel managers was useful to ascertain their level of comfort and knowledge about the use of ambient scent but also to point towards managerially relevant research questions. Results of Study 1 revealed that hotel managers strongly believed that lobby quality can be affected by the use of scent and appear to have been correct in believe so based on the results of Study 2. Managers from study 1 were also correct to believe that hotel guests would favor a scent more if it is congruent with the existing environment. Hotel managers from study 1 however had mixed feelings concerning the effect of scent on ones willingness to recommend the hotel and were shown by study 2 that there is marginal support linking scent with this variable.

Study 2 provided much needed concrete evidence of the impact of scent in a naturalistic experiential field setting. Moreover, Study 2 explored the possible responses that scent can trigger in the context of a hotel lobby in an upscale metropolitan hotel part of a large international chain. The results of Study

2 offer noteworthy implications for hospitality managers interested in using ambient scent to shape guest responses. Three key implications stand out and will now be discussed: 1) Scent selection, 2) Scent detection by guests, and 3) scent diffusion methods.

SCENT SELECTION

When selecting an ambient scent for their hotel, managers must consider a variety of factors. In this section, the following key issues will be addressed.

How to Select a Scent

In addition to congruency with their desired brand positioning and image, managers should also consider guests' responses. The results of study 2 demonstrate the impact of ambient scent in influencing customers' perception of the experiential setting. A congruent scent generally produced more favorable evaluations of the lobby's cleanliness and comfort. However when managers were asked how they would go about selecting a scent (in study 1), few indicated they would even consider this variable. This illustrates the strongest managerial challenge that was uncovered from the two studies conducted which involves deciding the type of scent to be used. Many participants in study 1 indicated they would test scents in the environment before selection and some stated they would ask the opinion of loyal guests and staff. However, only two participants indicated they would select a scent that was representative of the hotel brand,

which unveils that scent research has left a major gap in how scent should be used. Fortunately, study 2 has addressed this gap and allows managers to understand the importance of using congruent scents as a tactic of experiential branding strategies.

Congruent Scent and Perceived Lobby Quality

As lobby quality was explored by testing six individual variables, much can be discussed from the results. Despite all variables not demonstrating any significant results among conditions at the 95% confidence interval level, many implications can be seen. When testing at the 90% confidence level, results for the comfort variable demonstrated that hotel guests felt more at ease in the congruent scent condition than the no scent condition, a surprising result as this indicates that a congruent scent has the power to put guests more at ease. Results for cleanliness are more surprising as neither scents had a "clean" scent that could be attributed to most citrus based cleaning supplies, yet the lobby was perceived as being cleaner in the congruent scent condition than the no-scent condition. Implications here are apparent as managers can use a congruent scent to cause their public spaces to appear cleaner and more comfortable. Therefore if cleanliness and comfort are primary goals of the hotel lobby experience, a congruent scent should be used.

Other aspects of lobby quality warrant closer examination. Although warmth and appropriateness of decor did not seem to be influenced by a

congruent ambient scent, noise was perceived as significantly lower in the non-congruent condition than the other conditions. While further research is needed to replicate and validate this finding, it may be that non-congruent scent distracts guests' attention from existing noise level (keeping in mind however that noise levels were not controlled in this field experiment

Congruent Scent and Perceived Service Quality

Favorable results concerning perceived service quality were not revealed, indicating that congruency may not be the variable of scent that should be considered when attempting to increase perceived service quality. It is possible however that as past research that uses this variable was conducted using a pleasant scent rather than congruency one. Hotel managers should use a congruent scent that is also pleasant as an attempt to increase perceived service quality. In this study, pleasantness was not tested and therefore is not able to provide the full possibility of results that scent may be able to trigger in the hotel context. Regardless, from existing research on scent, the pleasant scent induces more favorable results and managers need to ensure that the scent chosen is pleasant before confirming that it is anything else.

Congruent Scent and Perceived Scent Quality

When testing the quality of the scents chosen, difficulties were experienced, as sample sizes were low. Few participants expressed that they detected the scent; therefore few were able to rate it. Guests' inability to detect the scent may actually be in keeping with the desired understated elegance of the hotel property. However, guests who were able to detect the scent rated the congruent scent of higher quality than the non-congruent scent. Hotel managers should therefore use a congruent scent if they are interested in the guests rating the scent as higher in quality, as this could be a vital component for achieving the ultimate first impression. However this does not mean that non-congruent scents are low in quality it simply means that the congruent scents rank higher as they fit within the environment. Therefore, depending upon the goals of the managers, non-congruent or congruent scents can be used.

Congruent Scent and Arousal

In addition to considering guests perception of the lobby quality, managers should also consider guests emotional and behavioral responses when selecting a congruent scent. In study 2, guests perceived the lobby as being more arousing in the non-congruent scent condition. This is not surprising as the non-congruent scent is unexpected and can lead to more excitement and stimulation. This finding is important, as managers need to decide whether they are looking for an aroused response when using scent. In the hotel setting that was used for

this study, managers were not looking for the guest to be aroused, as their goal was to create a calm and relaxed experience with the scent. Thus, congruency needs to be considered when arousal is an emotional response that managers would like to create.

Congruent Scent and Repurchase Intentions (Loyalty)

Study 2 did not show significant results for the Repurchase Intentions (Loyalty) and Word of Mouth Intentions variables. Although the results of Study 2 with regards to scent's impact on repurchase and word of mouth intentions were somewhat inconclusive, from a managerial point of view the issue still warrants attention. One item in the Word of Mouth Intentions variable (likelihood to recommend), did that guests in the congruent condition were more likely to recommend the hotel than those in the no-scent condition. Despite the overall variable not demonstrating any findings, considering this item alone is interesting as managers in study 1 indicated mixed feelings concerning scents' ability to influence a guests' likelihood to recommend. Thus, results from this item alone bridge a gap in behavioral responses to scent and managers should therefore utilize a congruent scent when attempting to increase a guests' likelihood to recommend their hotel.

Managerial Decisions

The variables of scent that are considered in scent selection are ultimately the decision of the manager. Some managers may prefer a congruent scent to bring about a comforting response while others may choose a non-congruent scent that will lead to higher levels of guest arousal. For example, the “Nevada Sunset” scent used in the non-congruent condition in study 2 was not an appropriate fit for the hotel brand in question; however other hotels that aim to be more modern and prefer to stimulate the guest may be able to use such scents. Also, hotels may be able to use different types of scents in different areas of the hotel. This study was conducted in the lobby, the location of the hotel that surely represents the brand. Other sections of the hotel may provide a different feel or ambience where the branding is not as clear. Examples of such locations may be the spa, banquet or restaurant, which leave managers with endless opportunities to use scent even allowing them to use more than one within the hotel. Special events would also provide opportunity for diverse scents depending on the theme. For instance, responses for weddings would ideally be different from a business event, requiring different scents to be used.

Determining which path to take in terms of scent selection can be difficult and should be decided with individuals within the hotel who are familiar with the brand. Managers may then choose to go with a scent that is unlike the brand (non-congruent) or representative of the brand (congruent), depending on the goals of intended experience. Once this decision has been made, determining

the best scent can also be a challenge as managers may disagree and more than one scent may need to be tested before the best one is selected. This research has shown that once the ideal scent is chosen, whether congruent or not, favorable responses can occur, causing the process of scent selection to be well worth the effort.

