The Influence of Mood on Consumers

In the Relation between Store Atmospherics and Product Evaluations

Bachelor Thesis Marketing 2009/2010

<u>Revised</u>

Supervisor: Dr. D. Lerouge

Student: Tijs Berens s442775

Word count: 7.261

Table of contents

Abstract

This paper investigates the unconscious influences of store atmosphere on consumer behavior via the concept of mood.

Previous investigations have studied several areas on this topic, but there is a lack of research on integration of several store atmospherics. Therefore, this thesis presents an overview of different ways to describe the relation between store atmosphere and product evaluations, via positive and via negative mood. Besides, this paper presents an outline of two significant environmental cues.

A distinction between positive and negative influences of mood on the relation between store atmosphere and consumer behavior has been made. In this thesis the focus is on the mediating effect of mood on the relation between store atmospherics and product evaluations.

Then two environmental cues have been investigated, namely music and color and lighting (combined). Their effects on store atmosphere, via mood changes, on eventual customer behavior have been examined.

Chapter 1: Introduction

Probably every single person shops in the grocery store regularly. We, as consumers, often have a shopping cart full of products. However, if you ask every single consumer why they have picked that specific cheese or bread they will find lots of difficulties in motivating the choices they have made. Many of their choices are being influenced by unconscious factors coming from the environment.

Imagine yourself in a specific supermarket in your neighborhood, choosing the brand of wine you are about to offer to your friends who are coming over that night. In the supermarket the amount of consumers is moderate, the floor is very clean and the wine division is very extensive. One of Johann Sebastian Bach's masterpieces is smoothly being played through the speakers of the supermarket while you are about to make a choice between the cheap supermarket's private label wine and the less affordable bottle of French Cabernet Sauvignon. All these factors seem to influence your mood in a positive way. After short deliberation and inspired by the classical song played on the background you decide to pick the more expensive Cabernet. Is this choice predestined or did the positive product environment in the store have had an important influence on the eventual product choice of you as a consumer?

§ 1.1. Background

In previous researches on the effect of product environment on purchase intentions it seemed to be that the atmosphere in a store unconsciously could have a major influence on consumer behavior because it influences consumers' mood (Bitner, 1986; Rappoport, 1982; Wheatly and Chiu, 1977).

Dijksterhuis, Smith, van Baaren and Wigboldus (2005) argued that "consumer behavior is often strongly influenced by subtle environmental cues". But what are the exact effects of the product environment on consumers in an unconscious thinking mode regarding their product decisions? North and Hargreaves did a lot of research on the effect of music on product choice and they concluded that music might influence product choice (North and Hargreaves, 1998). Two other researchers on this topic concluded that classical music unconsciously reinforces the consumer to buy a more expensive wine than top-40 music (Areni and Kim, 1993). This investigation resulted in the assumption

that the behavior of buying more expensive wine better fits the classical style of music (North and Hargreaves, 1998). Do volume and the amount of beats per minute influence consumers' mood and eventual product evaluations as well? Previous researches have not come up with a crystal clear conclusion on the effect of music on consumers' mood and behavior yet.

This research is not limited to the effect of music on consumers' mood only. Besides music there will be looked at the effect of color and lighting as well, because researches have shown that there is a remarkable relation between these environmental cues and purchase behavior: "For fashion-oriented stores, blue interiors are associated with more favorable evaluations, marginally greater excitement, higher store patronage intentions, and higher purchase intentions than are orange interiors." (Babin, Hardesty & Suter, 2003). However, which of the two is stronger: the positive or the negative influences on mood? Interesting for this study is to define clearly what types of color and lighting result in better product evaluations. Besides, this thesis is going to investigate how mood could have an important influence on the relation between environmental cues and consumers' product evaluations. Naturally, the roles of positive versus negative mood in this relation will be researched extensively.

In short, the focus of this thesis is on the influence of the differences between two important store atmospherics on eventual product evaluations by consumers. In combination with the previous, the role of positive versus negative mood is of particular interest. What is the effect of store atmospherics on consumers' mood? These are the key issues of this thesis.

§1.2 Problem statement

Research has proved that the environment can play a significant role in eventual consumer decision making. So, this study is not going to investigate *whether* the environment influences consumer behavior. Interest is in *how* the environmental cues influence consumer behavior aimed at the concept of mood, because this is not clearly defined so far. So the problem this study is going to attack can be formulated as follows:

"How does store atmosphere unconsciously influence consumers' product evaluations via mood?"

§ 1.3. Research questions

To solve the problem statement as stated above a few other questions are presented below. With the answers to these questions the problem statement will be solved.

i. How can mood positively affect product evaluations?
ii. How can mood negatively affect product evaluations?
iii. What is the influence of the various relevant store atmospherics on consumers' mood?

§ 1.4. Conceptual framework

To transform the problem outline into a visual representation a conceptual framework has been created below (see figure 1). This will help to understand the formulated problem statement better.
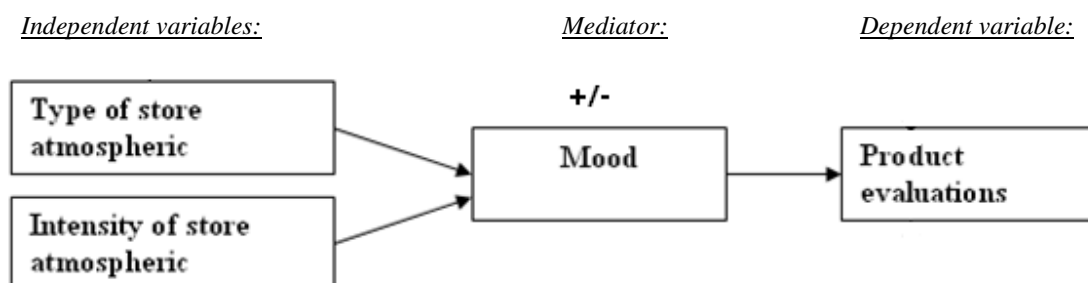

Figure 1: Store atmospherics and their influence on product evaluations via mood.
(based on Spies, Hesse & Loesch, 1997)

§ 1.4.1. Defining the variables

Independent variables: Type of store atmospheric

One of the independent variables in this framework is the type of store atmospheric. In light of this study the concept of store atmosphere in general can be defined as: "the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability" (Kotler, 1973-1974).

