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The impact of store atmospherics and consumer attitudes on in-store behavior – What determines the buying decision of functional food?

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Abstract

Title: The impact of store atmospherics and consumer attitudes on in-store behavior – What determines the buying decision of functional food?

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Thesis purpose: The aim of this paper is to extend the knowledge of what influences the purchase decision of functional food in the store. By applying the M-R model in a new setting - the dairy department in grocery retailing in Sweden - and adding variables related to health attitudes, the aim is to contribute to existing research concerning in-store purchase decision making and store environment as well as consumer attitudes.

Methodology: This thesis employs a quantitative strategy with a deductive approach and data has been collected with questionnaires.

Theoretical perspective: Environmental psychology serves as an overarching framework where, more specifically, certain aspects of store atmospherics and some variables concomitant to health attitudes provide the theoretical base.

Empirical data: The empirical data consists of customer purchasing a functional food product, Proviva, and this is contrasted with a test group, Bravo.

Conclusion: Health variables had a greater impact on functional food customers than did the environmental factors. Environmental factors also seemed to be of minor importance for the test group. However they appeared to have greater impact on customers who made their purchase decisions in-store irrespective of product category. As the influence of health factors are established outside the retail context, the decision to purchase of functional food is made prior to entering the store.

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1. Introduction

In this chapter the background to the research area of this thesis will be presented. This will amount to the research problem and theoretical as well as practical considerations will be discussed. The purpose of the study will then be expressed.

1.1 Background

In retailing, as in any other business, it is crucial to identify consumer needs and motives when shaping the retail strategy (McGoldrick, 2002). Components such as price, promotion, advertising and retail format are utterly important parts of the retail marketing mix. One of the greatest challenges, however, is to understand what satisfies customers as well as how to satisfy them. Merely identifying costumer needs and motives is not enough to reach success, this knowledge has to be utilized and conceptualized into the retail context, the location where shopping takes place. The reason for this is that the retail store is not merely a place where products are sold. It is an extension of retail advertising and promotion and should therefore take into consideration customer needs and motives for shopping.

For retailers and manufacturers, understanding customer needs and motives implies an alertness to and understanding of trends that are emerging, sustaining and/or waning in society (McGoldrick, 2002). Today one major trend that bears a major influence on consumers is health. Ubiquitously in the modern society of the west world, people are showered with advice, information and products regarding health trends, healthy living and lifestyles (Urala & Lähteenmäki, 2004). In grocery retailing, the health trend has been incorporated into the assortment. It is believed to be a promising trend of expenditure and many product categories have thus been broadened with some type of health alternative (McGoldrick, 2002). This has led to a nosier in-store atmosphere as more products are competing to acquire the customers' attention (Clarke et al. 2006; Underhill, 2000). Given this, it is legitimate to ask why a customer choose to purchase one product and not another inside the store. This question encompasses the domain of in-store shopping behavior and purchase decision making.

It is a debated question whether the purchase decision is made inside or outside the store. It is claimed that seven out of ten consumers make their choice within the store (Van Kenhove & Desrumaux, 1997), but this figure may depend upon product category, retail format (McGoldrick, 2002) and personal characteristics (Rook & Fischer, 1995; Rook, 1987). Within grocery retailing the impact of impulsive buying is a rather conscious process since "consumers are more likely to experience and evaluate buying impulses in the grocery store" (Rook & Fischer, 1995:312). In contrast, consumer behavior literature generally discusses consumption patterns in relation to attitudes, values and beliefs that consumers hold (Solomon et al. 1999). Consumer behavior and attitudes determine the relationship to products and consumption. There is a truism that consumer attitudes

determine what products the consumer will buy. However, if the purchase decision is made in the store on impulse, then to what extent do consumer attitudes influence this decision?

In order to understand shopping behavior, research has been done on consumers and how they are affected by the store atmosphere and store environment (e.g. Donovan & Rossiter, 1982; Donovan et al. 1994; Foxall, 1997; Tai & Fung, 1997; Foxall & Greenley, 1999; Foxall & Greenley, 2000; Turley & Milliman, 2000; Groeppel-Klein, 2005; Sherman et al. 1997; Foxall & Yani-de-Soriano, 2005). Most of this research have been conducted according to a conceptual model, known as the M-R model, which embraces environmental stimuli and its effects on behavior (Mehrabian & Russell, 1974). The holistic environmental stimuli of a given setting will affect the person who is situated there. The stimuli will cause an emotional response in the person, and in turn this will influence the person's behavior. In the retail setting, positive feelings will make the customer spend more time in-store and he/she will consequently spend more money there (Donovan & Rossiter, 1982; Donovan et al. 1994). This research, however, does not take into consideration product purchase decisions and specific product categories.

This highlights the importance of in-store marketing as it becomes an essential tool to serve and attain consumers as well as influencing them to shop more (McGoldrick, 2002). In this light, merchandising is one of the most important aspects, since it, above all, enables the customer to find and purchase products and is therefore an important aspect of the store environment (Turley & Milliman, 2000). This involves layout, store design, product display and product space allocation, amongst other things.

Although this conceptual model (M-R model) has attained great support (McGoldrick, 2002; Turley & Milliman, 2000), much research have been done on students and respondents have been approached outside the retail setting (Donovan et al. 1994, Foxall & Greenley, 2000). Consequently, the approach to environmental stimuli has been made on recall from respondents and not directly in the setting. Further, the research has not taken all aspects of the M-R model into account when applying it (Foxall 1997; Foxall & Greenley, 1999; Foxall & Greenley, 2000). It is also relevant to test the model in different settings since elicited emotions can vary in different contexts (Ibid).

Concerning the purchase decision, it is argued that cognitive factors largely determine store selection and planned purchases (Donovan & Rossiter, 1982; Donovan et al. 1994). Conversely, the impact of environmental stimuli on an individual will be related to impulse buying, as the positive emotions resulting in more time spent in a retail store will lead to more purchases. Hence, on the one hand there are cognitive factors concomitant to consumer attitudes, needs and motives, and on the other there are environmental factors that influence the shopping behavior. This also elucidates the dilemma that consumer behavior and attitudes do not have to be reflected in the purchase decision, rather it can be the result of the store environment. On the contrary, even though customers say they are affected buy certain things, the result is the opposite, they do not pay any attention to all features of in-store atmospherics (Milliman, 1982). Chebat and Michon (2003) shed some light on this complexity as they note that retailers have not done proper consumer

behavior research, before presenting products in-store. Moreover, Donovan et al. (1994) state that the relationship between shopping motives and emotional states induced by the store environment needs to be researched. Liljander and Strandvik (1997) also highlight this as they claim that emotions will also depend on expectations and motives.

Although there are extensive research on the store atmosphere and the environmental impact on customers, aspects relating to the customer are swiftly addressed. These aspects concern the personal characteristics of a person's behavior (Mehrabian & Russell) a person's learning history (Foxall, 1997) or the existence of cognitive factors (Donovan & Rossiter, 1982; Donovan et al. 1994). They are not elaborated on any further more than acknowledging that cognitive factors influencing the purchase exist (Ibid). These two streams of research – consumer attitudes and environmental stimuli – have not been studied conjointly, even though they both influence purchase and shopping behavior.

Concerning consumer attitudes and behavior, as noted above healthy living has been a trend the past decades. Within the area of healthy food, functional food has grown to become an important part of the new product development (Sorenson & Bogue, 2003). Although functional food products have become popular only a small number of functional food consumers are aware of the concept functional food (Wansink et al. 2005). This exemplifies that the knowledge about why functional food is consumed is to some extent open and possibly the target group is not identified and therefore it can be even greater then expected. Furthermore, this leads to problems concerning marketing these products. They have been marketed by emphasizing the added ingredients, however, maybe it is more accurate to focus on taste as the Gira (2005) study stresses.

Attitudes towards health and functional food among Swedish people are known although they are very general (Gira, 2003; HealthFocus International, 2005). Nonetheless, relating the findings and its direct effects on customers purchase behavior in-store has not been done in Sweden. This is also highlighted by other researchers who note that research done on shopping motives, product choice criteria and in-store behavior implies that the studies cannot be used cross-culturally (Baltas & Papastathopoulou 2003; Mai & Zhao 2004). The reason for this is that the motives may differ largely nationally and culturally due to different traditions related to both retail format and consumption patterns (Baltas & Papastathopoulou, 2003). Thus, it is of interest to develop an understanding of how customers reason regarding the purchase of functional food in Sweden. Following the above, to what extent do cognitive factors and environmental factors influence the purchase decision? As Wansink et al. (2005) note, just having a positive attitude towards functional food does not explain certain behavior. By this they imply that health awareness does not have to affect the decision to purchase a particular health product. Similarly, the purchase of health products does not only have to be motivated by a customer's attitude to health (Sorenson & Bogue, 2003). As such there is a clash between attitudes held by customers and the actual purchase of functional food products that should represent those attitudes.

This far, it can be derived from the discussion that the M-R model that measures environmental stimuli does not take into account the impact of cognitive factors and shopping motives. They also influence the buying decision of products and maybe they should be incorporated into the model as well. In this paper the relative influence of the two set of factors – health attitudes and environmental factors – when making the purchase decision of functional food in Swedish grocery retailing will be studied. There is a possibility that the influence of respective set of factors may vary, therefore the purchase of a functional food product will be contrasted with a similar product but with weaker health connotations. The setting that is being studied is the dairy department in the retail store since this is the place where functional food is found. Finally, by cognitive factors it is here meant attitudes towards health, although cognitive factors in reality include more than this, e.g. product quality, value for money, price.

1.2 Theoretical relevance

Previous research using the M-R model has not always been applied on customers engaged in the actual setting. Students and customers have been used as respondents outside the retailing context either to *recall* their emotions in the store and the impact of the environment, or to answer how they *would* respond to a diverse range of settings shopping (e.g. Mehrabian & Russell, 1974; Donovan et. al. 1994; Foxall & Greenley, 2000). By simply employing the M-R model in-store on actual customers is insightful in its own right. Additionally, by researching health attitudes and environmental factors jointly, insights will shed new light on the factors that are at play when a customer approaches a product and decides on a purchase. This will extend the knowledge from just concluding that positive emotions will result in more time and money spent in the store, to the factors that more specifically determine the product purchase at the moment of truth.

In addition to testing the M-R model, aspects that relates to the person and not solely to the store will be accounted for. After all, reasoning lies within a person even though he/she is influenced by external factors. Measuring these two factors conjointly in-store sheds new light on extant theories and literature from respective field of study. By implication this renders refinement to existing knowledge as this study offers known factors to be tested and contrasted in a new kind of setting. Especially, it gives insights to actual in-store behavior, as this has been poorly done in both streams of research.

1.3 Practical relevance

There is a lack of research in this area of functional food when it comes to in-store behavior, the research that has been done have been too general on attitudes (Urala & Lähteenmäki, 2004) and too little focus have been done regarding consumers functional food behavior in the dairy segment. As times are changing as well as consumers, it is necessary to contribute with new knowledge. Verbeke (2005) emphasizes that knowing the consumer in-store is necessary for marketing purposes. Thus it is of importance to study and measure what variables, health factors and/or environmental factors, that stimulate shopping, and to what extent. By doing this, new reliable findings will bridge

the gap between attitudes and in-store behavior. Practicians can benefit from this when marketing functional food as the study will bring some light on variables that might influence customers when approaching the product. Knowing this, it will be easier to break down consumer behavior and understand what variables to focus on when marketing these products. Should the effort be directed outside the retail store, or is it more important to emphasize on the in-store atmosphere.

1.4 Research question

The research question is to explain the relative influence of environmental factors and health factors when buying a functional food product.