SCENT DETECTION ABILITIES

Study 1 revealed that hotel managers don't believe guests would be bothered by the use of scent in the public spaces of the hotel. In Study 2, few participants were able to detect the ambient scent, regardless of congruency. This brings about a relevant managerial issue as in some cases; managers may not want guests to detect the scent while in other circumstances detection may be desirable. For those managers however who would like guests to recognize the scent by following in the footsteps of hotels such as Westin, the chosen scent can be marketed and attached to products that can be sold at the hotel.

Scent Detection and Biological Traits

Scent detection abilities vary depending on biological traits as seen in study 2. Study 1 demonstrated that hotel managers believe woman and men react differently to scent. It was shown in this study that males are more likely to detect the congruent scent and therefore scent detection should be considered when using congruent scents in the lobby environment. This conflicts with the

past research on scent however that research was conducted in the lab setting, thus explaining the difference in results. Consequently, as significant results in scent detection were only evident in the congruent condition, gender need only be considered if managers decide to use this type of scent. Regardless, it was seen that only one third of participant in the scent conditions recognized a scent, leaving managers with less issues of whether the guests is able to detect the scent.

Age is an additional variable that needs to be considered when using scent as it has been shown that older participants are not able to detect scent as well as younger ones. Again, it should be decided by managers whether scent detection is important and understanding the target demographic needs to be considered when using scent as scent may not be as useful in a hotel where an older demographic makes up the major proportion of guests.

Scent Detection and Ambient Scents

It is not surprising that neither scent was detected by many of the participants as humans have difficulty detecting if the scent is a mix of more than three individual scents (Laing & Francis, 1989). This finding is helpful for managers as many are typically concerned about using scent as they are fearful guests may be bothered by it. Results however conclude that if the scent is comprised of more than three individual scents, which is typically the make-up of an ambient scent, the brain has issues detecting it. This finding allows managers

who are interested in the scent to only be detected on a subconscious level or on a more natural front to be successful in achieving their objectives.

Scent Detection and Habituation

As seen in study 2, most hotel guests did not recognize that a scent was present, despite optimal levels of diffusion. It is understood that the brain has issues recognizing scent if it is ambient in nature, however the issue of habituation may be present here as well. If guests become familiar with the scent, it is questioned whether or not it could lose its power to initiate response. Considering some hotel managers choose a scent that will excite and stimulate the guest rather than keep them comfortable, habituation may be a real issue as constant arousal may not be possible when the same scent is present for a long period of time. This is especially true with repeat guests, as they may no longer show response to the scent if they become familiar with it. Regardless, if scents are changed frequently, the brand experience may be affected, as one scent is no longer associated with the brand. Consequently, hotel managers are left with many questions regarding habituation issues and need to consider possible dangers of habituation when using scent as part of experiential branding. Longitudinal studies should therefore be conducted, as this challenge is still evident, leaving hotel managers with the question of whether they should change the scent often.

SCENT DELIVERY

The method in which the scent is delivered is the final implication found from studies 1 and 2. The scents used in study 2 were diffused by setting the flow of air through the fan at the mid-range power level, allowing for the scent to be barely detectable without being overpowering in the existing environment. In reality, it is difficult for managers to decide appropriate levels of scent with the existing environment. This study involved a sales person of Scent Air products who returned to the hotel on a continuous basis to ensure the scents were being diffused at the appropriate levels. Without the help of such individuals, it can be difficult for managers to access the existing atmospherics such as décor or music and then choose the appropriate strength.

An additional challenge that hotel managers may face when diffusing scent into their lobby involves people tampering with the levels at which it is being dispersed. During study 2, while data collection was not taking place, front desk staff would modify the levels of the scent diffusion, causing levels to be too low or high until fixed to the appropriate level when data collection reoccurred. It can also be difficult to ensure that hotel guests do not tamper with the scent machines. It is therefore necessary that managers who use scent in their lobbies to ensure the machine is not in an area where guests are able to tamper with the settings and clarify to staff the importance of not changing the levels without guidance of someone who is able to access the environment and then decide what the optimal levels would be.

LIMITATIONS OF STUDY 2

This thesis by virtue of the chosen methodology and setting presents some noteworthy limitations. As with any studies of this nature, both Study 1 and 2 suffer from a small sample size and should eventually be conducted with a larger sample, perhaps controlling for purpose of visit (leisure vs. business) and possible age and gender of participants. Other limitations warrant an explanatory note as they relate to future research directions, which will be addressed next. First, Study 2 conducted in a large lobby of an upscale hotel, therefore limiting the ability to generalize the results. Upscale hotel are most likely evaluated by guests according to higher standards (which may well differ between leisure and business travelers) than hotels in lower price segments of the industry. Also, the use of ambient scent in locations other than the lobby within a hotel (e.g., banquet halls, gym, etc.) may not produce similar results. Secondly, analysis strategy employed in Study 2 considered attitudinal, emotional and behavioral responses separately. Using alternative analytical methods would be warranted, perhaps in line with a larger sample size. For instance, it has thus far been assumed that scents impact behavior via emotional responses. Using structural equation modeling may show linkages between scent quality, attitudinal, emotional and behavioral responses. Experiential branding is mostly concerned with creating positive emotional responses. Yet research is needed to link more formally (and empirically) stimuli (such as scent) to the entire web of responses they create along with the interrelationships between those responses.

FUTURE RESEARCH DIRECTIONS

Notwithstanding their limitations, the results of the studies in this thesis point to fruitful directions for future research. Knowledge on the impact of scent has been known for some time by aroma therapists and perfume developers, yet existing research is rarely empirical in nature and does not determine the precise impact of scent on variables that exist within the hospitality context. This study was the first step in attempting to find empirical support in linking scent with variables in the hotel, however as managers who design experiential branding need more guidance, a more thorough and comprehensive study is much needed.

As this study was the first of its kind in terms of utilizing scent in the hotel setting, it is not known whether the effect of scent would differ in lower level hotels such as the Budget or Economy sector. Although these hotels may not be interested in investing in experiential branding at this point, the competition among hotels is forcing hotels in all sectors to become more creative in obtaining market share, leaving managers to be more creative in their marketing rather than relying upon low prices alone. It is therefore imperative to conduct research in the more price focused settings to understand if the clientele is all that different from the guests in the midscale or luxury settings.

The lobby is known as the most vital point of contact to provide a positive first impression. Areas that the guest is exposed to after however can be just as

important to impress the guest. Research is therefore suggested in other areas of the hotel such as the banquet halls, restaurants, bars and rooms to understand whether congruency is as important of a variable in these settings as it is in the lobby.

Behavioral variables were limited in this study as the nature of the questionnaire only allowed the guests to respond to behavioral variables rather than measuring actions of the guests. Future research is therefore suggested to determine if scent has an effect on variables such as money spent. This is especially imperative in settings outside of the lobby where scent may affect a guest's money spent, in the restaurant, gift shop or bar.

CONCLUSION

This thesis study explored the impact that scent as an atmospheric variable can have on hotel guests' responses. These responses aid hotel managers in building the package of atmospherics that can result in experiential branding strategies. The ultimate goal of these strategies is to enhance the hotel guests' experience by making it pleasurable and memorable. Challenges were faced as field experiments can be more difficult to conduct than those in the lab setting as variables are not as controlled. Managerial implications were uncovered, causing scent to be a valuable tool, however difficult to use without guidance. As with previous studies, this thesis demonstrated that scent has incredible power to induce responses that are attitudinal, emotional and

behavioral in nature. Although some limitations are evident, findings provide an excellent platform for future research as means to guide hotel managers in branding the experience.