In this study two important store atmospherics are being used as a way to describe the total store atmosphere. These two store atmospherics are music and color and lighting.

Each atmospheric then has got different types; for music one could think of the different music styles available, for instance pop versus classical music. The type of color can easily be seen as the distinction between different colors: red, blue, orange, etcetera.

Independent variables: Intensity of store atmospheric

The second independent variable is the intensity of the different store atmospherics. The intensity of music in this thesis refers to the volume of the music being played (hard versus low) and to pace or the amount of beats per minute (many versus few beats) (Milliman, 1982 & 1986).

Intensity of color and lighting can be seen as the brightness (low versus high) of present colors and lights. Low intensity of color and lighting means soft colors and weak lighting while a high intensity obviously refers to a sharp and bright color/light. This study looks at the effects of these fluctuations in intensity on consumers' mood.

Mediator: Mood

The mediator in the conceptual framework is mood. This thesis suggests that mood has a mediating effect on the relation between (type and intensity of) store atmospherics and eventual product evaluations. Mood is a sort of intervening variable.

Several scientists in the area of mood have defined the concept of mood. Pribram (1970) for example argued that "moods monitor and reflect our appraisal of our life circumstances". Denzin (1984) described moods as "emotional states of mind that transcend specific situational experiences". A more recent definition is given by Gnoth,

6

Zins, Lengmueller & Boshoff (1999): "Moods are complex affective states without a specific target, that are pervasive in their effect. In other words, moods are both states and responses to previous experiences that affect future behavior and experiences." In this thesis mood can be seen as the last description.

Besides this description of mood, the mediator can be divided into positive and negative moods. Examples of positive moods include concepts as pleasantness and happiness; negative moods on the other hand include concepts as anxiety and anger. In chapter 2 the concept of mood will extensively be discussed.

Dependent variable: Product evaluations

Store atmosphere influences eventual consumers' product evaluations. Product evaluations in this study can be defined as: "consumers' information processing of a product and its characteristics" (Bargh, 2002). The variables that determine total store atmosphere can have a positive or negative effect on product evaluations (see figure 1, page 5). The interest of this study is on the differences in effects on overall product evaluations by consumers. So, consumers' product evaluations is the most important dependent variable of the research.

§ 1.5. Relevance

There has been done a lot of research on the effect of store atmosphere on consumer behavior. Still there are lots of questions and irregularities concerning this subject matter, both from an academic and managerial point of view.

§ 1.5.1. Academic relevance

Till now, most researches on environmental influences on consumer behavior focused on one specific subtopic. Chebat and Michon (2003) and Spangenberg, Crowley and Henderson (1996) for example have mainly focused on the influences of scent on consumer product evaluations, while Babin et al (2003) and Areni and Kim (1994) for example have pointed their research at the effects of color and lighting on consumer behavior. Other researches only looked at the musical effects on eventual product decisions by consumers (North, Hargreaves & McKendrick, 2000; North & Hargreaves,

1997 and 1998; North, MacKenzie, Law & Hargreaves, 2004). This research is *not* going to focus on a single environmental effect on product evaluations of consumers. In the research two subtopics of environmental influences will be presented by means of a structured and clear overview. No study has provided an integrated research of various environmental influences thus far.

Besides the presentation of three environmental cues this study is going to provide an insight in the effects of positive versus negative mood on product evaluations. The store atmosphere can influence consumers' unconscious way of thinking (Spies et al, 1997). Store atmosphere can increase or decrease consumers' mood. The aim of this research is to define what factors exactly create positive (negative) mood changes. The focus is on two factors, namely type and intensity of the store atmospheric. The results will be presented in an integrated overview.

§ 1.5.2. Managerial relevance

Investigations have proven that consumers react in a certain way towards store atmosphere. So, the effect of atmosphere on consumers is recognized by managers (Bitner, 1992). Marketing managers continually try to influence environmental characteristics to optimize purchasing behavior of consumers. However, frequently the impact of these environmental cues is not fully understood (Bitner, 1992). They often do not know what the exact effect will be on consumers' mood and their product evaluations.

Besides, they often do not know *how* to best change and influence the store atmospherics. Interesting for them would be to know the exact ways to improve the effects of music style and volume and the difference in color in an environment for example.

This study is going to provide marketing managers with more insight in these fields. After this research they should be able to make better decisions on how to unconsciously influence product evaluations of consumers by means of changing store atmospherics.

§ 1.6. Thesis structure

In this chapter the background of the problem together with the problem statement and its research questions have been introduced. Besides, the conceptual framework has been presented before the various factors have been shortly defined. This chapter also includes the managerial and academic relevance.

This thesis continues by treating the subjects of the research questions in a sequential way. In chapter 2 research questions one and two about the positive and negative effects of mood on product evaluations, will be described.

A distinction between two different atmospherics has been made and a clear overview of every single cue will be presented in the chapters 3 and 4. In these chapters the focus will be on the type and intensity of the environmental cues in combination with their contribution to positive and negative moods. This outline should give some clearance to all research questions, but in particular to research question three.

In chapter 5 the conclusions of the findings regarding the research questions will be presented. The problem statement will be answered through discussing the results of the research. After that we will take a critical look at the approach of the thesis in the discussion. Therefore, managerial implications of the research will be presented. Finally, recommendations for future research on this topic will be given.