1.5 Research purpose

The aim of this paper is to extend the knowledge of what influences the purchase decision of functional food in the store. By applying the M-R model in a new setting - the dairy department in grocery retailing in Sweden - and adding variables related to health attitudes, the aim is to contribute to existing research concerning in-store purchase decision making and store environment as well as consumer attitudes.

2. Methodology

In this chapter, the scientific orientations underpinning this thesis will be presented. The approach, strategy and design will then be argued for and the chosen method will be presented and discussed.

2.1 Scientific orientations

2.1.1 Objectivism

The ontological foundation of this paper rests on objectivism. The objectivist ontology maintains that the social world exists dependently and externally of the social actors who inhibit it (Bryman & Bell, 2003). This position states that social phenomena and their meanings and categories are independent or separate from social actors (Bryman & Bell, 2003). Culture and organizations can be seen as external realities that offer a social order through shared values and beliefs that actors have to follow.

In the retail context, the social order can be said to exist as an external reality. Grocery shopping is claimed to be characterized by routine purchasing (Foxall, 1997). From an ontological perspective this implies that there is a given order in this setting that requires a certain behavior. Routine purchasing entails that there are set patterns that the customer follows in order to behave correctly in this context. Not pursuing a certain behavior breaks the order. By implication there are rules and norms on how to behave inside the retail store that exist independently of the social actors occupying this space. This is especially elucidated by the environmental stimuli that affect customers even though they are not necessarily aware of this.

An alternative would be to see this issue from a constructionist point of view. In this case there would be no pre-given order and social phenomena and meanings would be agreed upon continually in a social interaction (Bryman & Bell, 2003). This could account for how trends are created in society and become a personal expression in social interplay. In this paper, however, cognitive factors relating to the health trend are reduced to a small number of variables that are exerting influence on the customer (see chapter three for a presentation of these). From a constructionist stance, important factors of influence could not be limited prior to the conduction of the research, instead the crux would be to find out what the influencing factors are. This argument also holds true for the influence of environmental stimuli.

2.1.2 Positivism

The epistemological position of this paper adheres to positivism. The positivist stance follows objectivism in that reality is external to social actors. This connotes that

knowledge can only be reached through observation of this external reality (Easterby-Smith et al. 2002). Positivism can be said to be descriptive and aims establish regularities and structures (Bryman & Bell, 2003). In this study factors determining purchase behavior are researched. Given this a positivistic position is employed as the factors are used to describe regularities that structures purchase behavior.

An interpretivist position, on the other hand, stresses the understanding of social phenomena and the meaning social actors subscribe to theirs actions and the actions of others (Bryman & Bell, 2003). To understand social phenomena is to interpret the interpretation of social actors and the meaning they give to their actions and the world live in. Nevertheless, this epistemological view could not explain the research problem, since it is not the aim of this paper to understand the customers and the meaning they subscribe to the act of shopping. Rather it is to explain the factors and variables that are influential when making a purchase decision, regardless of the subjective meanings social actors subscribe to this.

2.2 Deductive approach

The research question is to explain the relative influence of environmental factors and health factors when buying a functional food product. There are three decades of research on the role of store environment and store atmosphere and the knowledge in this area is thus very thorough. Health trends and consumer attitudes towards healthy food have also been heavily examined during the last decade. By implication there is extensive knowledge in both these domains. Given this, the problem is not that new facts regarding these domains need to be explored. Instead it is more interesting to examine the relative influence when the two streams are conjoined. This implies that factors that should be influential when making a purchase decision can be derived from extant literature and theory from respective field of study.

Hence, the research problem of this thesis is built on what is already known and a theoretical framework is used as starting point, i.e. the M-R model. In chapter three, research regarding this model will be presented and this will lead to the formulation of variables that are important in store atmospherics. As the M-R are not applied in its original form, but adapted to suit the problem area of this study, and additional variables that are assumed to effect purchase behavior regarding health are included. Further propositions are formulated from relevant theories and in a second step they are matched with the analysis of collected data. The role of theory is thus to isolate a small number of variables that are considered important with regards to the set of factors that are being studied in this thesis, i.e. environmental factors and health factors.

The theoretical relationship to research of this study therefore employs a deductive approach. By and large deduction implies that research is built on theories that already exist in the domain that is being researched (Bryman & Bell, 2003). From relevant theories, a hypothesis is developed that will be translated into researchable terms and will steer the data collection. The results should then feed back into theory.

Alternatively an inductive or iterative approach could be employed. Using induction, existing theories would become useless other than defining an area of investigation. By an inductive approach, factors that are influencing shopping and purchase behavior are then explored. There is a possibility that important factors could have been identified, as well as the possibility that known factors could have been derived at. Nevertheless, the nature of this research is not to enter the retail setting as tabula rasa and explore factors, rather it is to explain factors derived from existing literature. As there are no intention to explore new factors this also excludes the iterative approach. By adhering to deduction, some factors may be disregarded. The influence of factors focused on in this paper may be significant when contrasted to each other, and therefore concluded to have varying degrees of importance. On the contrary, some important factors can be overlooked by only relying on deduction. Since the factors are tested in a new context on actual customers making the purchase decision, there could be other factors of higher significance at play that are left unnoticed.

2.3 Quantitative strategy

The research strategy is defined as quantitative. Generally it is noted that the quantitative strategy involve measurements and numbers and that the qualitative strategy does not (Bryman & Bell, 2003). Quantitative strategy connotes a quantification of data collection and data analysis. Concerning the research problem of this thesis, important variables influencing shopping purchase behavior are put forward in order to test their relative influence. As important variables are defined from existing research, their relative influence will be examined and contrasted. In other words, it is of interest to see how influential one set of variables are in contrast to another set of variables. By implication a quantitative strategy seems to address the research problem properly.

A qualitative strategy would not address to research problem in the same manner. A qualitative strategy adheres more to an inductive approach where the aim is to generate theory and not to test it (Bryman & Bell, 2003). Easterby-Smith et al. (2002) state that qualitative research aims to set straight the meaning of social phenomena, not its frequency. As been declared previously, this study does not wish to probe the meaning and interpretation actors make of the social world. Rather it is to explain the frequency of the defined research problem by testing predetermined factors as derived from theory. As the approach is deductive the aim is not to generate new theories and a quantitative strategy therefore explains the research problem more appropriately than a qualitative.

2.4 Research design

Prior to determining which research method to use, it is imperative to decide on research design (Bryman & Bell, 2003). The research design is a framework that determines the collection and analysis of data. It details the procedures that are needed to carry out the study and the nature of the information that is to be collected is thoroughly defined (Malhotra & Birks, 2003). Bryman and Bell (2003) discuss cross-sectional, longitudinal, and case study designs, among others.

The research problem in this study is to explain variables that influence purchase decision and behavior and a deductive approach and a quantitative approach have been defined as appropriate. In order to explain the relative influence environmental factors and health factors on the purchase of a functional food product, is important to study the influence these factors have on another product since this will contrast the influence on the two product groups. In this vein the research follows a cross-sectional design. The cross-sectional design entails that the collection of data from two or more samples of respondents are obtained at one single point in time (Malhotra & Birks 2003). This design allows quantification so that variations between cases and variables can be established (Bryman & Bell, 2003). In this paper it is very important to compare the findings of the functional food with another product to see if there are any differences and this consequently affects the inferences that this will amount to. By implication, other research designs are excluded.

Opting for a cross-sectional design restricts the study to only focus on certain aspect on point in time. A case study could have provided more intensive knowledge, but then only a single case would have been used. However, as noted above with the deduction, the frequency is sought after and it is therefore hard to generalize from one specific case. Moreover, a longitudinal design focuses on one sample and data is collected more than one occasion (Bryman & Bell, 2003). Not choosing this design renders it difficult to see whether the influence changes over time, especially to see if the influence of health factors grows or decreases as time pass. As mentioned before, some variables that could be important can be lost as well as the possibility to find new variables.

Concerning the cross-sectional design is this paper, health attitudes are presented as one set of variables that influence the purchase decision. Therefore, one fruit beverage brand (Proviva) that is a functional food product is utilized. Another fruit beverage brand (Bravo) is used to compare to relative influence between variables among the two different brands. The variables are categorized according to health factors on the one side, and environmental stimuli variables (environmental factors) on the other. In this study the cases are the two different brands and the information was collected simultaneously at one point in time. Important to note is that there could be other alternatives to Bravo that could have been better to contrast Proviva with. Bravo is a generally thought of as a juice beverage, but still a fruit beverage, whereas Proviva is only a fruit beverage. However, it is assumed they are consumed in a similar manner, for example when having breakfast. It was important to choose a product that was to be found in the dairy department. That they are different kinds of products was important since dissimilarities were sought after.

Given this, the sampling of respondents is constituted by people who, at the point of purchase in the grocery store, choose either a fruit beverage with strong health connotations (Proviva), or another fruit beverage (Bravo). By implication this determines the sampling units of the target population (Malhotra & Birks, 2003). The data was gathered in one grocery store in Sweden during four days from the sampling units, i.e. customers who opted for either Proviva or Bravo. This composes the sampling frame (Ibid). The occasions when the data was accumulated were spread to different times and

days of the week to include as many customer groups as possible. Given the short amount of time for conducting this study, the sample size were agreed to be no less than 30 respondents for the health product Proviva (Ibid). The sample size for Bravo was set at 100 respondents in order to contrast the distribution of Proviva. Due to problems in the production of Proviva, the manufacturer could not supply the product in adequate quantities. The sampling of Proviva did for this reason not exceed 30 respondents as the number was difficult to attain. This resulted in a rather thin assortment of Proviva in the shelves.

2.5 Research method

Concerning quantitative research and specific methods Bryman and Bell (2003) discuss more specifically structured interviewing, questionnaires, structured observation and secondary analysis as well as content analysis. Structured observation was not chosen since the influence of health factors relate to consumer attitudes and as they lies inside a person it can be difficult to observe what a person actually thinks. This study aims to capture the influence of defined factors at the moment of truth, i.e. where and when the purchase decision is taken place. Therefore this also excludes secondary analysis and content analysis. Primary data is needed since these factors have not been studied in tandem in the specific setting or any other setting before. By consequence there are structured interviewing and questionnaires to choose from. Structured interviewing is close to questionnaire as it is rather rigid and the questions are formulated and sternly followed when asking those (Bryman & Bell, 2003). Given that the environmental and health factors are based on previous research, the variables that are formulated to measure these factors clearly and distinctly defined. It is therefore not needed to search for underlying factors behind these variables since they are already known in previous research. The questionnaire is therefore the chosen method as the variables related to the environmental factors are strictly defined. The openness that the structured interviewing can provide is not necessary in this study, since research has already established for example the various impact of environmental factors and consumer attitudes and behavior related to consumption and health. However this could have been of interest if the aim was to probe these issues. By choosing a questionnaire this openness disappears and important underlying reasons or maybe new variables could have been forsaken as discussed above.

2.5.1 Questionnaire

Malhotra and Briks (2003) state it is important that procedures are standardized so that the data collection is internally consistent and can be analyzed uniformly and coherently when constructing the questionnaire. When formulating the questionnaire this principle as well as other principles declared by Malhotra and Briks was taken into consideration. These considerations are here accounted for.

Firstly, when formulating the questions of the questionnaire, the principle of translation has been regarded (Malhotra et al. 2003). The translation of theoretical themes and the variables had to be translated into a language that the respondents are familiar with. Since

the questionnaire survey was conducted in Sweden the questions also had to be translated to Swedish. To avoid ambiguities and confusion, translation and back translation were carried out so that the wording of questions encapsulated the concepts and themes that were being studied. Further, questions were put in a logic order to facilitate the completion of the questionnaire, with general and concrete questions in the beginning and more abstract questions in the end.