Author	Setting	Atmospheric	Key findings
Areni & Kim (1994)	Restaurant	Visual - Lighting	Functionality is a key component in lighting the purchasing environment
Summers & Hebert (2001)	Hardware Store and Western Apparel/Feed	Visual - Lighting	When consumers feel that proper illumination in the purchasing environment is present, they may be unconsciously persuaded to linger, thus increasing their chances of purchasing
Bellizzi & Hite (1992)	Lab	Visual - Color	Positive responses were seen with the color blue, including higher purchase intentions
Milliman (1986)	Restaurant	Aural -	Consumers purchase more when background music is in place and consumers spend more money and less time in the purchasing environment when the music is considered loud while spend more time in the store but greater amounts when the tempo is slower
Dubé & Morin (2001)	Mall	Aural - Music	If deemed pleasurable, background music can create a positive consumer response towards service quality
Garlin & Owen (2006)	None - Meta-analysis	Aural - Music	Loud music with fast tempo that is not considered pleasurable for consumers will cause longer perceived waiting time in lines
McDonnell (2007)	Bank	Aural - Music	Pleasant Music that is present when consumers are waiting in line can reduce rage and increase consumer satisfaction
Bellizzi, Crowley & Haste (1983)	Lab	Visual - Color	People are drawn to or physically attracted to warm colors, despite finding them unpleasant
Milliman (1982)	Supermarket	Aural -	Pace of in-store traffic was slower when slow tempo music was present compared to when fast tempo or no music was present. Higher Sales volume when music with slower tempo was played
Bateson & Hui (1987)	Lab	Visual - Crowding	Crowding is unpleasant while dominance is correlated with pleasure
Yaich & Spangenberg (2000)	Lab	Aural - Music	Shoppers shopped longer when music was unfamiliar

Author	Setting	Atmospheric	Key findings
Yalch & Spangenberg	Department	Aural -	Younger shoppers perceived longer periods of time when background music played while older shoppers perceived longer periods when foreground music was played
(1988)	Store	Music	
Yalch & Spangenberg	Store	Aural -	Younger males preferred foreground music more than younger females
(1993)		Music	while older females preferred background music than older males.
Areni & Kim (1993)	Wine Store	Aural - Music	Classical music resulted in higher sales volume
Hui, Dube & Chebat	Bank	Aural -	Positively valenced music (deemed pleasurable) is positively related to emotional response (mood) of waiting and music is not an environmental distraction
(1997)		Music	
Smith & Currow (1966)	Large Markets	Aural - Music	Rate of spending is higher when loud music is present
Yalch & Spangenberg	Department Store	Aural - Music	Consumers prefer foreground music over background music and purchase less impulsively when foreground music is present
(1990)			
Zemke & Shoemaker	Casino	Visual - Crowding	Increased social interaction that was also deemed as pleasant was found when the room was crowded
(2007)			

Author	Setting	Sample	Scent Used	Type of Response	Key findings
Laird (1932)	Retail store	250 housewives	Fruity, Sachet, Narcissus	Attitudinal	Link between pleasant scent and perceived quality
Mattila & Wirtz (2001)	Gift Shop	247 shoppers	Lavender and Grapefruit	Attitudinal	Adding pleasant scent and music enhances experience
Spangenberg, Sprott, & Grohmann (2005)	Lab	140 undergraduate	Christmas Scent	Attitudinal	Consistent scents with music leads to favorable evaluations
Bone & Jantranis (1992)	Lab	53 under-graduates	Cocoonut and Lemon	Attitudinal	appropriate scent leads to higher product evaluations
Lipman (1990)	Jewelry store	random	Fruity and spicy	Behaviour	Pleasant odor caused longer lingering time in a store
Chebat & Michon (2003)	Mall	592 shoppers	Citrus	Attitudinal	Link between scent and perceptions of environment
Morrin & Ratneshwar	Lab	50 under-	Rosemary, lavender, geranium and eucalyptus	Behaviour	subjects in the pleasantly scented condition exhibited superior recall of unfamiliar brands
(2000)		graduates			
Mitchell, Kahn & Knasko (1995) Study 1	Lab	77 college students	Floral and chocolate	Behaviour	Scent congruency leads to stronger
Mitchell, Kahn & Knasko (1995) Study 2	Lab	78, random sample	Floral and chocolate		decision making
McDonnell (2007)	Bank	607 bank customers	blended lavender, sage, and nutmeg	Emotional and Attitudinal	Pleasant scent = lower levels of discomfort and evaluate service experience more favorably
Morrin & Ratneshwar (2003)	Lab	90 students	Germanium, clove	Behaviour	Pleasant scent caused shoppers to spend more time in store
Spangenberg, Crowley, & Henderson (1996)	Super Market	308 undergraduate students	Lavendar, Ginger, Spearmint, Orange	Attitudinal	subjects in scented condition perceived that they had spent less time in the store
Hirsch (1995)	Casino	Slot Machine Players	Ambient Odors (unsure)	Emotional and Behavioural	Slot machine players spent more and were in better moods when one odor was present

Appendix C: Study 1 Questionnaire

* 1. I have heard about scent being used as a marketing tool in the hotel industry

- ☐ NO
- ☐ UNSURE
- ☐ YES, from where?

* 2. Please check off any scent diffusion systems that you are aware of:

- ☐ Dry Air Diffusion
- ☐ Vaporization
- ☐ Nebulization
- ☐ Scented Sticks in Oil
- ☐ None
- ☐ Other (please specify)

* 3. PLEASE INDICATE YOUR OPINION FOR EACH OF THE FOLLOWING STATEMENTS BY RATING

	Strongly Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Strongly Agree
Guests would be bothered by the use of scent in the public spaces of the hotel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guests would be bothered by the use of scent in the guest rooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If scent is present in the guest room, guests should have the ability to control it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using scent to influence consumers' responses is manipulative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumers would react negatively if they knew a hotel was trying to influence their perceptions by using scent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hotel guests would enjoy scent in hotel public spaces if the scent is appropriate to the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scent in hotel public spaces can have an impact on whether or not a guest would recommend the hotel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scent in the public spaces can make a difference on how a hotel's quality is perceived	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scent in the lobby of a hotel can make a difference on how the lobby's atmosphere is perceived	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leisure guests may respond differently to scent in public spaces than Business guests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Women may react differently to scent in hotel public spaces than men	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scent in hotel's public spaces can make customers willing to pay more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research on the effect of scent on consumers should be pursued actively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C: Study 1 Questionnaire

* 4. PLEASE CHECK THE STATEMENT THAT MOST CLOSELY REPRESENTS YOUR CURRENT SITUATION

- ☐ My hotel uses scent diffusion technologies
- ☐ I would like to learn more about scent diffusion for hotel use
- ☐ My hotel does not use scent diffusion technologies but plans on investing or researching scent diffusion technologies
- ☐ My hotel does not use scent diffusion technologies and has no plans of investing or researching scent diffusion technologies
- ☐ Other:

5. If your hotel does use scent diffusion products:

Where in the hotel do you diffuse the scent:

What type of scent diffusion system to you use:

On average, how much do you pay per month:

* 6. Who in your hotel makes the final decision of whether or not to use scent diffusion technologies ie: GM, Director of Marketing, Corporate head quarters, etc.:

7. If you had to select a scent to be used in your hotel's public spaces, how might you go about selecting the most appropriate scent?