Chapter 2: Mood: Positive versus negative

In this chapter the distinction between positive and negative mood will be explained, so that in the coming chapters about the store atmospherics it is clear what the concept of mood is about. The main questions in this chapter are: *How can mood positively affect product evaluations?* and *How can mood negatively affect product evaluations?*. Firstly, a general description about the influence of mood on product evaluations will be given. In this part two previous experiments on the topic of mood and consumer behavior will be introduced. Secondly, the obtained knowledge will be applied to positive mood compared with negative mood.

§ 2.1. The effect of mood on product evaluations

Mood is a mediating factor between environmental cues and consumer behavior. Environmental cues have a significant effect on respondents' pleasure, arousal and willingness to buy (Mehrabian & Russel, 1974; Chebat & Michon, 2003). So, overall mood responds to environmental characteristics in a commercial environment.

Spies and his colleagues (1997) have done an interesting experiment on the effects of mood on consumers' product evaluations. They compared consumer satisfaction between two stores of the same furnishing company with a completely comparable assortment, quality and price. The investigated consumers were also completely comparable on their sexes, age, income, number of persons living in the household, number of accompanying adults and number of accompanying children. They investigated the responses of a sample, consisting of 76 consumers per store, in one week (Monday to Friday). The consumers were questioned three times during their shopping period in the store; in the entrance area, after they had left the exhibition area and after they had passed the cash-deck (Spies et al, 1997).

The aim of the research was to examine the influence of mood on seven specific variables (see figure 2). These variables were: *liking of the exhibition, satisfaction with shopping, intent to return, time exhibition, time self-service, money spent on the whole* and *money spent for spontaneous purchase*. They assumed that a pleasant store environment improves customers' liking and satisfaction of the products via positive mood (Spies et al, 1997). Store A, which was recently renovated, was considered to be

more pleasant compared to Store B, which showed many signs of deterioration. Lighting, brightness and colors were considered to be important factors influencing customer perception of the store environment in this research (Buckley, 1987; Spies et al, 1997).

From previous researches they assumed that perceptions of store environment are positively linearly related to mood (Kroeber-Riehl, 1984; Cohen, 1990; Spies et al, 1997). This would indicate that positive (negative) store atmospherics increase (decrease) consumers' mood. Mood, on its turn, was assumed to be positively linearly related to the seven variables as presented in figure 2 (Spies et al, 1997).
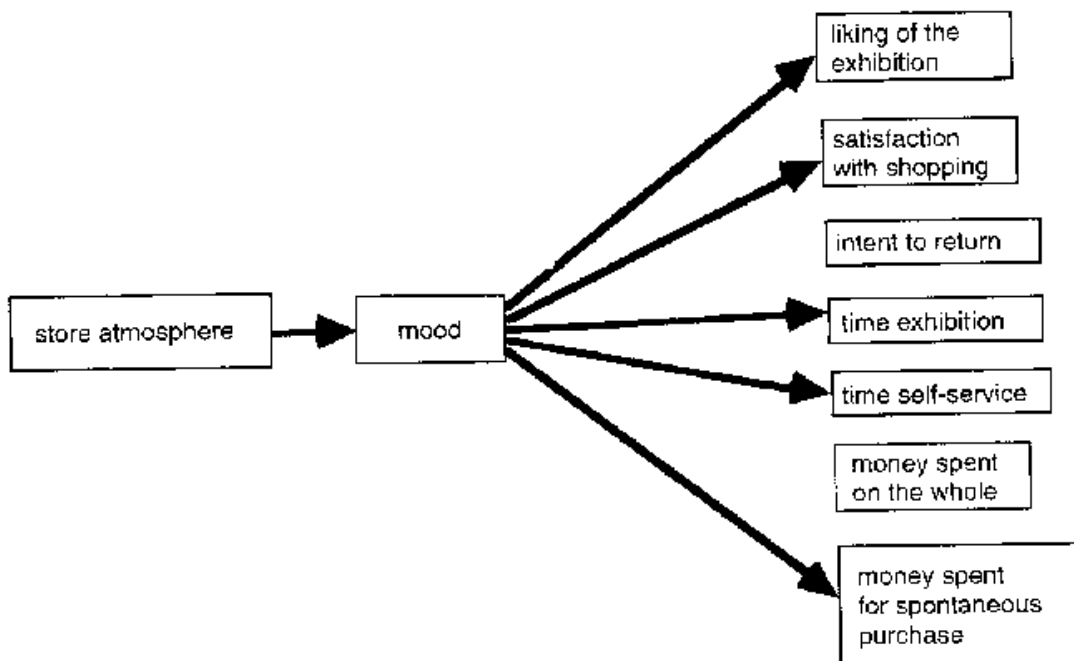

Figure 2: Positive reinforcing influences of mood (a fat line indicates a positive linear relation between two variables) (based on Spies et al, 1997)

As one looks at the model in figure 2 one can see that only five of the seven variables are positively linearly related to mood, based on the results from the experiment done by Spies and his colleagues (1997). Their outcomes of the experiment suggested that two of the seven variables are not influenced by mood at all, namely *the intent to return* and *money spent on the whole.* Most interesting for this thesis is the actual contribution of the research done by Spies et al (1997) of course. The scientists concluded that there is a

strong positive relation between the variables *liking of the exhibition* and *satisfaction with shopping* (figure 2) and the evaluation of products by consumers (the most important dependent variable of the current thesis). Thus, according to the research of Spies and his colleagues (1997) there is a causal relation between store atmosphere, mood and product evaluations. Store atmosphere is positively related to mood. Mood, in turn, is positively related to consumers' perceptions about products, because mood influences several important determinants of product evaluations.