A pilot test study was conducted on the location where the actual study took place with real respondents. This was done in order to identify and eliminate possible flaws of the questionnaire. Insights gained from this pilot test study led to some modifications of the questions. Mainly this concerned the translation from English to Swedish and the manner in which the questions were translated from theory to vernacular Swedish. Modifications were made accordingly. Additionally the modifications also concerned the concretization and clarification of abstract concepts and themes.

Constructing an appropriate questionnaire is influenced by how other researchers have conducted their research. Bruner & Hensel (1994) have been a source of information when creating standardized and accepted statements in the questionnaire. As the M-R model is used as a framework, the questions has been structured and formulated as closely as possible to this model with the aid of Bruner and Hensel to give some fine tuning to them.

In the questionnaire (see Appendix), the Stimuli part in the M-R model have solely been constructed with statements. Since much research deal with environmental stimuli outside the retail context, it is hard to operationalize the study in a manner that corresponds directly to this study. The reason for this is that all too often respondents are presented with made up setting and they have responded to how they would behave in this setting. Therefore Tai and Fung's (1997) operationalization is opted for as foundation of this study. Even though they approached customers when they had finished shopping, their operationalization is very fruitful. They employed the M-R model and adapted it to suit their setting in a highly effective manner. Their questions were translated and formulated in a way that captured the characteristics of the setting being studied and still related to the theoretical premises of the M-R model. Following the layout in this study, a five point Likert scale was used for the Stimuli part (from *strongly disagree* to *strongly agree*) and the questions were consistently formulated as statements. Using Tai and Fung's approach as inspiration when formulating the questions was helpful as neither set of factors had been applied into this setting before, especially the health factors that have not been tried in this model at all.

The operationalization of the Organism part followed the original work by Mehrabian and Russell (1974). The reason for applying their approach is that this is the most common way to operationalize the Organism part. Moreover it must not follow the same structure as the Stimuli part, as they are slightly different even though they are connected. This is also the case in the research of Mehrabian and Russell (1974). Given this a seven point semantic differential summated rating scale was employed (see figure 1) (Bruner & Hensel, 1994). Mehrabian and Russell's (1974) original six items on each emotional state

category were reduced to two items per category, which resulted in six questions on the whole. This is because 18 questions would seem to be too many questions to ask, which was also concluded by the pilot test.

The semantic differential scale – a seven point rating scale with end points associated with bipolar labels.

Satisfied :___:___:___:___:___:___:___: Unsatisfied
          1   2   3   4   5   6   7
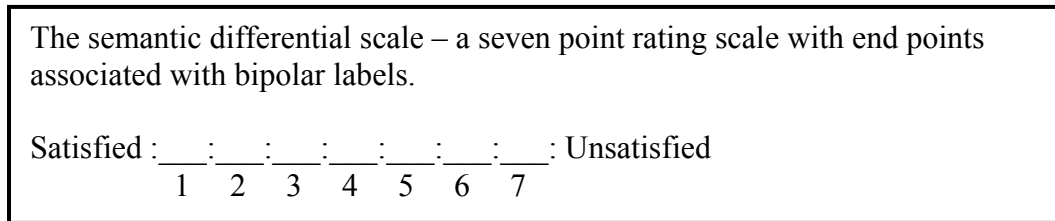
Figure 1. Semantic scale, Malhotra & Birks, (2003).

Important to note is that the last step in the model, the Response part, was not included into the questionnaire and several reasons for this exists. First, in the actual setting it would seem odd to ask the customers if they want to approach, explore or have a willingness to stay in this setting. Actually being there, approaching the products and deciding on a purchase seem to be an approach rather than avoidance to the setting. This dilemma is further highlighted by Foxall and Greenley (1999; 2000) who claim that this grocery setting is characterized by routine purchasing. The approach would then be insignificant, and similarly, avoidance that should follow displeasure would not have any influence. The conceptualization and operationalization of this step seemed to be too cumbersome and difficult to operationlize in order to give it the validity and reliability it merits. The aspect of time, both for conducting this research and for the respondents themselves, also had an impact. Completing a questionnaire should be easy for the respondents and questions should be easy to understand (Malhotra & Birks, 2003; Bryman & Bell, 2003). Both these considerations restricted the formulation and conduction of the last step of the model. This was also concluded from the pilot test, too many questions and incomprehensible questions resulted in a low response rate as well as general confusion among the respondents. Nevertheless, this paper aims to explain the influence of the factors on purchase decision, not if customers intend to avoid or approach the setting, as this last step suggests (Mehrabian & Russell, (1974) and it has therefore been omitted.

Lastly, filter questions have been used the make sure that the respondents meet the right requirements. More concretely, it was important to know if the costumers were familiar with the products, if they were frequent users, if they were loyal to the product or brand and where they decided to make the purchase decision (Malhotra & Birks, 2003).

The two set of variables that are studied are founded and based in theory discussed in chapter three. In accordance to these theories propositions are formulated. Environmental factors are often multimodal and therefore rather complex (Mehrabian & Russell, 1974). It is therefore impossible to study the holistic environmental stimuli of the retail store under the given timeframe. As derived from the theoretical discussion in chapter three, the most direct and closest environmental stimuli that seemed to be highly important as

well as the most concrete aspects in grocery retailing are issues of merchandising (Turley & Milliman, 2000). Accordingly, the environmental factors that are being studied are variables concerning product allocation, product placement and product availability at the point-of-purchase.

Health factors have been reduced to only include variables concerning attitudes on health and functional food. The argument for doing this is the same as with the environmental factors, the study would be too wide in size and thus hamper the study instead of helping it. In relation to health attitudes, issues regarding taste and price seem to be important when discussing health products and functional food. Therefore they have been included into the set of factors concerning health. Hence, this set of factors consists of variables regarding health and nutrition, taste and price.

2.6 Method analysis

The research in this study is to explain the relative influence of variables on costumers' purchase decision concerning functional food. The proposition testing is related to differences between the two sampling units and t-tests are therefore processed. This is an accepted and useful test when examining propositions. As two independent samples are compared, the measurement of one sample has no effect on the values of the second sample (Malhotra & Birks, 2003.) The means are calculated independently, but they are also added together in order to compare them, e.g. to contrast the decision statement and the total effect on emotions. A 95% confidence interval is used in order to ensure if any differences are statistically significant.

The data is processed through an accepted statistic program, namely SPSS. The respondents' answers and data material are coded after each scale, i.e. a semantic or Likert scale. Since a five point Likert scale is used, the results will score from one as the lowest to five as the highest. The semantic scale is seven point and high scores will be either one or seven and four is indifferent to both dimensions measured. The SPSS-program is then used to describe the data material and to analyze and compare the results. In the cases where respondents have omitted an answer in the questionnaire, the answers have been coded as missing value.

Concerning the emotional states and its dimensions the Cronbach's alpha test has been used. It is a reliability analysis which validates that the dimensions are measuring the same emotional state. Thus the alpha test ensures the internal reliability. The alpha value varies between zero and one. One connotes perfect internal reliability and zero signifies no internal reliability. Bryman & Bell (2003) mention that an acceptable value should be higher than 0.80. However, an alpha value of higher than 0.7 is acceptable as well (Ibid). Malhotra & Birks, (2003) on the other hand, stress that 0.6 and higher is acceptable and thereby indicates consistency reliability. 0.6 is therefore a landmark in the calculation in this paper.

2.7 Method discussion

2.7.1 Reliability

Reliability refers to how stable findings are, if the same results at a point in time will be engendered at another point in time (Easterby-Smith et al. 2002; Bryman & Bell, 2003). Since this paper is testing a model with the addition of new variables in a new context, it is difficult to relate it entirely to previous research. The stability of this study is therefore hard to hammer down. However, the M-R model has been applied and replicated in numerous studies and the model has gained much support (Turley & Milliman, 2000; McGoldrick, 2003), and the flaws of the model have been revised (Foxall, 1997; Foxall & Greenley, 1999; Foxall & Greenley, 2000). By implication the M-R model has to be regarded as stable. Since new variables are incorporated into the model, there is no previous research to support the operationalization of this paper. It is therefore difficult to claim the stableness of the findings.

Internal reliability has been mentioned in the method analysis. It concerns whether multiple indicators are measuring the same thing or not (Bryman & Bell, 2003). If two or more questions treats the same concept, the respondents should answer these questions in a consistent manner. In this study, the emotional states arousal could not be supported by the alpha test, as noted above. The internal reliability is thus weak concerning the emotional states.

2.7.2 Replicability

As a way to increase the replicability of research, procedures of data collection and data analysis should be explicitly accounted for (Bryman & Bell, 2003). In this paper the operationalization of the questionnaire have been spelled out so that the ingredients that makes up the study is thoroughly explained. The steps taken in the data analysis have also been fully declared. In this vein future research can replicate this study both when it comes to the collection of data and data analysis. Further, the attempt to detail the steps of the research methods allows other researcher to discover and point out possible flaws of this paper. Although that will not help this paper, it is useful for future research when making similar attempts.

2.7.3 Validity

Validity concerns whether the research is measuring what it is said to be measured (Easterby-Smith et al. 2002; Bryman & Bell, 2003). Validity can be divided into external validity and internal validity (Svenning, 2003). External validity concerns the theoretical basis on which the research is founded. It relates to the possibility to generalize from the sample to the population and from findings to theory. Further, theory exists on an abstract level and variables are found on a concrete empirical level and consequently this divide has to be bridged. In this paper, the possibility to generalize may be impeded due to the restriction of sampling from one retail store only. The generalizability to the rest of Sweden should therefore be downplayed, since there can be variations in health attitudes in different areas, cities and regions. For example, it could happen that the customers of

the retail store used in this paper are more aware of health than the general population. The number of respondents is also a matter of critique, since it is a low number regarding Proviva. However it is still viable when analyzing the data statistically (Malhotra & Birks, 2003). Although the findings are difficult to generalize to the whole population, the findings can contrast theories upon which the study rests. Even though the external validity is weak concerning the generalizability to a population, it is stronger concerning the theoretical contributions as it can feed back into theory.

To offset the gap between the abstract level of theory and the conduction of the questionnaire survey, great efforts were put into translation and back translation. This was also aided by the pilot test which resulted in changes in the vocabulary. However, some emotional state variables were also impossible to translate without sexual connotations, which is a further reason why it was opted for two items in each category instead of six. Reducing the number of questions also inhibits the validity of this paper as this affects the possibility to generalize to theory. The pilot study showed that too many questions rendered a low response rate, and it was therefore a delicate balance act of how many questions that had to be excluded in orderto enhance the feasible response rate.

Concerning the specific variables that are studied, existing research has laid the foundation for them. Following the problematization in chapter one, two fields of research were identified. These are the research conducted within the field of environmental psychology or store atmospherics and the field of consumer health attitudes. Relevant research and theories have regarding these two fields are therefore been presented and discussed. From the theoretical presentation factors that seem to be influential were then highlighted and further developed. In this manner important variables could be derived at.

Internal validity treats how the study is put together in its different parts with connection to the empirical findings (Svenning, 2003). This relates to if questions are asked to the right respondents, if necessary indicators are covered up in the research problem and if right measurements are employed. Questions have been asked to the right respondents as defined in the research design. If the respondents would be considered to be wrong, then the design of the research have been formulated and devised incorrectly. On the other hand, the research problem could maybe been contrasted by asking people why they *did not* take Proviva, to find out if they differ concerning health attitudes. However, with the control group Bravo the intention was to overcome this obstacle. Moreover, the dilemma of including too few variables have been addressed before. It is possible that some important inductors have been overlooked, and that the included factors only are significant in relation to each other but not if other factors are included as well. This problem could have been compensated for if a qualitative strategy and inductive approach would have been utilized, but then it would have been more difficult to process the findings in a generalizable manner.