8. Please indicate whether your hotel would be interested in partaking in a scent study, and if so, please provide email address or phone number of main decision maker or contact person

9. Please add any comments and Thank You for your participation:

Appendix D: Study 1 Results

1. I have heard about scent being used as a marketing tool in the hotel industry

	Response Percent	Response Count
NO <input type="checkbox"/>	25.0%	5
UNSURE <input type="checkbox"/>	0.0%	0
YES, from where? <input type="checkbox"/>	75.0%	15

1. Brand	Thu, Sep 24, 2009 9:01 AM
2. Basic hotel training	Wed, Sep 23, 2009 6:37 PM
3. we actually have a national supplier for this type of marketing	Wed, Sep 23, 2009 5:54 PM
4. the thing is that we use scent in many ways and areas but not as a marketing tool	Wed, Sep 23, 2009 5:38 PM
5. W hotels	Wed, Sep 23, 2009 5:23 PM
6. Marriott Full Service hotels	Wed, Sep 23, 2009 5:20 PM
7. Starwood has specially design scents for each one of their Hotel Brands. Le Meridien is one of them	Wed, Sep 23, 2009 4:39 PM
8. magazines	Wed, Sep 23, 2009 4:18 PM
9. Residence Inn information	Wed, Sep 23, 2009 3:54 PM
10. I have received some solicitation calls	Wed, Sep 23, 2009 3:31 PM
11. Have experienced it at Starwood hotels	Tue, Sep 22, 2009 4:50 PM
12. From our hotel brand	Tue, Sep 22, 2009 3:55 PM
13. W hotels	Tue, Sep 22, 2009 3:36 PM
14. We use it and have scents in our lobby and our guestrooms	Tue, Sep 22, 2009 2:43 PM
15. Ecolab and during meeting for the new restaurant concept	Mon, Sep 21, 2009 12:41 PM

2. Please check off any scent diffusion systems that you are aware of:

	Response Percent	Response Count
Dry Air Diffusion <input type="checkbox"/>	55.0%	11
Vaporization <input type="checkbox"/>	60.0%	12
Nebulization <input type="checkbox"/>	15.0%	3
Scented Sticks in Oil <input type="checkbox"/>	35.0%	7
None <input type="checkbox"/>	20.0%	4
s Other (please specify) <input type="checkbox"/>	5.0%	1





1. Ozone machines	Wed, Sep 23, 2009 6:37 PM
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3. PLEASE INDICATE YOUR OPINION FOR EACH OF THE FOLLOWING STATEMENTS BY RATING


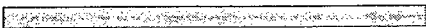
	Strongly Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Strongly Agree	Rating Average	Response Count
Guests would be bothered by the use of scent in the public spaces of the hotel	20.0% (4)	55.0% (11)	15.0% (3)	10.0% (2)	0.0% (0)	2.15	20
Guests would be bothered by the use of scent in the guest rooms	15.0% (3)	40.0% (8)	15.0% (3)	20.0% (4)	10.0% (2)	2.70	20
If scent is present in the guest room, guests should have the ability to control it	10.0% (2)	10.0% (2)	5.0% (1)	25.0% (5)	50.0% (10)	3.95	20
Using scent to influence consumers' responses is manipulative	40.0% (8)	15.0% (3)	25.0% (5)	15.0% (3)	5.0% (1)	2.30	20
Consumers would react negatively if they knew a hotel was trying to influence their perceptions by using scent	25.0% (5)	25.0% (5)	25.0% (5)	25.0% (5)	0.0% (0)	2.50	20
Hotel guests would enjoy scent in hotel public spaces if the scent is appropriate to the environment	15.0% (3)	5.0% (1)	5.0% (1)	40.0% (8)	35.0% (7)	3.75	20
Scent in hotel public spaces can have an impact on whether or not a guest would recommend the hotel	5.0% (1)	30.0% (6)	20.0% (4)	30.0% (6)	15.0% (3)	3.20	20
Scent in the public spaces can make a difference on how a hotel's quality is perceived	10.0% (2)	15.0% (3)	5.0% (1)	55.0% (11)	15.0% (3)	3.50	20
Scent in the lobby of a hotel can make a difference on how the lobby's atmosphere is perceived	15.0% (3)	0.0% (0)	0.0% (0)	65.0% (13)	20.0% (4)	3.75	20
Leisure guests may respond differently to scent in public spaces than Business guests	10.0% (2)	25.0% (5)	10.0% (2)	35.0% (7)	20.0% (4)	3.30	20
Women may react differently to scent in hotel public spaces than men	0.0% (0)	10.0% (2)	15.0% (3)	35.0% (7)	40.0% (8)	4.05	20
Scent in hotel's public spaces can make customers willing to pay more	30.0% (6)	35.0% (7)	15.0% (3)	20.0% (4)	0.0% (0)	2.25	20
Research on the effect of scent on consumers should be pursued actively	5.0% (1)	10.0% (2)	40.0% (8)	25.0% (5)	20.0% (4)	3.45	20

Appendix D: Study 1 Results

4. PLEASE CHECK THE STATEMENT THAT MOST CLOSELY REPRESENTS YOUR CURRENT SITUATION

		Response Percent	Response Count
My hotel uses scent diffusion technologies		25.0%	5
I would like to learn more about scent diffusion for hotel use		20.0%	4
My hotel does not use scent diffusion technologies but plans on investing or researching scent diffusion technologies		0.0%	0
My hotel does not use scent diffusion technologies and has no plans of investing or researching scent diffusion technologies		50.0%	10
Other:		5.0%	1

5. If your hotel does use scent diffusion products:

		Response Percent	Response Count
Where in the hotel do you diffuse the scent:		100.0%	9
1. Oasis 273 Zephair			Wed, Sep 23, 2009 6:37 PM
2. rooms			Wed, Sep 23, 2009 6:54 PM
3. public washrooms, gym			Wed, Sep 23, 2009 5:38 PM
4. Entrance, lobby, elevators			Wed, Sep 23, 2009 4:39 PM
5. in the hotel corridors			Wed, Sep 23, 2009 4:18 PM
6. lobby			Tue, Sep 22, 2009 3:57 PM
7. lobby and guestrooms			Tue, Sep 22, 2009 2:43 PM
8. bathroom			Mon, Sep 21, 2009 5:59 PM
9. Public bathroom			Mon, Sep 21, 2009 12:41 PM
What type of scent diffusion system to you use:		77.8%	7

Appendix D: Study 1 Results

1. Liquid form	Wed, Sep 23, 2009 6:37 PM
2. vaporization	Wed, Sep 23, 2009 5:54 PM
3. Dry air	Wed, Sep 23, 2009 4:39 PM
4. ?	Tue, Sep 22, 2009 3:57 PM
5. spray in guestrooms and diffuser in lobby	Tue, Sep 22, 2009 2:43 PM
6. unknown	Mon, Sep 21, 2009 5:59 PM
7. Automatic vaporization	Mon, Sep 21, 2009 12:41 PM

On average, how
much do you pay
per month:



66.7%

6

1. Not sure I don't use often	Wed, Sep 23, 2009 6:37 PM
2. n/a at this time -	Wed, Sep 23, 2009 5:54 PM
3. unknow	Wed, Sep 23, 2009 4:39 PM
4. cannot respond	Tue, Sep 22, 2009 3:57 PM
5. unknown	Mon, Sep 21, 2009 5:59 PM
6. 200	Mon, Sep 21, 2009 12:41 PM

Appendix D: Study 1 Results

6. Who in your hotel makes the final decision of whether or not to use scent diffusion technologies ie: GM, Director of Marketing, Corporate head quarters, etc.:

1. GM	Thu, Sep 24, 2009 9:01 AM
2. Corporate head office and GM	Wed, Sep 23, 2009 6:37 PM
3. GM	Wed, Sep 23, 2009 5:54 PM
4. gm	Wed, Sep 23, 2009 5:38 PM
5. GM and Director of Sales and Marketing	Wed, Sep 23, 2009 5:23 PM
6. Corporate headquarters	Wed, Sep 23, 2009 5:20 PM
7. Corporate head quarters	Wed, Sep 23, 2009 4:39 PM
8. our hotel is currently closed for renovations	Wed, Sep 23, 2009 4:18 PM
9. GM - brand standards, environmental policy	Wed, Sep 23, 2009 3:54 PM
10. Director of Marketing	Wed, Sep 23, 2009 3:35 PM
11. Executive Committee	Wed, Sep 23, 2009 3:31 PM
12. Corporate	Tue, Sep 22, 2009 4:50 PM
13. General Manager	Tue, Sep 22, 2009 3:57 PM
14. Corporate head quarters	Tue, Sep 22, 2009 3:55 PM
15. GM and Director of Marketing	Tue, Sep 22, 2009 3:36 PM
16. GM	Tue, Sep 22, 2009 2:43 PM
17. GM	Tue, Sep 22, 2009 1:43 PM
18. GM and Director of Marketing	Tue, Sep 22, 2009 10:06 AM
19. GM	Mon, Sep 21, 2009 5:59 PM
20. GM	Mon, Sep 21, 2009 12:41 PM

Appendix D: Study 1 Results

7. If you had to select a scent to be used in your hotel's public spaces, how might you go about selecting the most appropriate scent?

1. Brand specific	Thu, Sep 24, 2009 9:01 AM
2. I would choose an air neutralizer instead of a scent	Wed, Sep 23, 2009 6:37 PM
3. natural plants and flowers	Wed, Sep 23, 2009 5:54 PM
4. Expertise for the company	Wed, Sep 23, 2009 5:20 PM
5. Testing various scents available.	Wed, Sep 23, 2009 3:54 PM
6. By finding what scent is best for what reasons.	Wed, Sep 23, 2009 3:35 PM
7. I would sample different kind of scent and try to identify the one that would suit our environment best	Tue, Sep 22, 2009 4:50 PM
8. I would try various scents and involve our clientele for their feed back	Tue, Sep 22, 2009 3:57 PM
9. One that adheres to the brand standards	Tue, Sep 22, 2009 3:55 PM
10. trails, focus groups	Tue, Sep 22, 2009 3:36 PM
11. tests and survey	Tue, Sep 22, 2009 2:43 PM
12. n/a	Tue, Sep 22, 2009 1:43 PM
13. Probably would look into existing surveys - would go for Neutral - Lemony or forest scent	Tue, Sep 22, 2009 10:06 AM
14. ask colleagues for their opinion	Mon, Sep 21, 2009 5:59 PM
15. ASK opinion of staff and regular guests	Mon, Sep 21, 2009 12:41 PM

8. Please indicate whether your hotel would be interested in partaking in a scent study, [Download](#) and if so, please provide email address or phone number of main decision maker or contact person

1. No	Thu, Sep 24, 2009 9:01 AM
2. No thank you	Wed, Sep 23, 2009 6:37 PM
3. no	Wed, Sep 23, 2009 5:54 PM
4. yes me	Wed, Sep 23, 2009 5:38 PM
5. no	Wed, Sep 23, 2009 5:23 PM
6. no	Wed, Sep 23, 2009 4:39 PM
7. maybe when the hotel reopens	Wed, Sep 23, 2009 4:18 PM
8. Yes, Michael Banks. Director of Marketing	Wed, Sep 23, 2009 3:35 PM
9. mbouchard@deltahotels.com	Tue, Sep 22, 2009 4:50 PM
10. This is not my decision - see number 6	Tue, Sep 22, 2009 3:57 PM
11. No thank you	Tue, Sep 22, 2009 3:55 PM
12. clevesque@opushotel.com	Tue, Sep 22, 2009 3:36 PM
13. no thanks	Tue, Sep 22, 2009 2:43 PM
14. melfassy@lenouvelhotel.com	Tue, Sep 22, 2009 10:06 AM
15. n/a	Mon, Sep 21, 2009 5:59 PM

Appendix D: Study 1 Results

9. Please add any comments and Thank You for your participation:

- | | |
|---|----------------------------|
| 1. The scent of a room or public space sets the standard of the room | Wed, Sep 23, 2009 6:37 PM |
| 2. very interesting survey , | Wed, Sep 23, 2009 5:54 PM |
| 3. We do not use scents as it would contradict our enviromental policies. | Wed, Sep 23, 2009 3:54 PM |
| 4. Good luck! | Tue, Sep 22, 2009 3:36 PM |
| 5. Interesting concept. | Tue, Sep 22, 2009 10:06 AM |
| 6. n/a | Mon, Sep 21, 2009 5:59 PM |



This questionnaire concerns your experience in the lobby at Fairmont The Queen Elizabeth. This study is being conducted in collaboration with Dr. Jordan LeBel from Concordia University's John Molson School of Business. By completing this questionnaire you agree to participate in the study. Your participation is voluntary and your answers will be entirely anonymous. You may stop filling out the questionnaire at any time. Should you have any questions or concerns, contact Dr. LeBel at llebel@msb.concordia.ca. Thank you for your participation!

The main purpose of my trip is: ☐ Business ☐ Leisure ☐ Other

How many nights have you stayed so far at the hotel?

- ☐ Checked in today ☐ 1 night ☐ 2 nights
☐ 2+ nights ☐ Not staying/ Not applicable

Mood Evaluation

For each statement on the left hand side, please circle the number that best describes how you feel at this very moment:

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
Currently, I am in a good mood		1	2	3	4	5	6	7	
At this moment, I feel "edgy" or irritable		1	2	3	4	5	6	7	
For some reason, I am not 'very' comfortable		1	2	3	4	5	6	7	

How would you describe your first impression of the lobby?



Please circle the number that best describes your opinion

The atmosphere of the lobby is:

Calm	1	2	3	4	5	6	7	Exciting
Relaxing	1	2	3	4	5	6	7	Stimulating
Dull	1	2	3	4	5	6	7	Interesting

The Lobby...

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
Is comfortable		1	2	3	4	5	6	7	
Is clean		1	2	3	4	5	6	7	
Is organized		1	2	3	4	5	6	7	
Is noisy		1	2	3	4	5	6	7	
Is warm		1	2	3	4	5	6	7	
Has employees who dress well/ appear neat		1	2	3	4	5	6	7	
Has caring employees		1	2	3	4	5	6	7	
Has employees who provide prompt service		1	2	3	4	5	6	7	
Has appropriate décor		1	2	3	4	5	6	7	

What do you think about the design and décor of the lobby?

How likely would you be to recommend this hotel to friends and/or colleagues?

Very Unlikely	1	2	3	4	5	6	7	Very Likely
---------------	---	---	---	---	---	---	---	-------------

I will say positive things about this hotel to other people

Strongly disagree	1	2	3	4	5	6	7	Strongly Agree
-------------------	---	---	---	---	---	---	---	----------------

How likely might you be to return to this hotel?

Very Unlikely	1	2	3	4	5	6	7	Very Likely
---------------	---	---	---	---	---	---	---	-------------

I will choose this hotel over others in the future

Strongly disagree	1	2	3	4	5	6	7	Strongly Agree
-------------------	---	---	---	---	---	---	---	----------------

Have you detected a particular scent in the lobby so far?

☐ Yes ☐ No ☐ Not sure

If yes, what does the scent remind you of?