According to a similar earlier research done by Bitner in 1992, customers respond emotionally to the environment. Mood is an internal customer response to the atmosphere of the store and it influences eventual customer behavior. That research came to comparable results as the study of Spies et al (1997). However, the most remarkable difference is that, as opposite to those results, Bitner's study argues that there is a positive linear relation between mood and *intent to return* and *money spent on the whole* (figure 2). Despite of the differences in the outcomes between the researches of Bitner (1992) and Spies et al (1997), they both agree on the theorem that mood is positively related to eventual product evaluations.

§ 2.2. Positive versus negative mood

From the obtained knowledge of paragraph 2.1 we can state that mood is positively linearly related to product evaluations. The question in the current paragraph is how store atmosphere can lead to positive (negative) product evaluations. The aim is to find out whether positive (negative) mood directly leads to positive (negative) product evaluations.

Mood is not a concept on itself. It is a collection of several determinants of mood. Easy-listening music, delicate colors and lightings and a smooth scent often give people a relaxing feeling for example. However, there are a lot of other stimulating environmental characteristics as well. These characteristics determine the perceptions customers have of an environment. Marketers can influence these perceptions by influencing the environment. By optimizing the consumers' perceptions, they immediately increase one's mood. However, it is important to know for a marketer that the expectations an individual

has towards an environment also determines one's mood and consequently the way the individual is going to respond to the environment. "When expectations are negatively disconfirmed, the person is likely to dislike the place." (Bitner, 1992). The opposite is also true of course.

Obermiller and Bitner (1984) showed that respondents who viewed retail products in an emotionally pleasing environment evaluated products more positively than subjects who viewed the same products in an unpleasant environment because mood was positively being influenced by the environment (Spangenberg et al, 1996; Chebat & Michon, 2003).

The combination of the feelings that leads to positive mood eventually results in better product evaluations by consumers. Donovan & Rossiter (1982), two researchers on the topic of mood, also concluded from their study that good product evaluations are very dependent on positive moods of consumers. They found that positive feelings are comparable to positive moods.

Negative moods on the other hand, are the opposite of positive moods. Some studies on negative moods have come to remarkable conclusions however. At first, if a consumer is in a state of depression (negative mood) one should assume that the consumer does not like to do shopping. Rippere (1977) did a research on this topic and the results of the survey showed that consumers more often go shopping in these circumstances. Products on the other hand, were not evaluated better in these situations of depression.

Parker & Brown (1982) did research on the same area and concluded that negative moods often lead to more shopping as well. This as a result of finding some distraction (Parker & Brown, 1982). Consumers in negative moods often shop longer and spend more money on themselves according to their research. Product evaluations again were less positive than with consumers in a positive mood. Heeler & Berneman (1986) agreed upon the statement that negative moods often result in more shopping. Shopping then is used by consumers to compensate for negative moods. However, they did not find a reinforcing relation between negative moods and less positive product evaluations, because shopping was used as compensation for their negative feelings (Heeler & Berneman, 1986).

Two researchers who did find a strong relation between negative moods and product choice and evaluations are Gardner & Hill (1988). They discovered that negative-mood subjects are more likely to choose more informational brands and evaluate these brands better than positive-mood subjects do (Gardner & Hill, 1988; Luomala & Laaksonen, 2000). Besides, these negative-mood consumers who used more informational brands had more positive post-processing mood than those negative-mood consumers who used different brands.

Luomala & Laaksonen (1995) also did specific research on consumption-related activities. In that study they concluded that consumers commonly bought something special for oneself when one was in a negative mood. Examples of the products they bought were cosmetics, candies, chocolate and clothes. Remarkable was that these consumers evaluated those specific products relatively positive in comparison to other products in that situation (Luomala & Laaksonen, 1995).

§ 2.3. Results

The aim of this chapter was to determine the influence of mood on product evaluations via positive and negative scenarios. Many researches have proven that mood has a significant influence on eventual product evaluations. However, there were lots of contradictory findings thus far. Almost all researches indicate that positive moods have a positive effect on consumers' perceptions of products. Till now, there has been more discussion on the effect of negative moods on product evaluations. Early researches often assumed that there was a positive linear relation between negative moods and product evaluations only (Rippere, 1977; Parker & Brown, 1982). Through time there became more awareness of the assumption that negative moods could lead to positive product evaluations as well (Heeler & Berneman, 1986; Gardner & Hill, 1988; Luomala & Laaksonen, 1995; Luomala & Laaksonen, 2000). So, from this chapter we can conclude that mood is not always positively linearly related to product evaluations.

Chapter 3: Music

In many situations there has been taken a look at the effect of music on consumer behavior. But what are the elements within music as an environmental cue that could affect consumer behavior? A distinction between type and intensity of music has been made. Further on, the effects of type and intensity have been separated into effects on positive moods and negative moods. The research question belonging to this chapter is: *What is the influence of the various relevant store atmospherics on consumers' mood?*

§ 3.1. Type

Type of music refers to the different styles that are present in this phenomenon. North & Hargreaves (1998, 2000) did research on the effect of different music styles in cafeterias and banking halls and came to the conclusion that "different music styles had different effects on the perceived characteristics of the cafeteria" (North & Hargreaves, 1998). Banking halls just as cafeterias were influenced by the music style as well. Firstly, we will take a look at the types of music that lead to positive moods. Secondly, the effects of music on negative moods will be discussed.

Positive types of music

Remarkable findings from the research done by North & Hargreaves in 1998 were: "When classical music was played, the cafeteria was perceived as elegant; when easy-listening music was played, the cafeteria was perceived as dignified/elegant." (North & Hargreaves, 1998). These results seem to conclude quite obviously that positive styles of music have strong influences on consumers' mood. It suggests that consumer behavior is influenced by the style of music that is being played within the environment. However, this study was conducted among a group of students, which may indicate that it would not be representative for the general consumers.