To surmount problems when measuring and collecting data as well as analyzing them, the operationalization has been made according to the approach and structures of other research measuring the same as well as similar variables. As noted above, health aspects

have not been operationalized in this manner before which can be a setback of this paper. The operationalization in this regard can thus be a question of critique. However, in order to contrast environmental factors and health factors it was imperative that they were operationalized in the same manner. Not doing this would make it difficult to relate them to each other, since differences in results and findings as well as problems thereof could have been caused by the difference in operationalization. When comparing and contrasting the influence of environmental factors and health factors it is impossible to make inferences if they are not operationalized similarly. Concerning the health variables, they have been engendered following research on health attitudes in general and functional food in particular. The focal point has also been directed towards health and functional food attitudes in Sweden to give the variables as much relevance as much as possible for the present study.

3. Theory

The following chapter discusses the two domains of research that are presented in chapter one. The first part concerns store atmospherics and environmental psychology, whereas the second part discusses consumer attitudes towards health food. Variables will be derived from the theoretical discussion and this will lead to the formulation of propositions.

3.1 Store atmosphere and environmental factors

3.1.1 Environmental psychology as a source of inspiration

The origin of environmental studies on store atmospherics stems from the seminal work of Mehrabian and Russell (1974). Their research was conducted within the discipline of psychology, and had nothing to do with retailing specifically. They gathered and compiled previous research concerning various stimuli in different settings and contexts, as well as the correspondence of these stimuli to emotional responses and behavior. Much of the knowledge existed prior to their research, but their contribution was that they put all these different kinds of research together and knitted the different parts together. In this manner they constructed a framework that took into consideration manifold aspects of the environment and their cause-and-effect relationship with emotional and behavioral response.

The framework (the M-R model) rests upon the Stimulus-Organism-Response (S-O-R) paradigm (see figure 2) (Donovan et al. 1994). This concept argues that a stimulus will affect an organism, and as a result, this will cause a response in the organism. In the model, the environment is representing the Stimulus, which is thus being conceptualized as environmental stimuli (Mehrabian & Russell, 1974). The Organism comes to represent emotional states evoked by environmental stimuli in the person who is situated in the environment. Finally, the Response is the outcome of the evoked emotional state, i.e. how the person comes to behave. Simply put, the environment will affect a person, and in response to this the person will act in a certain way. In reality, however, things are not this straight-forward.

Figure 2. The S-O-R paradigm, Donovan et al. (1994).

Concerning the environmental stimuli, it consists of various stimulus components of sense modalities, e.g. color, light, smell, sound, texture, temperature etc (Mehrabian & Russell, 1974). Mehrabian and Russell (1974) note that in environments characterized by multimodal sense stimulation, it can be difficult, if not impossible, to break down specific sense stimulations and relate them to specific emotional states. The reason for this is that the impression of an environment depends on the combination and complexity of the various stimuli. In one setting one stimulus may be highly influential, whilst in another setting the same stimulus may bear no significance at all. Therefore it is more appropriate to categorize the stimuli according to the information rate of the environment. Information rate refers to the spatial and temporal relationships amongst different stimuli in a specific setting. The stimulus itself can be physic as well as social.

The environmental stimuli will elicit emotional states in a person. The emotional states that are brought forth, however, are not discriminately depended on the environmental stimuli (Mehrabian & Russell, 1974). The emotional states educed are also depended on the characteristic emotions that are associated with the personality of an individual. Mehrabian and Russell (1974) make the distinction between two types of emotions, these are trait emotions and state emotions. Trait emotions characterize the individual in general, and are connected to the personality of the individual. In contrast, state emotions are momentary and not connected to the personality as such. For example, a person may have a personality trait that always makes him/her feel anxious. In this case anxiety represents a trait emotion. A person may also experience anxiety at a single point in time and this would be signified as a state emotion. This temporary emotional state could for example be conditions such as hunger, thirst or intoxication. Moreover, when entering a specific environment, the individual has a learning history that is related to the setting and will influence the emotional state. The individual can be a total stranger to the environment, or be familiar with it, and accordingly incited emotions can therefore be rather diverse. However, what kinds of feelings that are elicited falls back on the personality trait of a person. A proneness to experience certain emotional states may facilitate the evocation of those states when being subject to a particular environmental stimulus. Conclusively, the emotional state, as experienced by the person in a given setting, will be conditioned by the environmental stimuli, the emotional personality trait and the nature of the temporary emotional state a person has when entering the setting.

Mehrabian and Russell (1974) state that emotions can be reduced to three basic emotional variables, which are *pleasure*, *arousal* and *dominance*. These variables include the opposite feeling of the emotional state (e.g. pleasure and displeasure, arousal and unarousal, dominance and submissiveness), and the experienced emotion will be found on a continuum between the two pairs. Thus, the environmental stimuli will cause varying degrees of these emotional states in a person. Moreover, these emotional states will cause an emotional response, i.e. the person will behave in a certain manner due to the felt emotional state. When measuring these three variables, Mehrabian and Russell used six dimensions for each variable (see figure 3).

Pleasure
HAPPY as opposed to UNHAPPY
PLEASED as opposed to ANNOYED
SATISFIED as opposed to UNSATISFIED
CONTENTED as opposed to MELANCHOLIC
HOPEFUL as opposed to DESPAIRING
RELAXED as opposed to BORED

Arousal
STIMULATED as opposed to RELAXED
EXCITED as opposed to CALM
FRENZIED as opposed to SLUGGISH
JITTERY as opposed to DULL
WIDE-AWAKE as opposed to SLEEPY
AROUSED as opposed to UNAROUSED

Dominance
CONTROLLING as opposed to CONTROLLED
INFLUENTIAL as opposed to INFLUENCED
IN CONTROL as opposed to CARED-FOR
IMPORTANT as opposed to AWED
DOMINANT as opposed to SUBMISSIVE
AUTONOMOUS as opposed to GUIDED

Figure 3. The emotional states of pleasure, arousal and dominance, Mehrabian & Russell, (1974).

In their model, Mehrabian and Russell (1974) conclude that the emotional response caused by the emotional state will be either *approach* or *avoidance*. Depending on the emotional state the person will either want to approach the environment or to avoid it. Approach means a willingness to stay or explore a setting. Positive feelings of pleasure and arousal will influence the person to approach the setting, whereas negative emotions, e.g. displeasure, will produce an emotional response to avoid the setting. Feelings of dominance refer to the extent a person feels restricted or free to act in a particular setting. This connotes that the characteristics of a specific setting can either allow multiple ways of different behaviors or be fairly restricted and only permits a limited amount of behaviors. Mehrabian and Russell (1994) did not give as much attention to the effects of dominance as they gave to pleasure and arousal, due to the scarce research on this topic at the time of their writing. The behavioral response caused by this emotional state is consequently not fully elaborated on in their study, and they concluded that the relationship between dominance and approach could not be strengthened.

3.1.2 Store atmosphere and shopping behavior

In 1982, Donovan and Rossiter made the first attempt to apply the M-R model to the retail setting. Although the relevance of store atmosphere had been highlighted

previously, it was not until Donovan and Rossiter (1982) tested this model in the retail setting that store atmosphere and shopping behavior were connected (Donovan & Rossiter, 1982). Donovan and Rossiter proved the M-R model to be valid in the retail context when they concluded that high levels of pleasure and arousal will lead to an approach to the retail setting. Positive feelings of the retail setting will make the person want to spend more time there. However, as they noticed themselves in this study as well as in a later study, the implementation of the model concerned shopping intentions rather than actual behavior (Donovan & Rossiter, 1982; Donovan et al. 1994). However, they concluded that the M-R model works well in predicting shopping behavior, which have gained support by much later research (Donovan et al. 1994; Van Kenhove & Desrumaux, 1997; Tai & Fung, 1997; Turley & Milliman, 2000; McGoldrick, 2002).

The application of the M-R model resulted in some minor modifications. Donovan and Rossiter (1982) found no support for the emotional state of dominance in the retail context. Consequently, dominance was not incorporated into the M-R framework of retail settings. The exclusion of dominance has been prevailing until Foxall and his colleagues cast new light on the M-R model (Foxall, 1997; Foxall & Greenley, 1999; Foxall & Greenley, 2000; Foxall & De Soriano, 2005). In a study of CD retail stores, Tai and Fung (1997) found that the M-R model also works in reverse. The model is not one-directional, approach and willingness to stay in one setting can also enhance the emotional states of pleasure and arousal. In this sense the behavioral Response also feeds back into the Organism (see figure 4).
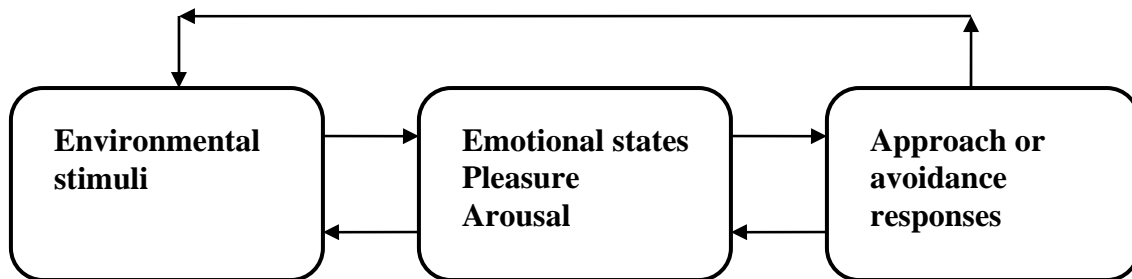
Figure 4. Mehrabian- Russell's model modified by Tai & Fung (1997).

To make up the flaw of measuring shopping intentions instead of shopping behavior, Donovan et al. (1994) repeated the study but did it on actual in-store behavior and with real shoppers and not students as the previous study had done. Although some findings did not support the earlier study (i.e. Donovan and Rossiter, 1982) the general conclusion is that pleasure and arousal will lead to more time spent in the store (Donovan et al. 1994). Donovan et al. (1994) also added that more time in the store will lead to more money spent there. In this manner they concluded that M-R model will predict shopping behavior depending on the environmental stimuli.

As Donovan's et al. (1994) study only focused on type of retail store – the department store – they called for investigation of other kinds of retail stores and formats. Foxall

(1997) aimed to fill this gap with the conceptualization of his behavioral perspective model. This model elaborates on the M-R model and specifies the consumer behavior in the retail context. It takes a slightly different stance considering the characteristics of different retail contexts. The specific setting will be defined on a continuum on how open or closed it is and this will restrict the scope of behavior appropriate in the setting. Further, behavior will depend on the consequence of behaving in a certain way. Foxall terms this reinforcement and divides it into two categories, utilitarian and informational. Utilitarian reinforcement refers to the functionality or practical aspect of behaving in a special way. The informational reinforcement denotes the performance that are associated with the behavior, e.g. to convey social status by consuming certain products or services. Finally, the consumer behavior will be influenced by the consumer's learning history which refers to the consumer's previous reinforcement and punishment in similar contexts.

Various combinations of these parts compose a matrix that categorizes eight different consumer situations (Foxall, 1997). The matrix takes into consideration the level of utilitarian and informational reinforcement (high or low), and subdivide these different combinations with the openness or closeness of a given setting. When applying the M-R model based on the matrix, Foxall and Greenley (1999) found that positive emotional states of dominance will lead to an approach behavior in some settings. This extends the research by Mehrabian and Russell (1974) as their conclusion about dominance ended up a cul-de-sac. Further, the findings of the research concluded that within grocery retailing neither pleasure nor arousal were prominent, still the consumer approached the setting (Foxall & Greenley, 1999; Foxall & Greenley, 2000). In these cases dominance showed to be of greater significance. The conclusion was that dominance is related to grocery shopping since it is very much routinized. The prominent state of dominance in grocery shopping can be highlighted by Donovan et al. (1994) as they stress that familiarity with the store can have a great impact on the emotional states felt within the store. Given this, the occurrence of dominance does not appear odd, as familiarity with a setting logically infuses the customer with feelings of security and control.