Please evaluate the scent if you are now able to detect it in the lobby:

I dislike it	1	2	3	4	5	6	7	I like it
Pleasant	1	2	3	4	5	6	7	Unpleasant
Not appropriate for the lobby	1	2	3	4	5	6	7	Appropriate for the lobby
Good fit for our brand	1	2	3	4	5	6	7	Bad fit for our brand
Classy	1	2	3	4	5	6	7	Not classy
Conservative	1	2	3	4	5	6	7	Modern
Not Uplifting	1	2	3	4	5	6	7	Uplifting

Please indicate your gender: ☐ Male ☐ Female

Please indicate your age:

☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+

Please indicate how many nights you stay at a hotel per year:

☐ 0-9 nights ☐ 10-19 nights ☐ 20-29 nights ☐ 30-39 nights ☐ 40+ nights

Please provide any additional feedback concerning the lobby:

Thank you for your participation!



Cette questionnaire est à propos de votre expérience dans le foyer de cette hôtel. Ce sondage est fait en collaboration avec le Dr. Jordan Lebel de l'école d'affaires de l'Université Concordia. En complétant ce sondage, vous indiquez que vous désirez participer à cette étude. Votre participation est entièrement volontaire et vos réponses resteront anonymes. Vous pouvez cesser de répondre quand vous voulez. Si vous avez des questions, veuillez contacter Dr. Lebel à jlebel@jmb.concordia.ca. Merci pour votre participation!

Vous travaillez pour: ☐ Affaires ☐ Plaisir ☐ Autre

Combien de nuits avez-vous déjà resté à cet hôtel?

- ☐ Présenté aujourd'hui ☐ 1 nuit ☐ 2 nuits
☐ 2+ nuits ☐ Je ne reste pas

Évaluation d'humeur

Pour chaque énoncé à gauche, veuillez encercler le numéro qui indique le mieux ce que vous ressentez à ce moment.

	Pas d'accord du tout							Vraiment d'accord
Je suis de bonne humeur	1	2	3	4	5	6	7	
Je me sens nerveux ou irrité	1	2	3	4	5	6	7	
Je ne me sens pas confortable	1	2	3	4	5	6	7	

Comment décrivez-vous votre première impression du foyer?

Veillez encadrer le numéro qui exprime votre opinion

L'ambiance du foyer est:

Calm	1	2	3	4	5	6	7	Excitante
Relaxante	1	2	3	4	5	6	7	Stimulante
Ennuyante	1	2	3	4	5	6	7	Intéressante

Le foyer...

			Pas d'accord du tout					Vraiment d'accord
Est confortable	1	2	3	4	5	6	7	
Est propre	1	2	3	4	5	6	7	
Est bien organisé	1	2	3	4	5	6	7	
Est bruyant	1	2	3	4	5	6	7	
Est chaleureux	1	2	3	4	5	6	7	
A des employés soignés	1	2	3	4	5	6	7	
A des employés qui se soucient des clients	1	2	3	4	5	6	7	
A des employés efficaces	1	2	3	4	5	6	7	
A un décor approprié	1	2	3	4	5	6	7	

Que pensez-vous du plan et du décor du foyer?

Recommanderiez-vous cet hôtel à un ami ou un collègue?

Pas du tout	1	2	3	4	5	6	7	Absolument
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J'aurais de bonnes choses à dire à propos de cet hôtel

Pas du tout	1	2	3	4	5	6	7	Absolument
-------------	---	---	---	---	---	---	---	------------

Je retournerai à cet hôtel

Pas du tout	1	2	3	4	5	6	7	Absolument
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Je choisirai cet hôtel parmi d'autres

Pas du tout	1	2	3	4	5	6	7	Absolument
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Avez-vous perçu un arôme particulier dans le foyer?

☐ Oui ☐ Non ☐ Pas sûr

Si oui, à quoi cet arôme vous fait vous penser?

Veillez évaluer l'arôme si vous le percevez maintenant dans le foyer

Je l'aime	1	2	3	4	5	6	7	Je ne l'aime pas
Agreable	1	2	3	4	5	6	7	Désagréable
Pas approprié pour le foyer	1	2	3	4	5	6	7	Approprié pour le foyer
Ça bien avec notre marque	1	2	3	4	5	6	7	Ne va pas bien avec notre marque
Chic	1	2	3	4	5	6	7	Fait chic
Traditionnel	1	2	3	4	5	6	7	Moderne
Édifiant	1	2	3	4	5	6	7	Pas édifiant

Veillez indiquer votre sexe:

☐ Homme ☐ Femme

Veillez indiquer votre âge:

☐ 18-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65-

Veillez indiquer combien de nuits vous passez dans un hôtel chaque année

☐ 0-9 nuits ☐ 10-19 nuits ☐ 20-29 nuits ☐ 30-39 nuits ☐ 40+ nuits

Veillez nous faire part de tous autres commentaires que vous auriez à propos du foyer

Nous vous remercions de votre participation!

Appendix G: Summary of Hypotheses

Hypothesis	Confirmed ($p \leq 0.05$), Marginally supported ($0.05 < p \leq 0.1$) or Rejected ($0.1 < p$)
H1a) Hotel guests will be more comfortable in the congruent scent condition than the no-scent condition	Marginally supported
H1b) Hotel guests will be more comfortable in the congruent scent condition than the non-congruent scent condition	Rejected
H1c) Hotel guests will perceive the lobby as being cleaner in the congruent scent condition than in the no-scent condition	Marginally supported
H1d) Hotel guests will perceive the lobby as being cleaner in the congruent scent condition than in the non-congruent scent condition	Rejected
H1e) Hotel guests will perceive the lobby as being better organized in the congruent scent condition than in the no-scent condition	Rejected
H1f) Hotel guests will perceive the lobby as being better organized in the congruent scent condition than in the non-congruent scent condition	Rejected
H1g) Hotel guests will perceive the lobby as being less noisy in the congruent scent condition than in the no-scent condition	Rejected

Hypothesis	Confirmed ($p \leq 0.05$), Marginally supported ($0.05 < p \leq 0.1$) or Rejected ($0.1 < p$)
H1h) Hotel guests will perceive the lobby as being less noisy in the congruent scent condition than in the non-congruent scent condition	Rejected
H1i) Hotel guests will perceive the lobby as being warmer in the congruent scent condition than in the no-scent condition	Rejected
H1j) Hotel guests will perceive the lobby as being warmer in the congruent scent condition than in the non-congruent scent condition	Rejected
H1k) Hotel guests will perceive the lobby as having a more appropriate décor in the congruent scent condition than in the no-scent condition	Rejected
H1l) Hotel guests will perceive the lobby as having a more appropriate décor in the congruent scent condition than in the non-congruent scent condition	Rejected
H2a) Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the non-congruent scent condition	Rejected
H2b) Hotel guests will evaluate service quality more favorably in the congruent scent condition than in the no-scent condition	Rejected

Hypothesis	Confirmed ($p \leq 0.05$), Marginally supported ($0.05 < p \leq 0.1$) or Rejected ($0.1 < p$)
H3) Hotel guests will perceive scent to be of higher quality in the congruent scent condition than the non-congruent scent condition	Confirmed
H4a) After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the non-congruent scent condition	Rejected
H4b) After being exposed to the ambient scents, guests' mood will be more positive in the congruent scent condition than the no-scent condition	Rejected
H5a) Hotel guests will be more aroused in the non-congruent scent condition than the congruent scent condition	Confirmed
H5b) Hotel guests will be more aroused in the non-congruent scent condition than the no scent condition	Marginally Supported
H5c) Hotel guests will be more aroused in the congruent scent condition than the no scent condition	Rejected
H6a) Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the non-congruent scent condition	Rejected