Though, North & Hargreaves (2000) conducted another study concerning different music styles in a commercial environment: a banking hall. This environment probably gives a more representative view of the general consumer reaction to different music styles. 331 consumers were investigated (124 men, 207 women) in a bank in a city center of the United Kingdom. Surprisingly enough, this study came up with similar

results: the general consumer his perceptions on an environment are being influenced by the type of music being played in that specific environment. (North & Hargreaves, 2000).

If no music is being played the consumer perceives the environmental characteristics as not being inspirational and dynamic at all. The consumers did not find the music aggressive either. From these results North & Hargreaves (2000) concluded that no music had few / a neutral influence on consumers' mood. Besides, consumers perceived the bank as very inspirational when classical music was played. This automatically increased consumers' mood, because the more that consumers liked the music, the more the banking hall was also perceived in this way. Consequently, consumers enjoyed being there, so that mood increased linearly (North & Hargreaves, 2000).

Another research on the effect of music styles is the one of Areni & Kim (1993). They found that classical music reinforces consumers to buy a more expensive wine than top40 music does. The explanation of this event was based on the assumption that classical music positively influenced consumers' mood and subsequently their intention to buy a more expensive wine (Areni & Kim, 1993). This is a clear indication that music style directly influences consumers' product evaluations and eventual decision making.

Negative types of music

Music styles can also negatively influence consumers' mood of course. Looking again at the study of North & Hargreaves (1998) one can see that several music styles have a bad influence on consumers' mood. In the cafeteria for example, pop music was perceived as upbeat and therefore aggressive. When easy listening or no music was played consumers were not inspired by it, because they did not find the music inspirational at all. These findings contradict with the findings about positive influences of music, because consumers perceived the environment as being elegant and restful when easy listening music was played, on the one hand. However, easy listening music did not inspire them on the other hand. From these results it can be concluded that different music styles can either positively and either negatively influence consumers' mood (North & Hargreaves, 1998).

Khalfa, Roy, Rainville, Dalla Bella & Peretz (2008) also discovered significant influences of music styles on consumers' mood. They made a clear distinction between happy and sad music. They found that sad music reduces blood pressure and heart rate. Therefore, sad music is seen as a significant determinant of negative mood. Sad songs and tunes directly temper one's mood, because consumers are being stimulated to think about sad events and circumstances (Khalfa et al, 2008).

§ 3.2. Intensity

Intensity of the environmental cue music can be seen as the volume level and the amount of beats per minute (tempo). Volume level is another musical criterion than music style that can influence consumer behavior. North & Hargreaves (1998) noticed in their study that volume level also influences people's perception on the environment.

Tempo of music also influences consumers' mood according to the outcomes of the research done by Khalfa and his colleagues (2008). How this is done will be examined in this paragraph.

§ 3.2.1. Volume

North & Hargreaves (1998) did not only focus on style of music in their research. They also tried to look at the effects of volume on consumer behavior.

Positive versus negative volume level

This time music was being played in a cafeteria at a level which was considered as "sufficient to be heard clearly, while allowing dinners to talk over it." (North & Hargreaves, 1998). This volume level was regarded as to be pleasant in commercial environments. These pleasant feelings affected consumers' mood positively.

Any higher volume level would be regarded as being more unpleasant dependent on the degree the volume level increases, immediately decreasing consumers' mood. The lower the volume level the more the environment would be perceived by consumers as an environment without music (North & Hargreaves, 1998). One can simply judge from self-experience that music should not be played too loud during conversations in a dining environment.

In other catering establishments than dining environments loud music seems to be more appreciated; North et al (2000) discovered that in their research in a bar. They compared foreground music (80 decibel), background music (60 decibel) and silence. The results indicated that "the bar was perceived as least peaceful when foreground music was played, but that background music led to it being perceived as slightly more peaceful than when no music was played." (North et al, 2000).

Further on, the research provided clear evidence that difference in the volume level of the music influenced customers' perceptions of the atmosphere of the bar. If these perceptions were positive the moods of the consumers increased linearly (North et al, 2000). Obviously, when we look at the results from the experiment in the bar and in the cafeteria, the volume level of music in commercial environments can influence consumers' perceptions about the environment and their moods significantly.

§ 3.2.2. Tempo

Besides the volume of music there is another musical influence on consumers' perceptions of the environment: pace (tempo of music). Milliman (1982 and 1986) has done some research on this aspect of music and found out that tempo of background music influences traffic flow and gross receipts within commercial environments.

Positive versus negative tempo

The higher the pace (thus the more stimulating the background music) the higher the traffic flow and gross receipts are and *mostly* the better the moods the consumers are in (Milliman, 1982 and 1986). A lower pace results in lower traffic flow and gross receipts and eventually it often results in sad feelings causing negative moods.

Another research fits these findings relatively well. Khalfa, Peretz, Blondin & Manon (2002) discovered that low tempo of music leads to more negative mood changes. Slow beats per minute (or long-seconds duration) often evoke depressing and negative emotions, resulting in decreasing mood stages (Khalfa et al, 2002).

In 2008 however, this research was extended by Khalfa and some colleagues; they did a research among 50 students without many knowledge on music. They were being exposed to slow tempo / rhythm music and high tempo / rhythm music; they discovered

that low (high) tempo did not influence mood significantly in comparison to sad melodies (Khalfa et al, 2008). This result was not in line with their expectations and hypotheses about the subject tempo.

§ 3.3. Results

This chapter gave an outline of the environmental cue music. The results indicate that the type of music just as the intensity of the music can have a significant influence on customers and their perceptions of store environment.

North & Hargreaves (1998 and 2000) for example, showed that positive music styles (e.g. classical music) in commercial environments like cafeterias and banking halls increases consumers' mood. Besides some music styles can stimulate / inspire consumers behavior, which also leads to positive mood changes.