3.1.3 Breaking down the environmental stimuli of the retail setting

In a review article, Turley and Milliman (2000) exhaust the literature of store atmospherics in order to construct a synthetic framework on the subject. Using the M-R model as a point of departure, research on store atmospherics are compiled and arranged with the purpose to set straight the variables that are considered to influence shopping behavior, and to give a structured logic to the subject of store atmospherics. As their study aims to encompass the whole range of retail settings, the framework takes into account a myriad of variables and factors. This allows the framework to be applicable to many, if not most retail settings, since the high number of variables and factors renders it possible to cherry-pick those that are relevant in a specific setting.
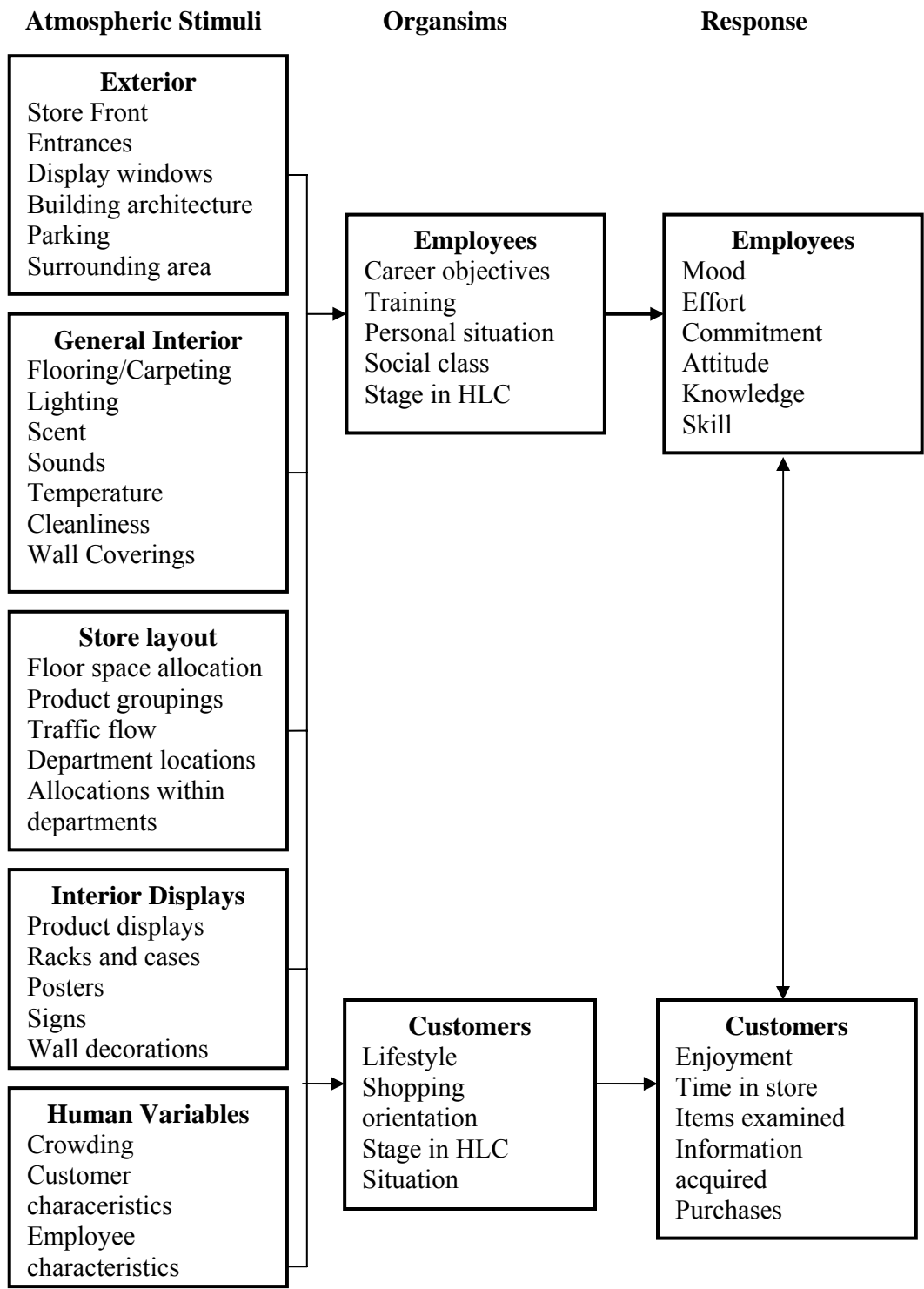
The atmospheric stimuli (i.e. environmental stimuli) are classified into five categories. These categories of different variables are *exterior*, *general interior*, *store layout*, *interior displays* and *human variables*. On the Organism level, Turley and Milliman (2000) have

included employees as being influenced by the environment, in addition to the ordinary group which are the customers. Following this, the final step, the Response, will have an impact on both employees and customers. Additionally, the behavioral responses of both these groups will influence one another. Furthermore, if taking into consideration Tai and Fung's (1997) conclusion that the M-R model works bi-directionally, this full-fledged model becomes rather intricate but still insightful since it effectively explains the complexity of in-store behavior and store atmospherics and the interconnectedness of the different parts. For an overview of Turley and Milliman's model see figure 5, however all their factors are impossible to include, so we refer to their article for a full presentation thereof.

Concerning the in-store atmospheric stimuli, Turley and Milliman (2000) particularly mention the importance and necessity of merchandising and the stimuli that are present at the point-of purchase. Not considering this in the marketing strategy can be the difference between success and failure, since the realization of a purchase may simply not happen if the merchandising is not carried out properly and consequently the customer will not be stimulated. Merchandise assortment is thus one on many store elements that make up the in-store marketing mix and it is highly important (Van Kenhove & Desrumaux, 1997). Turley and Milliman note that generally merchandising is not incorporated into studies of store atmospherics, however they stress the importance of this since every part of the store, both internal and external, conjoins in a general impression. The definition of merchandising can differ from country to country (McGoldrick, 2002). For example, in the USA, merchandising from a manufacturer perspective, refers to retailing itself, whereas in the UK, it primarily involves the merchandise mix, space allocation and product placement. Turley and Milliman (2000) adhere to the UK definition, as they emphasize variables such as shelf space, racks and cases, product and point-of-purchase displays, product allocation within departments, to mention a few, when discussing merchandising.

Space allocation is a major part of making products visible in order to attract customers (McGoldrick, 2002). Needless to say, the more space a product is given, the higher is the probability that the customer will give attention and approach the product. This becomes especially important with impulse buying, as the decision is made instantly at the point-of-purchase. Shelf space is a very important aspect in order to attract customers (Yang & Chen, 1999).

Borin and Farris (1995) highlight that space allocation is a means of making products available for the customers. If customers were completely brand loyal then space allocation would not matter, the customer would find the product anyway and if it was not found he/she would go somewhere else to buy it. This is however not always the case and brand switching at the point-of-purchase is explained by either that the product was not available or that the shelf display influenced the customer to switch. This is further contrasted buy Larson and DeMarais (1999) who note that customers cannot by products if they cannot see them. It is thus common knowledge that space allocation affects sales positively (Urban, 1998), and the availability of a product can be a stimulus for making the purchase decision (Urban, 2002).

Atmospheric Stimuli	Organsims	Response

Exterior
Store Front
Entrances
Display windows
Building architecture
Parking
Surrounding area

General Interior
Flooring/Carpeting
Lighting
Scent
Sounds
Temperature
Cleanliness
Wall Coverings

Store layout
Floor space allocation
Product groupings
Traffic flow
Department locations
Allocations within
departments

Interior Displays
Product displays
Racks and cases
Posters
Signs
Wall decorations

Human Variables
Crowding
Customer
characeristics
Employee
characteristics

Employees
Career objectives
Training
Personal situation
Social class
Stage in HLC

Customers
Lifestyle
Shopping
orientation
Stage in HLC
Situation

Employees
Mood
Effort
Commitment
Attitude
Knowledge
Skill

Customers
Enjoyment
Time in store
Items examined
Information
acquired
Purchases

Figure 5. The influence of retail atmospherics, Turley & Milliman (2000).

Finally, when studying emotional factors and their impact on customer purchase behavior, they cannot be separated from the functional meaning of purchase behavior (Liljander & Strandvik, 1997). Both functional and emotional meanings will influence the purchase behavior. Above it has been argued that emotions experienced in the store, will depend on trait emotions and state emotions evoked in the store, as well as the interaction with the employees and the feedback loop of behavioral response. In addition to this, emotions will also depend on expectations and needs that the customer brings to the store (Liljander & Strandvik, 1997). If the product fail to live up to customer needs and expectations, this will lead to negative emotions, even though the environmental stimuli are not inciting any negative emotions. Cognitive and affective aspects can then be difficult to separate as they are somewhat intertwined. Hence, emotional states experienced in the retail store are not solely influenced by the environmental stimuli, but also by what the customer brings to the store, in shape of needs, motives, expectations, or attitudes. McGoldrick (2002) also highlights the impact of multiple diverse variables on impulse buying, since there is rarely one factor alone that causes the realization of a purchase. Similarly, Donovan et al. (1994) emphasize the need to classify the relationship between shopping motives and in-store behavior, however this suggestion has been left more or less alone.

3.2 Consumer attitudes towards health and functional food

3.2.1 Consumer attitudes in general

In consumer behavior, attitudes are used to understand how consumers interpret situations and products (Solomon et al. 1999). Consumers may have very different attitudes towards objects for very diverse reasons and further it may differ in levels of commitment. Thus it is of great importance to stress that consumers are individuals. Consequently, decisions in one setting may fluctuate because of learning history, products and attitudes towards them. Attitudes can be classified into three parts i.e. affect, behavior and cognition (Solomon et al. 1999). Basically this involves what a consumer feels about an object, the intention a consumer has of it and the consumer's belief in it.

Critique against this is that an attitude may not correspond with the actual behavior or even predict behavior when the situation occurs (Solomon et al. 1999). Solomon et al. (1999) also put focus on attitudes regarding buying. Instead of investigating attitudes concerning the actual product, they stress the importance of intentions with the purchase. By doing so, it proved to be easier to understand and bring attitude and behavior together. Concretely it means that consumers, for example, not only responded to attitudes concerning health products but also how likely they are to buy them.

3.2.2 Grocery retailing

Smith and Carsky (1996) note that grocery involvement is a complex creation and defines it as something constructed in the interaction of the individual, situation and product characteristics. They stress that grocery shopping depends on how involved the custmer is. Grocery products are low involvement products and the attention has been directed

towards the products and not on customers. Although grocery products are low involvement products, customers are still affected by their attitudes and beliefs when buying these products.

Griffin et al. (2000) stress the importance of being aware of that regional and cultural differences affect the shopping process. Their findings illustrates that the in-store environmental surroundings may not single-handedly affect consumers decision making. Furthermore, studying characteristics of shopping traditions in Beijing, Mai & Zhao (2004) supported this as they investigated consumer behavior and attitudes. Baltas & Papastathopoulou (2003) explore similarities as their research put focus on the Greek market, and the interaction between brand choice criteria, store selection and shopper characteristics.

Research on what variables that drives the consumer behavior decisions have been investigated over some years now (Clarke et al. 2006). The last decade, researchers have conducted research in specific market segments, such as attitudes on health issues, genetic modified food and organic food (Bogue et al. 2005; Lusk et al. 2004; Verbeke 2005; Urala & Lähteenmäki, 2004; Bamberg 2002; Lappalainen et al. 1998). This will be elaborated on in the following pages.