Hypothesis	Confirmed ($p \leq 0.05$), Marginally supported ($0.05 < p \leq 0.1$) or Rejected ($0.1 < p$)
H6b) Hotel guests will report a higher likelihood of positive word of mouth intentions in the congruent scent condition than the no scent condition	Rejected
H7a) Hotel guests will a report greater likelihood of repeat purchase in the congruent scent condition than in the non-congruent scent condition	Rejected
H7b) Hotel guests will a report greater likelihood of repeat purchase in the congruent scent condition than no scent condition	Rejected
H8a) Women will be more likely able to detect the scent overall (regardless of condition) than men	Rejected
H8b) Younger guests (under 45 of age) will have an overall greater capacity to detect the scent (regardless of condition) than older guests (45 and older)	Confirmed
H8c) Leisure travelers will detect scent more readily than business travelers (regardless of scent condition)	Rejected

References

- Aftel, M. (2001). *Essence & alchemy: A natural history of perfume*. New York, North Point Press.
- Areni, C. & Kim, D. (1994). The influence of in-store lighting on consumers' examination of merchandise in a wine store. *Journal of Business Research*, 11(2), 117-125.
- Areni, C. & Kim, D. (1993). The influence of background music on shopping behavior: Classical versus top-40 music in a wine store, in McAlister, L., Rothschild, M.L. (Eds), *Advances in Consumer Research*, Association for Consumer Research, Provo, UT, 20, 336-40.
- Baker, J., Levy, M. & Grewel, D. (1992). An experimental approach to making retail store environmental decisions, *Journal of Retailing*, 68, 445-60.
- Barsky, J. & Nash, L. (2002). Evoking emotion: Affective keys to hotel loyalty. *Cornell Hotel and Restaurant Administration Quarterly*, February, 39-46.
- Bateson, J. & Hui, M. (1987). A Model for crowding in the service experience: Empirical findings. In: John C. Czepiel et al. *The Service Encounter: Integrating for Competitive Advantage*, American Marketing Association, Chicago, 85-90.
- Bellizzi J.A., Crowley A.E. & Hasty R.W. (1983). The effects of color in store design. *Journal of Retailing*, 59(Spring), 21-45.
- Bellizzi, J.A. & Hite, R.E. (1992). Environmental color, consumer feelings and purchase likelihood. *Psychology Marketing*, 9(5), 347-363.
- Berman, B. & Evans, J. (1995). *Retail management: A strategic approach*. 6th Edition, Prentice-Hall, Inc., Englewood Cliffs, NJ.
- Bojanic, D. (2008). Hospitality marketing mix. Chapter 3, *Handbook of Hospitality Marketing Management*. Elsevier Ltd., Burlington, MA.
- Bone, P. F. & Jantrania, S. (1992). Olfaction as a cue for product quality. *Marketing Letters*, 3(3), 289-296.
- Booms, B. H. & Bitner, M. J. (1982). Marketing services by managing the environment. *Cornell Hotel and Restaurant Quarterly*, 23(1), 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(3), 52-68.
- Brown, T., Barry, T., Dacin, P., & Gunst, R. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33(2), 123-138.
- Cain-Smith, P. & Curnow, R. (1966). Arousal hypothesis and the effects of music on purchasing behavior. *Journal of Applied Psychology*, 50, 255-256.
- Carbone, L., P. & Haeckel, S.H. (1994). Engineering customer experiences. *Marketing Management*, 3(3), 8-19.
- Carmen, J.M. (1990). Consumer perceptions of service quality: An assessment of the servqual dimensions. *Journal of Retailing*, 66(1), 33-55.
- Chebat, J.C., Chebat, C. & Vaillant, D. (2001). Environmental background music and in-store selling. *Journal of Business Research*, 54, 115-123.
- Chebat, J.C & Michon, R. (2003). Impact of ambient odors on mall shoppers' emotions, cognition, and spending: A test of competitive causal theories. *Journal of Business Research*, 56(7), 529-539.
- Choi, T. Y. & Chu, R. (2001). Determinants of hotel guests' satisfaction and repeat patronage in the hong kong hotel industry. *International Journal of Hospitality Management*, 20(3), 277-297.
- Dembling, S. (2005). What the dr. ordered: Dr. smell. *Sky Magazine*, October, 102-105.
- Dev. C. (1990). Marketing practices of hotel chains. *Cornell Hotel and Restaurant Administration Quarterly*, 31(3), 54-63.
- Dewey, J. (1934). *Art as Experience*. Minton, Balch & Company.
- Donovan, R. & Rossiter, J.R. (1982). Store Atmosphere: An Environmental Psychology Approach. *Journal of Retailing*, 58(1), 34-57.
- Donovan, R., Rossiter, J., Marcoolyn, G. & Nesdale, A. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283-294.
- Dubé, L., Chebat, J.C. & Morin. (1995). The effects of background music on consumers' desire to affiliate in buyer-seller interactions. *Psychology and Marketing*, 12(2), 305-319.

- Dube, L. & LeBel, J. (2002). The content and structure of laypeople's concept of pleasure. *Cognition and Emotion*, 16, 1-34.
- Dubé, L., LeBel, J. & Sears, D. (2003). From customer value to engineering pleasurable experiences. *Cornell Hotel and Restaurant Administration Quarterly*, 44, 124-130.
- Dubé, L. & Morin, S. (2001). Background music pleasure and store evaluation: Intensity effects and psychological mechanisms. *Journal of Business Research*, 54(2), 107-113.
- Gardner, M. & Hill, R. (1988). Consumers' mood states: Antecedents and consequences of experiential versus informational strategies for brand choice. *Psychology and Marketing*, 5(2), 169-182.
- Garlin, F. & Owen, K. (2006). Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. *Journal of Business Research*, 59, 755-764.
- 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.
- Grewal, D. & Baker, J. (1994). Do retail store environmental factors affect consumers' price acceptability? An empirical examination. *International Journal of Research in Marketing*, 11(2), 107-115.
- Grewal, D. Levy, M. & Kumar, V. (2009). Customer experience management in retailing. An organizing framework. *Journal of Retailing*, 85(1), 1-14.
- Grossbart, S., Mittelstaedt, R., Curtis, W., & Rogers, R. (1975). Environmental sensitivity and shopping behavior. *Journal of Business Research*, 3(4), 281-294.
- Gulas, C. S. & Bloch, P. H. (1995). Right under our noses: Ambient scent and consumer responses. *Journal of Business and Psychology*, 10, 87-98.
- Haviland-Jones, J. (2005). *Fragrance: Emotion, sensuality and relationships*. Sense of Smell Institute, November.
- Heide, M., Lærdal, K. & Grønhaug, K. (2007). The design and management of ambience – Implications for hotel architecture and service. *Tourism Management*, 28(5), 1315-1325.