It can also be concluded that some music styles, as easy listening music, can have both positive and negative effects on consumers' mood (North & Hargreaves, 1998). It can be seen as a both stimulating and elegant music style.

Khalfa and her colleagues (2008) made a clear distinction between happy and sad music and concluded that sad music is an important determinant of negative mood.

There is much more discussion on the effects of intensity of music on consumers' mood. The most important findings were that high and low volume levels can negatively influence consumers' mood. However, the effects of tempo of music on mood are not clearly defined thus far. The contradicting outcomes indicate that more research on this topic is desirable to verify the influence of tempo of music on consumers' mood.

Chapter 4: Color and lighting

From a marketing perspective it is very interesting to examine the impact of color and lighting on consumer behavior. Marketing managers can use this information to influence consumers' perceptions of a certain environment to increase their moods. Just as in the previous chapter, the main research question in this section is: *What is the influence of the various relevant store atmospherics on consumers' mood?*

§ 4.1. Type

In an effort to stimulate consumers' perceptions on environments color and light seem to be of significant importance according to several researches (Babin et al, 2003, Areni & Kim, 1994 and Crowley, 1993). Surprisingly little research addresses how a store's predominant color affects consumer reactions and subsequently their moods (Crowley, 1993). The following paragraph is on the effects of color and lighting on mood.

Positive versus negative color / lighting

Color and light, just as music, affect human performance because they arouse consumer reactions according to Babin and his colleagues (2003). In their research on the influences of color and lighting on human performance Babin et al (2003) made a distinction between "cool" and "warm" colors, based upon the wavelength of the color's *hue* or *gradation*. Cool colors are associated with short wavelengths and violet is a typical cool color just like blue. These cool colors tend to increase consumers' feelings about a certain environment and increase their mood (Valdez & Mehrabian, 1994). Warm colors on the other hand are associated with long wavelengths and red and orange are typical colors for this category. Such warm colors seem to increase consumers' perceptions and mood much less than the cool colors do (Valdez & Mehrabian, 1994). Other experimental research suggested similar conclusions: cool-colored store environments are being preferred over warm-colored store environments by consumers (Belizzi, Crowley & Hasty, 1983). This research also showed that the choice for cool colors increases mood and improves product evaluations by consumers.

In addition, experimental research using a hypothetical television purchase suggests that a blue background can decrease the likelihood of postponing purchase compared to a red background (Bellizi and Hite, 1992).

Besides the separated effect of color or lighting on consumer behavior the combination of the two seem to have an important influence as well. Color may interact with other ambient characteristics and may alter consumer reactions to a store concept (Babin et al, 2003). For example: bright lights and warm colors are more consistent with a discount store concept, while the combination of soft lights and cool colors express the image of a prestige store concept (Baker, Grewal & Parasuraman, 1994, Bellizi & Hite, 1992). The reactions of consumers then will result in negative or positive mood. So, to improve mood of consumers through color and lighting one should use a combination of soft lights and cool colors, in the case of prestige stores.

Often the effect of color or lighting on its own is being reinforced by the other effect. For example, if a consumer is in a commercial environment with a specific predominant color, the effect of lighting influences the perceptions of the consumer about the environment. A soft lighting effect will stimulate the feeling of being "relaxed", while a bright lighting effect will stimulate the feeling of "arousal" (Babin et al, 2003).

§ 4.2. Intensity

The intensity of lighting is another important phenomenon in the world of store atmospherics. Research on the effects of lighting on consumer behavior suggests that the use of soft versus bright lighting influences consumer mood.

Positive versus negative intensity

Brighter lighting influenced shoppers to examine and handle more merchandise (Areni & Kim, 1994). Till 1994 there has been done little research on this topic, so the conclusions seem quite unfounded. However, the research done by Areni & Kim (1994) offered a better insight into the topic.

Earlier research on lighting effects suggested that lighting is an extremely important determinant of the environment because "brightly lit rooms are more arousing than dimly lit ones" (Mehrabian, 1976). Arousal leads to more exposure to the

environment because an individual who is highly aroused will become stimulated, jittery and alert (Areni & Kim, 1994). The question is whether more arousal would be positive for the store or not. Early research namely suggests the opposite: soft lighting reduces the level of arousal (stimulation), so consumers stay longer in the store. This implies that the amount of time spent by consumers in the store can be increased through employing soft lighting (Markin, Lillis & Narayana, 1976). The researchers argued that mood is positively influenced by soft lighting, because consumers feel at ease in the case of soft lighting. The opposite, bright lighting results in more negative mood changes, is also true because these bright lights are very stimulating and arousing, so that consumers do not feel comfortable to stay there very long (Markin et al, 1976).

§ 4.3. Results

The type of color and lighting seems to have an important effect on store atmosphere just as music. Understanding the distinction between cool (for example blue) and warm colors (for example red) is important to understand the impact of colors on mood, because cool colors tend to increase consumers' mood about an environment, while warm colors tend to decrease consumer mood (Valdez & Mehrabian, 1994; Bellizi and Hite, 1992).

The intensity of the use of color and lighting in store environments can also be used to improve consumers' mood. The use of soft lighting and colors seems to have the best effects on mood, since consumers have better feelings of comfort in that case (Mehrabian, 1976; Areni & Kim, 1994).

Chapter 5: Conclusion

In this final chapter a conclusion on the findings will be given, followed by the discussion (including managerial implications) and recommendations from the research.

§ 5.1. Conclusion

At the beginning of the thesis the problem background led to the following problem statement: **"*How does store atmosphere unconsciously influence consumers' product evaluations via mood?*"** Through facing the problem step by step a solution to the problem statement slowly has been found.