3.2.3 Attitudes towards health

Health aspects in consumer behavior have been examined in many countries and researchers have tried to explore factors that are influencing consumption of healthy food. There are aspects in this field, which are complex to measure, such as the definition of healthy food (Lappalainen et al. 1998). This varies across traditions, cultures, and regions, thus, as expressed by Griffin et al. (2000), consumers have diverse attitudes to healthy food. However, to illustrate the situation, Lappalainen et al. (1998) state that more than 70 % of the respondents consider that they do not need to change their consumption patterns. They already have healthy consumption habits. Seemingly, people in general are unable to evaluate their own health consumption situation.

Thus consumers have been more enlightened regarding health ingredients in food and its positive affect on the body. To feel good is according to the HealthFocus International (2004) report one of the main drivers behind health choices in Sweden; feeling good gives the impression of looking good. Still, consumers according to HealthFocus International (2004) do not want to forgo taste, freshness, quality and low price, to mention a few variables.

In modern retailing, health is an important motive for food shopping (Lappalainen, 1998). It is not a new phenomenon, as a concept it has been studied for some time. However the health trend has grown massively as the knowledge about diseases and the link to what we eat have been made clearer (HealthFocus International, 2004). Consumers base their healthy purchase decisions on a variety of factors such as psychologic, economic, sociologic and physiologic preferences (Blaylock et al. 1999). Rozin (1999) further stresses the fact that depending on setting, people eat both for pleasure and biological

reasons. However each individual aspect is abstract and difficult to understand (Blaylock et al. 1999). Health attitudes and beliefs are highly individual and in addition a relatively new phenomenon. Most of the research has aimed at attitudes towards health enhancing food and the possible health effects, whilst fairly little is known regarding consumers response to them and especially transferred to in-store behavior (Urala & Lähteenmäki, 2004; Gira 2003; HealthFocus International 2004, Mark-Herbert, 2004).

Moreover, Grunert et al. (2000) characterized the dairy segment into four segments based on consumers' quality perception. The segments were established based on consumer attitudes and acceptance of products. Product quality is defined as product specific characteristics, which consumers form based on product characteristics, and which they believe is affecting their purchase attitude. The results presented showed that the dairy segment can be divided into four divisions, namely hedonic, health-related, convenience-related and process-related quality.

Health and process-related quality is of importance for the consumer if the provided information is trustworthy. The other two concern personal characteristics. The findings indicated three phenomenon regarding information about health products (in their study; organic food, functional food, genetic modified food) and these are: communication about quality aspects; consumer attitudes towards trustworthy product characteristics; one inference processes in quality perception. These three issues, is building the acceptance of dairy products. The first consideration is information about how the product is produced and the translation of product benefits to consumers, which is important in order to reach them in an understandable manner. The second aspect is to provide credible information that positively interplays with consumer attitudes regarding product characteristics. The third factor concerns the awareness about that many consumers have negative attitudes towards mentioned products as they are in opposition to conventional attitudes. It is a hinder for many consumers in consuming food that are not natural. Grunert et al. (2000) stress the importance not to neglect these attitudes, instead they are emphasizing on providing uncomplicated information, as that is one of the key factors to positive consumer attitudes of new dairy products.

3.2.4 Functional food

Japan was the first country in the world to start selling functional food. Functional food is food with a scientifically proven medical effect (Mark-Herbert, 2004). Bogue et al. (2005) claim that functional food has become one of the more popular trends within grocery retailing the last decade. Functional food is based on patents and there are certain criteria that have to be fulfilled in order to market products as functional food. In Sweden, Proviva was one of the first functional food products that were introduced on the market (www.skanemejerier.se; www.proviva.se). The brand was introduced in 1994 and consists of fruit beverages and yogurts. Skånemejerier is marketing the products as health enhancing, primarily helping consumers having problems with the stomach. The functional food segment has grown in popularity and attitudes concerning these products have been researched (Saher et al. 2004; Verbeke 2005; Wansink et al. 2005; Mark-Herbert 2004; Urala & Lähteenmäki 2004)

Saher et al. (2004) emphasizes that functional food differs a lot from traditional health food and therefore needs to be separated and investigated separately, as consumers attitudes and behavior differ in relation to traditional health food. Saher et al. (2004) stress that consumers can be divided in relation to three variables; disciplined, gentle and innovative. They conclude that functional food consumers are innovative and that the other two variables scored low in their study regarding functional food. This implies that consumers are not hesitant to venture into new product territories.

Poulsen (1999) carried out research in Denmark regarding attitudes towards functional food. He concluded that the added substances strongly affected the Danish consumers' beliefs. They had a negative attitude towards functional food. Poulsen (1999) therefore concluded that functional food should be treated as a separate product division within each food categories. Urala & Lähteenmäki's (2004) research on attitudes come to similar conclusions as they stress that functional food is seen as something else than conventional products. It cannot be seen as a homogenous group of products, instead functional food products exist within diverse product categories. Furthermore, Urala & Lähteenmäki (2004) also came to the same conclusion as Poulsen (1999) that a balance between health, taste, familiarity, pleasure and security builds the platform in consumers' attitudes and behavior around consumers' willingness to consume.

3.2.5 Knowledge and health information

Concerning health attitudes in Sweden, consumers want to be well informed and learn more about health enhancing products (HealthFocus International, 2004). The information sources which build the platform of health attitudes and beliefs are constructed among friends, doctors and media (Ibid). Still no more than one out of ten, according to the HealthFocus International (2004) report believes that in-store information control their choices and supply them with necessary information.

The Gira study (2003) emphasizes that too much health information inhibit consumers in their actions. Grunert et al. (2000) conclude that educational knowledge is an important variable, as their findings show that too much new and difficult information inhibit the acceptance to purchase organic food, genetic modified food and health food.

Knowledge about what is being consumed and the effect of it is a central concept in functional food attitudes. However, one consequence of too much information is that it can easily lead to resistance, as consumers tend to dislike too much complex information. Furthermore it is hard to grasp all information as the time spent in a store is a critical fact for all products. Lusk et al. (2004) demonstrates this as well. Even though their research deals with genetically modified food and ethical aspects, it displays the negative impact of too much industrialized vocabulary, since consumers are skeptical to eat unnatural ingredients. Bogue et al. (2005) concluded this as well, although they stress the relation to age, gender and socio-economic situation to be main bricks to overcome the knowledge obstacle. The Gira study (2003) also signifies this as the report showed that technicalities were more hampering than appealing to consumers. Monneuse et al. (1996)

touch upon this as well and connect it to knowledge about diseases. No knowledge about diseases is directly connected to food choices, as knowledge is believed to play a minor role in healthy food choices. Knowledge is on one hand a springboard but on the other an obstacle to consumption of functional food.

Blaylock et al. (1999) indicate that many forces independent of each other, such as time and money, overshadow health information. HealthFocus International (2004), on the other hand, states that information about health aspects is influential and important. The information should capture the consumers' willingness to eat and feel healthy and not the negative sides of not consuming the product. However, the two different studies are from different regions, USA and Sweden, which means that they may be comparable but not transferable.

3.2.6 The influence of taste

This aspect have been investigated a great deal in previous research, the results are striking, as it demonstrates that it is the number one driver in consumer decisions. Urala &Lähteenmäki (2004) stress in their report, conducted in among Finnish consumers, that consumers' attitudes towards taste are more important than the health aspects. Further their findings highlights that consumers are to some degree willing to compromise on good taste, if the product is functional food. Additionally the findings also indicate that Finnish consumers do not buy functional food, unless they know how it tastes. Taste is thus an important variable, but other variables concerning functional foods such as consuming because it is part of a healthy diet, is of equal importance (Urala & Lähteenmäki, 2004).

Verbeke (2005) carried out a study in Belgium and compared attitudes between conventional food and functional food. The report focused upon attitudinal determinants and concluded that slightly more than the average accepted functional food as long as it tastes good. Their investigation also points out that consumers would not change to conventional food if the taste was worse.

HealthFocus International (2004) stresses that consumers are very interested in good taste. Good taste is obviously regarded as a main driver, however for some consumers it is not the main driver. According to the Health Focus report there are groups of consumers who will not relent to taste just because it is healthy food. In Sweden 57 % belong to this target group. The report further stresses the importance to know how consumers reflect on these issues, for example, do consumers prefer taste before feeling better when making their choice?

Wansink et al. (2005) achieved similar results when investigating customers' perception of functional soy and concluded that consumers purchase of different reasons. According to their research, consumption of functional soy involves on one hand a taste aspect and on the other hand, depending on how involved consumers are, knowledge of product characteristics i.e. the health benefits of the products.

3.2.7 The influence of price

The role of price in retailing differs enormously among sectors and products in different retail settings (McGoldrick, 2002). Researchers have found different facts regarding price. Grewal and Marmorstein (1994) concluded that consumers tend to say price is important, but depending on product and situation this is varying. Ackerman and Telis (2001) also stress that consumer look upon price from different point of views, based on culture preferences, and that cultures have different shopping habits concerning price. Herrington and Capella (1995) indicate that consumers stress price is influential when making the product purchase, however in relation to time, price is not the main variable influencing customers. For example, less time at disposal dilutes the importance of price as the customers have less time to evaluate the purchase.

Factors affecting consumers' food habits can according Urala and Lähteenmäki (2004) be divided into three groups, the consumers, the food and the environmental and economic factors. Further they stress that these factors form consumer attitudes and are essential when consumers are making food choices. HealthFocus International (2004) states that Swedish consumers are interested in price, 55 % emphasize that price is utterly important, and influences their choice of product brand. Contradictory, the Gira (2003) study, stress that price is of subordinate interest when marketing and selling healthy products. However as Saher et al. (2004) accentuate there is very little knowledge about what variables that actually influence consumers in their purchase behavior of functional food.

Lappalainen et al. (1998) investigated several variables among consumers in Europe and attitudes to health food. The most important variables for Swedish consumers are, among others, price. 60 % of the respondents agreed upon the fact that price is influencing them while shopping. Nevertheless, Lappalainen et al.'s (1998) study, was conducted out-store and not at the point of purchase, thus it is of interest to learn more about this variable at the moment of truth. Especially concerning the fact that other researchers like Goldman et al. (1999) have emphasized that money is fundamental, as it influences where consumers shop. Yet, depending on culture and regional differences and what specific products consumers are purchasing, this is somewhat uninvestigated. Goldman et al (1999) conducted the research in Asia, although still other researchers have investigated the role money plays in western countries.

Price is controversial as researchers have concluded different findings about its influence. Grunert et al. (2000) state that price affect consumer in their choice of functional food. However their report is carried out in Denmark, Finland and USA. Therefore it is a possibility that there are regional differences as Danish consumers are more negative towards functional food (Poulsen, 1999). Therefore it is of interest to dig deeper into and explain how the consumers look upon price among Swedish customers when shopping functional food.

3.3 Chapter summary

From the presentation and discussion of theory it is concluded that the environmental stimuli will induce a person with feelings of *pleasure*, *arousal* and *dominance* along with the oppositional sides of these emotions. They will elicit a response in the person and he/she will either *approach* or *avoid* the setting. Environmental stimuli are multifaceted and diverse. It thus embraces a myriad of aspects pertinent to the setting. The environmental stimuli that have been discussed more specifically are factors related to merchandising and space allocation at the point-of-purchase. It is concluded that shelf space, product allocation and product placement are utterly important since they enable the customer to find the products and stimulate a purchase decision. Hence important variables that will serve as a base for the propositions are *the product placement*, *easiness of finding the product* and *the availability of the product*. These variables concern the general impression of merchandising in the shelves.

Regarding health attitudes, it is concluded that knowledge and information are crucial for functional food consumers, although to much technicalities and intricate vocabulary can be an obstacle for consumers to adopt these products. The health aspects of consuming these products are believed to be the number one driver of consuming functional food. The importance of taste is somewhat contested, and according to some researcher it is said to be as important as the health aspects whereas some researcher downplay its importance. Price is another aspect of health attitudes that undergoes similar discussion. The health factors will in the propositions be related to the two variables *health aspects* and *nutritional properties of the product*. The variables *price* and *taste* will also be included as they seem to be important.