- Herz, R.S. (2002). Influences of odors on mood and affective cognition. In C. Rouby & B. Schaal (Eds.). *Olfaction, Taste, and Cognition*. 160-177. Cambridge University Press, New York NY.
- Higgins, E.T. (1997). Beyond Pleasure and Pain. *American Psychologist*, 52(12), 1280-1300.
- Hirsch, A. (1995). Effects of ambient odors on slot-Machine usage in a las vegas casino. *Psychology and Marketing*, 12(October), 585-594.
- Hui, M.K., Dube, L. & Chebat, J.C. (1997). The impact of music on consumers' reactions to waiting for services. *Journal of Retailing*, 73, 87-104.
- Interbrand Forum, 2002. *Uncommon Practice: People who deliver a great brand experience*. London: Prentice Hall/Financial Times.
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(Winter), 48-61.
- Laing, D. G. & G. W. Francis, (1989). The capacity of humans to identify odors in mixtures. *Physiology and Behavior*, 46(5), 809-814.
- Laird, D. A. (1932). How the consumers estimate quality by subconscious sensory impressions: With special reference to the role of smell. *Journal of Applied Psychology*, June, 241-246.
- Laird, D. A. (1935). What can you do with your nose? *The Scientific Monthly*, 41, 126-130.
- LaSalle, D. & Britton, T. (2003). *Priceless: Turning ordinary products into extraordinary experiences*. Harvard Business School Press, Cambridge MA.
- LeBel, J., Dubé, L., Sears, D. & Renaghan, L. (2010). Strategic experiential branding in the hospitality industry. Featured Chapter, *Cornell Handbook of Applied Hospitality Strategy*. Nelson Education Lt., Sage Publications.
- Lenderman, M. (2005). *Experience the Message*. Toronto: M & S.
- Leslie, D. & McAleenan, M. (1990). Marketing hotels, tourism and northern ireland. *Tourism Management*, 11(1), 6-10.
- Lindstrom, M. (2005). *Brand sense*. New York: The Free Press.
- Lipman, J. (1990). Scents that encourage buying couldn't smell sweeter to stores. *The Wall Street Journal*, January 9, b5.

- Mattila, A. S. & Wirtz, J. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. *Journal of Retailing*, 77(2), 273-289.
- McCarthy, E.J. (1975). *Basic marketing: A managerial approach*. Fifth edition, Richard D. Irwin, Inc., 37.
- McDonnell, J. (2007). Music, scent and time preferences for waiting lines. *International Journal of Bank Marketing*, 25, 223-237.
- Mehrabian, A. & Russell, J.A. (1974). *An approach to environmental psychology*. Cambridge MA, The MIT Press.
- Meidan, A. & Lee, B. (1982). Marketing strategies for hotels. *International Journal of Hospitality Management*, 1(3), 169-177.
- Michon, R., Chebat, J.C. & Turley, L.W. (2005). Mall atmospherics: the interaction effects of the mall environment on shopping behavior. *Journal of Business Research*, 58(5), 576-583.
- Milliman, R. (1982). Using background music to affect the behavior of supermarket shoppers. *Journal of Marketing*, 46, 86-91.
- Milliman, R. (1986). The influence of background music on the behavior of restaurant patrons. *Journal of Consumer Research*, 13(3), 286-289.
- Mitchell, D. J., Kahn, B. E. & Knasko, S.C. (1995). There's something in the air: Effects of congruent or incongruent ambient odor on consumer decision making. *Journal of Consumer Research*, 22, 229-238.
- Morrin, M. & Ratneshwar, S. (2000). The impact of ambient scent on evaluation, attention, and memory for familiar and unfamiliar brands. *Journal of Business Research*, 49, 157-165.
- Nasution, H. & Mavondo, F. (2008). Customer value in the hotel industry: What managers believe they deliver and what customer experience. *International Journal of Hospitality Management*, 27(2), 204-213.
- Parasuraman, A., Zeithaml, V.A. & Berry. (1988). Servqual: A multiple-item scale for measuring customer perceptions of service quality. *Marketing Science Institute*, 86-108, Cambridge MA.
- Parasuraman, A., Zeithaml, V.A. & Berry. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60, 31-46.

- Peterson, R. A. & Sauber, M. (1983). A mood scale for survey research. AMA educators' proceedings, American Marketing Association, 409-414, Chicago IL.
- Pine, J. & Gilmore, J. (1999). The experience economy. Harvard Business School Press, Boston MA.
- Rétiveau, A.N., Chambers IV, E. & Milliken, G.A. (2004). Common and specific effects of fine fragrances on the mood of women. *Journal of Sensory Studies*, 19(5), 373-304.
- Renaghan, L. M. (1981). A new marketing mix for the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, 22(August), 31-36.
- Schmitt, B. H. (1999). *Experiential Marketing*, J. Wiley & Sons, New York NY.
- Schiffman, S.S., Sattely-Miller, E.A., Suggs, M.S. & Graham, B.G. (1995). The effect of pleasant odors and hormone status on mood of women at mid-life. *Brain Research Bulletin*, 36, 19-29.
- Shedroff, N. (2001). *Experience design 1*. New Riders. Indianapolis IN.
- Smith, P. & Curnow, R. (1966). Arousal hypothesis and the effects of music on purchasing behavior. *Journal of Applied Psychology*, 50(3), 255-256.
- 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), 67-80.
- Spangenberg, E. R., Grohmann, B. & Sprott, D. E. (2005). It's beginning to smell (and sound) a lot like christmas: The interactive effects of ambient scent and music in a retail setting. *Journal of Business Research*, 58(11), 1583-1589.
- Spangenberg, E. R., Sprott, D. E., Grohmann, B. & Tracy, D. L. (2006). Gender-congruent ambient scent influences on approach and avoidance behaviors in a retail store. *Journal of Business Research*, 59(12), 1281-1287.
- Stokols, D. (1978). Environmental psychology. *Annual Review of Psychology*, 29, 253-95.
- Stroebele, N. & De Castro, J. M. (2004). Effect of ambience on food intake and food choice. *Nutrition*, 20(9), 821-838.
- Summers, T. A. & Hebert, P. R. (2001). Shedding some light on store atmospherics: Influence of illumination on consumer behavior. *Journal of Business Research*, 54(2), 145-150.

- Tsai, S-P. (2005). Integrated marketing as management of holistic consumer experience. *Business Horizons*, 48, 431-441.
- Turley, L. W. & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: A review of the experimental evidence. *Journal of Business Research*, 49, 193-211.
- Van Boven, L. & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology*, 85(6), 1193-1202.
- Wakefield, K. & Blodgett, J. (1994). The Importance of service-scapes in leisure service settings. *Journal of Services Marketing*, 8(4), 66-76.
- Wilkie M. (1995). Scent of a market. *American Demographics*, 17(8) 40-47.
- Wysocki, C. & Gilbert, A. (1989). National geographic smell survey: Effects of age are heterogeneous. *Annals of the New York Academy of Sciences*, 561, 12-28.
- Yalch, R. & Spangenberg, E. (1990). Effects of store music on shopping behavior. *Journal of Services Marketing*, 1, 31-9.
- Yalch, R., & Spangenberg, E. (1988). An environmental psychological study of foreground and background music as retail atmospheric factors. *AMA Educators' Conference Proceedings*, Alf W. Walle, ed., American Marketing Association, 54, 106-110, Chicago IL.
- Yalch, R. & Spangenberg, E., (1993). Using store music for retail zoning: A field experiment. In: McAlister, Leigh and Rothschild, Michael L., Editors, 1993. *Advances in Consumer Research*, Association for Consumer Research, 20, 632-636, Provo UT.
- Yalch, R. & Spangenberg, E. (2000). The effects of music in a retail setting on real and perceived shopping times. *Journal of Business Research*, 49(2), 139-147.
- Zellner, D., Bartoni, A. & Eckard, R. (1991). Influence of color on odor identification and liking ratings. *American Journal of Psychology*, 104(4), 547-561.
- Zemke, D. M. V. & Shoemaker, S. (2007). Scent across a crowded room: Exploring the effect of ambient scent on social interactions. *International Journal of Hospitality Management*, 26(4), 927-940.