First of all, in **chapter 2** the concept of mood is extensively described via a general description about the influence of mood on product evaluations and via a distinction between positive and negative mood. The researches of Spies and his colleagues (1997) and Bitner (1992) have contributed very much to this section. Based on their investigations it has been concluded in this thesis that mood is a very important intervening variable between store atmosphere and several dependent variables of consumer behavior (figure 2, page 11). Although, there were some contradicting findings in these investigations, we can conclude that mood obviously has significant influences on product evaluations by consumers. As expected, positive moods have positive effects on product evaluations. Negative moods on the other hand, have got several different influences on product evaluations: from recent researches it can be concluded that negative moods can lead to both negative and positive product evaluations (Heeler & Berneman, 1986; Gardner & Hill, 1988; Luomala & Laaksonen, 1995; Luomala & Laaksonen, 2000).

Chapter 3 continued with a description about the positive versus negative effects of music on mood. Music style, volume level and tempo were the various variables that were distinguished. This chapter confirmed that music has a significant influence on mood. More specific were the effects of classical music for example: it seems that this music style increases consumers' feelings of comfort and eventual mood (North & Hargreaves, 1998). Easy listening music on the other hand, seems to have both positive and negative effects on mood, because it stimulates consumer behavior. Besides, this style is being perceived as elegant (North & Hargreaves, 1998; 2000). The most

surprising fact came from music tempo: against most expectations, tempo of music does not seem to have a significant effect on mood (Khalfa et al, 2008). However, more research on this topic is desirable to provide some well-founded conclusions on this topic.

Chapter 4 about the effects of color and lighting on mood presented a clear distinction between the effects of cool versus warm colors. Cool colors (like blue and violet) tend to increase consumers' mood, whereas warm colors (like red and orange) tend to decrease consumers' mood (Valdez & Mehrabian, 1994; Bellizi and Hite, 1992). Cool colors in combination with soft lighting result in most positive effects on mood (Mehrabian, 1976; Areni & Kim, 1994).

Via the different chapters an answer to the **problem statement** has been found. Product evaluations are being influenced by several important store atmospherics (like music and color and lighting), because they significantly influence mood. Positive mood positively influences product evaluations, whereas negative mood can influence product evaluations both positively and negatively.

§ 5.2. Discussion

This paper focused on the effects of store atmospherics on product evaluations taking into consideration the mediating effect mood.

Firstly, mood is an important mediating factor in the relationship between store atmospherics and product evaluations. However, mood is not the only mediating factor. Other factors that could be of important interest are arousal and store attractiveness. In this thesis the focus was on mood to clearly define its influence on consumer behavior.

Secondly, there has been made a distinction between two environmental cues, namely music and color and lighting. Obviously, these are not all possible environmental cues. Some other environmental cues that have not been taken into consideration are scent, crowding, cleanliness, hygienic and clutter for example. Probably these cues can have a significant effect on mood and eventual product evaluations in commercial environments as well.

This study described only the type and intensity for each store atmospheric. For some atmospherics other features could have been described as well (like product-

specific colors for example), but in this way every atmospheric has been treated structurally the same.

This paper contains a lot of information from several different researches on store atmosphere and consumer behavior. The validity of the findings is likely to be high, because all experiments and investigations include several different customer groups. Besides, these researches were done solely in commercial environments. So the results and conclusions about the findings can be generalized to the complete population of commercial environments.

§ 5.3. Recommendations

This paper looked at the effect of store atmospherics on product evaluations via the important mediator mood. For future research it would be interesting to look at specific combinations of several environmental characteristics and their influence on customer behavior. Some empirical research can be done on the combination of several music styles in combination with a specific color. For marketing managers it would be interesting to know how to use their possibilities optimally within the commercial environment.

Another interesting area left to be studied is about the exact effect of tempo of music on consumer behavior. Till now, there is a lot of contradicting information available. Future research could make the irregularities in this topic disappear.

Another interesting subtopic that could use some extra research is about the exact effect of several mood stages on other aspects of consumer behavior than product evaluations only. Some suggestions are: amount of money spent and time spent in a store.

A last suggestion is about the interest in consumers and their familiarity with a specific commercial environment. It would be interesting to know whether high familiarity with a specific store has a significant influence on mood and store perception. There has not been done a lot of research on this area, so a suggestion would be to do some experiments containing these factors.

Reference list

Areni, C. S., & Kim, D. (1993). The influence of background music on shopping behavior: Classical versus top-forty music in a wine store. *Advances in Consumer Research,* 20, 336-340.

Areni, C. S., & Kim, D. (1994). The influence of in-store lighting on consumers' examination of merchandise in a wine store. *Journal of Marketing Research,* 11, 117– 25.

Babin, B. J., Hardesty, D. M. & Suter, T. A. (2003). Color and shopping intentions: The intervening effect of price fairness and perceived affect. *Journal of Business Research*, 541-551.

Baker, J., Grewal, D. & Parasuraman, A. (1994). The influence of store environment on quality inferences and store image. *Journal of Marketing,* 22, 328– 39 (Fall).

Bargh, J. A. (2002). Losing consciousness: Automatic influences on consumer judgment, behavior, and motivation. *Journal of Consumer Research, 29,* 280-285.

Bellizi , J., Crowley A. & Hasty R. (1983). The effects of color in store design. *Journal of Retailing,* 59, 21– 45 (Spring).

Bellizi, J. & Hite, R. (1992). Environmental color, consumer feelings and purchase likelihood. *Journal of Psychology and Marketing,* 9 (5), 347 – 63.

Bitner, M. J. (1986). Consumer Responses to the Physical Environment in Service Settings. In *Creativity in Services Marketing.* M. Venkatesan, Diane M. Schmalensee and Claudia Marshall, eds. Chicago: American Marketing Association, 89-93.

Bitner, M. J. (1990). Evaluating Service Encounters: The Effects of Physical and Employee Responses. *Journal of Marketing*, 54 (April), 69-82.