3.3.1 Propositions

Proposition 1: Health aspects and nutritional properties will be more important than taste and price when purchasing Proviva.

Proposition 2: Taste and price should be more important than health aspects and nutritional properties when purchasing Bravo.

Proposition 3: Health aspects and nutritional properties should exert more influence than environmental factors on Proviva customers.

Proposition 4: The impact of environmental factors should be higher than health aspect and nutritional properties for Bravo.

Proposition 5: The decision to purchase Proviva should be taken outside the store.

Proposition 6: When the choice and purchase decision of both Proviva and Bravo are made in the store, the influence of environmental factors should be higher.

Proposition 7: The emotional state dominance should strike higher than arousal and pleasure.

4. Results

In this chapter the results from the questionnaires are presented. The chapter is divided into the following parts, descriptive statistics, health factors, environmental factors and emotional states.

4.1 Descriptive statistics

Throughout the result part, following information is needed in order to facilitate for the reader. Frequency indicates how many respondents from each product group who filled in the questionnaire. Mean signifies the average value. The Likert scale that was used ranges from one to five, and the semantic scale ranges from one to seven. Mean is thus providing descriptive information on how the respondents filled out the questionnaire. Moreover, t-test is used when comparing the results in order to explore statistically guaranteed differences. This is done on a confidence interval of 95 %. Thus a value less than 5 % is statistical secured and consequently indicates a difference.

Altogether 130 consumers took part of the questionnaire. 30 of them were Proviva customers, which are the object of study, the remaining 100 was part of the test group, i.e. Bravo customers. Table 1 depicts to whom the customers buy the product. The difference is low when comparing the two products. More than 80% in both cases bought the product for themselves or for someone else and themselves. This implies that the products are bought for self consumption and buying decisions are mostly taken from a personal point-of-view. The remaining approximate 20% of each group is still of interest as they are still influenced to make the buying decision in any one way. Further, the majority of both Proviva and Bravo customers buys the product between one to two times a week.

	Frequency	To myself	Somebody else	Myself & somebody else	Total
Bravo	N	20	21	59	100
	%	20 %	21 %	59 %	100 %
Proviva	N	7	5	18	30
	%	23 %	17 %	60 %	100 %
Total	N	27	26	77	130
	%	21 %	20 %	59 %	100 %

Table 1. To whom do you buy the product.

Moreover, approximately 35% of both Proviva and Bravo customers purchase the product less than once a week. The amount of customers that buy either Proviva or Bravo more than three times a week is rather small, 13% for Proviva and 10% for Bravo.

Table 2 presents where the purchase decision was taken regarding product and brand. The first statement is general and concerns whether the decision to purchase the product was taken inside or outside the store. It is followed by a specific statement that, in the same manner, concerns where the choice of brand was taken. The decision to choose the product inside the store is low for both product groups, 2.16 for Bravo and 1.90 for Proviva. This means that the decision to buy the product was not made in-store for either Bravo or Proviva. Concerning the specific brand statement, the choice of brand is a little higher for Bravo, 2.34, compared to the general question which is 2.16. Proviva on the other hand have a lower mean than Bravo on this question, 1.42. Hence the product move in opposite directions, the brand choice was more or less made outside the store for Proviva, whereas the brand choice for Bravo moves more towards being an in-store decision.

Regarding the decision to buy the product in the dairy department, the difference between the products cannot be statistically proven as the significance is 0.463 which is higher than 0.05. The difference between to products considering where the decision for the specific brand was made is statistically proven with 0.012 in significance. This implies that even though the mean is low for both Bravo and Proviva, Proviva customers are more prone to decide on brand before entering the store. For Proviva customers, the purchase decision for both product and brand are made before entering the dairy department.

	Product	Frequency	Mean	Sig.
Decision of product	Bravo	100	2.16	0.463
	Proviva	30	1.90	
Choice of brand	Bravo	100	2.34	0.012
	Proviva	30	1.42	

Table 2. Two statements explaining in-store decision-making: the decision to purchase the product was made in the store and the choice of brand was made in the store.

The difference between the two questions in table 3 is that the first statement concerns the customers' attitudes in changing taste within the same brand when their ordinary taste is not in stock. The second question concerns the attitude to switch from one brand to another when the brand is not in stock. Proviva customers are more prone to replace their taste within the same brand in contrast to Bravo customers who do not change the taste within the brand. In numbers this is 2.82 for Proviva and 4.13 for Bravo and the difference between them is statistically confirmed. The Proviva customers replace a product taste out of stock within the same brand to a greater extent than Bravo customers.

Further, Bravo customers are more positive to replace the Bravo brand with another brand but stay with the same taste. Proviva customers, on the other hand, are more willing to stay within their brand and select another flavor. The difference between the means, Bravo 3,96 and Proviva 1.90, is statistically significant. Consequently, Proviva customer do not willingly replace a product out of stock with another brand, whereas Bravo customers are more open to switch between different brands.

	Product	Frequency	Mean	Sig.
Replace with another taste within the same brand	Bravo	100	2.82	0.000
	Proviva	30	4.13	
Replace with different brand within the same product category	Bravo	100	3.96	0.000
	Proviva	30	1.90	

Table 3. Two statements explaining customers' willingness to switch taste or brand when the product is out of stock.

4.2 Health factors

Table 4 presents the results of the influence of health factors on Bravo and Proviva. For Bravo customers taste is more important than the other three variables, as it has the highest mean with 4.66. However, the other three variables have almost similar mean, from health 2.71, price 2.42 and nutritional properties 2.78. Price is thus the least important variable when customers decide to buy the Bravo product.

For Proviva customers, the respective scores of taste, health and nutrition are very similar, with a score between 4,33-4,34. Price, on the other hand, scores relatively low with 1, 80. It is then of minor importance when making the purchase decision. Taste is almost as high as it is for Bravo consumers. The health and nutritional variables are scoring high in comparison to the Bravo numbers. Further, the price is not as important for the Proviva customer as it is for the Bravo consumers.

The difference between the means in table 4 is statistically significant in all the four variables. However, the health and nutritional variables are considerably more significant than the other two. Taste is an important variable for both Bravo and Proviva and in addition, taste is statically proven to be slightly more important when choosing Bravo compared to Proviva. On the contrary, health aspects and nutritional properties are considerably more important when purchasing Proviva than Bravo. Further, price does not seem to matter that much when making the purchasing for none of the products, however there are a statistically significant difference between them. The price is thus

more important for Bravo customers. For Proviva price score noticeably lower than the other variables.

	Product	Frequency	Mean	Sig.
Health aspects	Bravo	100	2.71	0.000
	Proviva	30	4.33	
Price	Bravo	100	2.42	0.025
	Proviva	30	1.80	
Taste	Bravo	100	4.66	0.04
	Proviva	30	4.33	
Nutritional properties	Bravo	100	2.78	0.000
	Proviva	30	4.34	

Table 4. The impact of health factors when making the purchase decision.

4.3 Environmental factors

For both Bravo and Proviva customers, the environmental factors are about the same, only small differences exist (see table 5). The three variables have almost the same results and the influence of environmental factors seems to be low on both product categories. Although the differences are small, the environmental variables seem to be more consistent for Bravo customers. For Proviva customers, the environmental factors are a little bit more varying. The variable easiness-to-find-the-product is the lowest one, and in relation to the Bravo it is the variable that indicates the largest difference.

	Product	Frequency	Mean	Sig.
Product availability	Bravo	96	2.61	0.769
	Proviva	30	2.70	
Easiness to find the product	Bravo	100	2.56	0.100
	Proviva	30	2.03	
Product placement	Bravo	100	2.18	0.603
	Proviva	30	2.33	

Table 5. The impact of environmental factors when making the purchase decision.

Within the environmental variables, no statistical difference exists between the two product groups. Thus customers' perception of the environmental factors is more or less equal between Bravo and Proviva. Possibly, a tendency towards a statistical difference of the easiness-to-find-the-product variable can be discerned, as the significance is 0.10. Concerning the other two variables, there is not even a tendency towards statistical difference, as the significance is 0.769 for product availability and 0.603 for product placement.

When the purchase decision to buy either Proviva or Bravo was made in the dairy department, environmental factors were more influential than for those customers who made the decision out-store (see table 6). On the product placement variable the mean is 2.91 to in-store decision compared to 1.96 for out-store decision, which is considerable. There is the greatest difference between the in-store and out-store decision making related to the environmental variables. Additionally, the mean for product availability is 2.97 for in-store decisions and 2.18 for out-store decisions. The mean for easiness-to-find-the-product is 3.12 for in-store decisions and 2.44 for out-store decisions. This also represents the highest score of the environmental variable concerning in-store decisions. By consequence, those who make the purchase in-store are more affected by this environmental variable than those who make it out-store. Nevertheless the environmental variables do not reach any great heights, especially compared to the influence of taste, health aspects and nutritional properties.

Location of purchase decision	Frequency /Mean	Product availability	Easiness to find the product	Product placement
In-store	N	34	32	34
	Mean	2.97	3.12	2.91
Indifferent	N	3	3	3
	Mean	4.33	3.33	2.33
Out-store	N	93	91	93
	Mean	2.18	2.44	1.96
Total	N	130	126	130
	Mean	2.44	2.63	2.22

Table 6. The impact of environmental factors when making the decision to buy the product in-store.

Regarding the environmental factors and whether the choice of brand was done in the store or not, the distribution is more or less the same as with the product decision making (see table 7). There is a slight tendency that the environmental factors have greater impact when the choice is made in the dairy department. The product availability variable is higher when the choice is made in-store with a mean of 3.19, compared to out-store 2.44. The variable easiness-to-find-the-product is also noteworthy as the difference is

3.06 to in-store and 2.18 to out-store. The greatest difference is provided by the product placement variable where the mean for in-store choice is 3.06 and out-store choice is 1.93. This indicates that although the environmental variables are not highly influential, they are more influential when the brand choice is made in-store.

Location of brand decision	Frequency /Mean	Product availability	Easiness to find the product	Product placement
In-store	N	32	34	34
	Mean	3.19	3.06	3.06
Indifferent	N	4	4	4
	Mean	2.50	3.00	1.50
Out-store	N	90	92	92
	Mean	2.44	2.18	1.93
Total	N	126	130	130
	Mean	2.63	2.44	2.22

Table 7. The impact of environmental factors when deciding on brand in the store.

4.4 Emotional states

The variables that have been tested are *pleasure, arousal* and *dominance*. As mentioned in the method, this has been measured by estimating the respondents' responses to the environment of the dairy department. To guarantee that the variables are measuring what they are supposed to measure, a correlation test within each variable has been done. Therefore a statistic reliability test have been conducted, the alpha test. Consequently, a test with the two dimensions within each variable has been conducted. This means that the findings will indicate whether the two dimensions are measuring the same emotional concept or not. Malhotra and Birks (2003) stress that the alpha value must be higher than 0.60, otherwise they are not correlated and can thus not be accepted. In table 8 alpha tests are presented showing whether the three variables are viable or not.

Pleasure have an alpha value of 0.652 which is higher than 0.6. This means that it is accepted as an appropriate measurement, and viable in this setting. Arousal scored only 0.295 which is lower than 0.6 and this is not a satisfied alpha value. Thus it is not measuring what it is suppose to measure. Concerning the last variable dominance, it scored higher than the other two on 0.893. This is very high and indicates that the underlying dimensions are measuring the same variable. Conclusively, this means that not all three emotional states could be measured in this setting, only pleasure and dominance were reliable measures.