Bitner, M. J. (1992). Servicescapes: The Impact of Physical Surroundings on Customers and Employees. *Journal of Marketing*, 56 (2), 57-71.

Buckley, P. (1987). The internal atmosphere of a retail store. *Advances in consumer research*, 14.

Chebat, J. & Michon, R. (2003). Impact of ambient odors on mall shoppers' emotions, cognition, and spending: A test of competitive causal theories. *Journal of Business Research*, 529-539.

Cohen, J. (1990). Attitude, affect and consumer behavior. In B. S. Moore and A.M. Isen (Eds.), *Affect and social behavior.* Cambridge: Cambridge University Press.

Crowley, A. (1993). The two-dimensional impact of color on shopping. *Marketing Letters,* 4, 1, 59– 69.

Denzin, N. (1984). On understanding emotion. New York: Jossey-Bass.

Dijksterhuis, A., Smith, P., van Baaren, R., Wigboldus, D. (2005). The Unconscious Consumer: Effects of Environment on Consumer Behavior. *Journal of Consumer Psychology,* 15(3), 193-202.

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

Donovan, R., Rossiter, J., Marcoolyn, G. & Nesdale, A. (1994). Store Atmosphere and Purchasing Behavior. *Journal of Retailing*, 70 (3), 283-294.

Gnoth, J., Zins, A., Lengmueller, R. & Boshoff, C. (1999). Dimensions of emotions, mood and motivational orientation with regard to experiential consumption. In L. Hildebrandt, D. Annacker & D. Klapper (Eds.), *Proceedings of the 27th Emac Conference.* Berlin: Humboldt University.

Heeler, R. & Berneman, C. (1986). Shopper's mood and purchases. *Proceedings of the 15th Emac Conference*, Helsinki School of Economics and Business Administration, 595-601.

Khalfa, S., Roy, M., Rainville, P., Dalla Bella, S. & Peretz, I. (2008). Role of tempo entrainment in psychophysiological differentiation of happy and sad music? *International Journal of Psychophysiology*, 68, 17-26.

Khalfa, S., Peretz, I., Blondin, J., Manon, R. (2002). Event-related skin conductance responses to musical emotions in humans. Neurosci. Lett. 328, 145–149.

Kotler, P. (1973-1974). Atmospherics as a marketing tool. *Journal of Retailing,* 49,48-64.

Kroeber-Riehl, W. (1984). Konsumentenverhalten (3. Aufl). München: Vahlen.

Luomala, H. & Laaksonen, M. (1995). Mood-regulation in the context of hedonic shopping behavior. *Proceedings of the First International Research Seminar on Marketing Communications and Consumer Behavior*, University of Aix-Marseille, 363-383.

Luomala, H. & Laaksonen, M. (2000). Contributions from mood research. *Psychology & Marketing*, 17, 3, 195-233.

Markin, R., Lillis, C. & Narayana, C. (1976). Social-psychological significance of store space. *Journal of Retailing,* 52, 43-54.

Mehrabian, A. (1976). Public places and private spaces. New York, NY: Basic Books.

Mehrabian, A. & Russel J. (1974). An approach to environmental psychology. Cambridge (MA): *The MIT Press*.

Milliman, R. (1982). Using Background Music to Affect the Behavior of Supermarket Shoppers. *Journal of Marketing*, 46 (Summer), 86-91.

Milliman, R. (1986). The Influence of Background Music on the Behavior of Restaurant Patrons. *Journal of Consumer Research*, 13 (September), 286-9.

North, A. & Hargreaves, D. (1997). Liking, arousal potential, and the emotions expressed by music. *Scandinavian Journal of Psychology,* 38, 45-53.

North, A. and Hargreaves, D. (1998). The Effect of Music on Atmosphere and Purchase Intentions in a Cafeteria. *Journal* of *Applied Social Psychology,* 28, 24, 2254-2273.

North, A., Hargreaves, D. and McKendrick, J. (2000). The Effects of Music on Atmosphere in a Bank and a Bar, *Journal of Applied Social Psychology,* 30, 7, 1504-1522.

North, A., MacKenzie, L., Law, R. & Hargreaves, D. (2004). The Effects of Musical and Voice "Fit" on Responses to Advertisements, *Journal of Applied Social Psychology*, 34, 8, 1675-1708.

Obermiller, C. & Bitner, M. (1984). Store atmosphere: a peripheral cue for product evaluation. *Stewart DC, editor*. American psychological association annual conference proceedings, consumer, psychology division. Washington, DC: American Psychological Association, 52–3.

Parker, G. & Brown, L. (1982). Coping behaviors that mediate between life events and depression. *Archives of General Psychiatry*, 39, 1386-1391.

Pribram, K. (1970). Feelings as monitors. In M. B. Arnold (Ed.), *Feelings and emotions. The Loyola Symposium*, New York: Academic, 41-54.

Rappoport, Amos (1982). *The Meaning of the Built Environment.* Beverly Hills, CA: Sage Publications.

Rippere, V. (1977). What's the thing to do when you're feeling depressed?- A pilot investigation. *Behavioral Research and Therapy*, 15, 185-191.

Spangenberg, E., Crowley, A. & Henderson, P. (1996). Improving the Store Environment: Do Olfactory Cues Affect Evaluations and Behaviors? *Journal of Marketing,* 60 (April), 2, 67-80.

Spies, K., Hesse, F. & Loesch, K. (1997). Store atmosphere, mood and purchasing behavior. *Journal of Research in Marketing,* 14, 1-17.

Valdez, P. & Mehrabian, A. (1994). Effects of color on emotion. *Journal of Experimental Psychology,* 123 (4), 394– 409.

Wheatly, John J. and John S. Y. Chiu (1977). The Effects of Price, Store Image, and Product and Respondent Characteristics on Perceptions of Quality. *Journal of Marketing Research,* 14 (May), 181-86.