Cronbach's alpha test					
Pleasure		Arousal		Dominance	
Alpha	Number of dimensions	Alpha	Number of dimensions	Alpha	Number of dimensions
.652	2	.295	2	.893	2

Table 8. Alpha test of the emotional states.

As noted above, the emotional state arousal is not statistically validated and can therefore not be relied on. By consequence it can not be compared to the other two emotional states. As shown in table 9, the emotional state dominance looms large in comparison to pleasure, 1.6 for dominance compared to 2.94 for pleasure. The difference is statistically verified on a confidence interval of 95%. Thus the customers feel very secure and much in control in this setting. Even though pleasure scores lower than dominance, this emotional state is tilted more towards pleasure than displeasure.

	Frequency	Mean	Sig.
Pleasure	130	2.94	0.000
Dominance	130	1.60	

Table 9. The emotional states of pleasure and dominance.

4.5 Chapter summary

The results show that the Bravo customers are more prone to switch brand compared to the Proviva customers. Thus the Proviva customers are more into staying within the same brand and choosing another taste. Further the result indicates that Proviva customers are significantly more influenced by health aspects and nutritional properties compared to the Bravo customers. Moreover, price is more important for Bravo customers than for Proviva customers as Proviva customers does not pay the same interest to the price variable. Even though there is a statistical difference in price, it is scoring relatively low for both products. Taste on the other hand is scoring high for both products, although there is a significant difference, which indicates that the bravo customers are more concerned about the taste.

Environmental factors are not that influential on either Proviva or Bravo customers. There are no significant differences, however the results point towards a tendency in difference for the easiness-to-find-the-product variable. But as stressed, it is not significant.

Concerning the customers that have made their product purchase decision and brand choice in-store for either Proviva or Bravo, the results show that they are more affected by the environmental variables, and especially the product placement variable. However, the result is moderately low, and not as high as for the health variables.

The emotional states pleasure and dominance are useful as an appropriate measurement in this setting whereas the arousal variable is not. The arousal measurement is weak and can not be utilized in this study. Furthermore, the dominance variable is showing that customers' are in control of the setting, and the pleasure variable is almost neutral but little bit tilted towards pleasure which means that they are relatively happy.

5. Analysis

In this chapter the results will be discussed and they will be set in relation to theories. As such the propositions will be either confirmed or disconfirmed.

5.1 Proposition 1

Health aspects and nutritional properties will be more important than taste and price when purchasing Proviva.

Proposition one is partly confirmed in that both the health aspects and the product's nutritional properties were very influential when purchasing Proviva and that price had a very low impact on the purchase decision. The disconfirmation of the proposition lies in that taste scored as high as both health aspects and nutritional properties. However, when comparing Proviva and Bravo, it is statistically proven that taste is more important for Bravo customers than for Proviva customers. In this light, taste is not as an important factor when purchasing Proviva than it is for Bravo.

Research claims that health is the main driver when purchasing functional food and taste seem to be important most of the time, although different studies showed varying degrees of the importance of taste (HealthFocus International 2004; Urula & Lähteenmäki, 2004; Verbeke, 2005; Wansink et al. 2005). The results show that taste is an essential aspect when making the product choice, and therefore boost research that claim that taste is as important or nearly as important as health aspects. In contrast to Bravo taste is not as important. In the light of this it can be concluded that the high scores of health aspects may decrease the importance of taste for Proviva customers, although it is still very important.

Further, research indicates that health information and knowledge are highly important when buying health products if it is not too intricate (Gira, 2003; Bogue et al. 2003; Monneuse et al. 1996; HealthFocus International, 2004). The fact that Proviva customers have to an overwhelming extent made the purchase decision before entering the dairy department and that they have high health awareness, could imply that they have developed their product knowledge outside the store. This is in line with the HealthFocus International (2004) report which states that one out ten customers believe in in-store information about the products. That considerably more customers purchase Proviva due to the product's health and nutritional properties underlines that customers are well-informed and possess knowledge about the product they are purchasing and/or consuming. This sheds some light on Lappalainen et al.'s (1998) statement as they emphasize that customers cannot evaluate their health attitudes. The results, however, show that Proviva customers are more health conscious than Bravo customers in their purchase decision, which is seemingly appropriate as Proviva have a stronger health

association. Using Grunert et al.'s classification, Bravo products will then be divided into hedonic related quality and Proviva into health-related quality. The reason for this is that Proviva customer seem to be very health conscious in their purchase decision, whereas taste is the main driver for Bravo customers. For Proviva's sake, this can also be derived to the functional meaning of purchasing a product, as Liljander and Stranvik (1997) note, or to the utilitarian reinforcement of purchasing it as Foxall (1997) argues.

5.2 Proposition 2

Taste and price should be more important than health aspects and nutritional properties when purchasing Bravo.

The results concerning proposition two have already been touched upon and the proposition cannot be fully confirmed either. For Bravo customers, taste is the most important reason behind the purchase decision, which confirms the proposition. On the other hand, price scored lower than the health variables, which does not confirm the proposition. For Bravo customers taste and price were more important than for the Proviva customers. This can be illuminated by the fact that the purchase decision and the choice of brand were to a greater extent made within the dairy department and that the attitude towards product and brand switching were considerably higher for Bravo customers. It further cements the health awareness of Proviva customers as they do not replace their product since they buy it for health reasons. Bravo customers are not as brand loyal as Proviva customers since they switch brands in order to have the taste they prefer. Further, the results on price go against theory that claims that price is an important variable when making the purchase decision (HealthFocus International, 2004; Goldman, 1999; Lappalainen, et al. 1998). It showed to be of minor importance for both product brands. In comparison, however, price was less important for Proviva customers. This shows that Proviva customers are less price sensitive than Bravo customers. The Gira (2003) report stress that price is of miniscule importance regarding health product and the results in this study confirm this.

5.3 Proposition 3

Health aspects and nutritional properties should exert more influence than environmental factors on Proviva customers.

Proposition three is fully confirmed when comparing health factors to environmental factors for Proviva. The health aspects and nutritional properties are significantly more important when deciding on the product than are the environmental factors. Nevertheless, when contrasted to Bravo, there is no statistical difference between the two brands. Hence it cannot be claimed that environmental factors are specifically insignificant when purchasing the Proviva since this also holds true for Bravo. Possibly, there could be a very small tendency that the product placement made it easier to make the purchase decision in the Bravo case.

5.4 Proposition 4

The impact of environmental factors should be higher than health aspect and nutritional properties for Bravo.

Proposition four is not confirmed. Health factors score low on Bravo, which is also proposed, whereas environmental factors also score low, which is not proposed. The environmental variables actually scores lower than the health factors. Hence the proposition cannot be confirmed at all.

Relating propositions three and four to theory, the environmental factors studied in this paper did not have a positive relationship to the purchase decision of either product brand. Theories claim that environmental factors should affect purchase behavior (e.g. Donovan & Rossiter, 1982; Donovan et al. 1994; Tai & Fung, 1997; Foxall & Greenley 1999) but apparently the results do not show this relationship. Consequently, product placement, allocation and availability had no or little impact on the purchase decision on both Bravo and Proviva. Interesting to note is that for Bravo customers, who were hypothesized to be influenced by environmental factors to a greater extent than Proviva customers, health aspect and nutritional properties were slightly more important than the environmental factors.

According to Turley and Milliman (2000) merchandising is very important. It can be a stimulus for a purchase decision (Urban, 2002). Issues of merchandising regarding product allocation, shelf management and the availability of the products in the racks should facilitate the purchase decision, even cause the purchase decision (Borin & Farris, 1995; Larson & DeMarais, 1999; Urban, 1998; Turley & Milliman, 2000; Urban, 2002). However, the variables relating to this in propositions three and four could not support this. The positive effects of merchandising that are strongly emphasized only seemed to have minor importance when making the purchase decision (Turley and Milliman, 2000).

This can also be highlighted by Liljander and Strandvik (1997), as cognitive and emotional aspects can be hard to disentangle. According to theories of store atmosphere, the environmental stimuli causing positive emotions in a person should lead to more time and money spent (e.g. Donovan et al. 1994). However, as Liljander and Strandvik (1997) note, the emotional state is influenced by the shopping motives. For Proviva customers, the shopping motive seems to be the health attributes of the product which is in contrast to Bravo customers. As noted above, the functionality or utilitarian reinforcement of making a purchase influences the purchase behavior. Even though Proviva customers, and maybe also Bravo customers, may be influenced by environmental factors, the clarity of their shopping motives can overshadow their emotional states. On the other hand, familiarity with the store can decrease the relative impact of the environmental factors (Donovan & Rossiter, 1982; Donovan et al. 1994).

5.5 Proposition 5

The decision to purchase Proviva should be taken outside the store.

Proposition five is confirmed, the Proviva decision is taken outside the store. However it shows the same result for Bravo and no significant difference exist. There are no clear cut explanations to this result, although there are several indications when interpreting the measurement. This comes a little bit hand in hand with the result where the attitudes are established. As the HealthFocus International (2004) stresses, nine out of ten Swedes are educated in the health field through media, friends and doctors in everyday life outside the dairy department and the grocery store. There is possibly a relationship between where the decision is taken and where the attitudes and beliefs are established. Concerning functional food, earlier studies (Urala & Lähteenmäki, 2004; Sorenson & Bogue, 2003) have indicated the same results which further strengthen the fact that health attitudes regarding functional food are mostly recommendations and not founded in-store. Most Proviva consumers are well aware of the nutritional substances in the product, and out-store decision are maybe linked to health knowledge and to the context of the establishment beliefs and attitudes.

Comparing the choice of brand made in the store, it is a difference between the two products. The Proviva customers as compared to Bravo customers are very certain in what they are shopping for and it is a statistical difference between where the choice of brand was made. This touches upon the consumer awareness that Grunert et al.'s (2000) discuss. Their findings show that consumers want to know the benefit of the functional food product quality and the effects of consuming it. This could explain that the decision for Proviva customers regarding product and brand is almost entirely made out-store and the high scores of health aspects and nutritional properties. Bravo consumers, on the other hand, are searching more for the same taste which could explain that they are positive towards switching brand.

That the purchase decision was taken outside the dairy department can be highlighted by Foxall (1997) who characterize grocery shopping as routine purchasing. Consequently, it does not seem odd that the purchase decision was made before entering the dairy department as much grocery shopping is on routine. However, this does not explain the Bravo customers' decision and choice. Although they are shopping on routine, their decisions seem spontaneous. Once again, the difference between the products can be explained by the Proviva customers strong health awareness. Given this, the shopping motive can be an important aspect of making the purchase decision, provided by the fact that both the product decision and brand choice was taken out-store as well as the strong impact of the product's health aspects and nutritional properties.

5.6 Proposition 6

When the choice and purchase decision of both Proviva and Bravo are made in the store, the influence of environmental factors should be higher.

This proposition is confirmed for all environmental variables as they showed to bear more influence on in-store purchase decisions and brand choices. Donovan et al.'s (1994) theory stresses that the above proposition should be confirmed. Indecisive customers entering the store are more influenced by the environment than customers who already

made up their minds on what product to buy. The environmental variables have slightly more impact on in-store product purchase decisions than on out-store, whereas their impact on brand choice decision making is much greater. This is supported foremost by Donovan and Rossiter (1982) and Donovan et al. (1994) who declare that decisions made in-store are largely influenced by environmental factors. Unplanned purchases should be influenced by environmental factors. Yet, the impact of environmental variables does not score significantly high when compared to the influence of taste, health aspects and nutritional properties. Concerning the placement variable, the customers who are making their choice in-store are more affected by this environmental stimulus. Nevertheless, this environmental stimulus is in this setting low and the measurement is neither high nor low, and it should not be treated as license to throw in the kitchen sink. Although, as the emotional state dominance scores high, a reasonable explanation is that consumers are feeling very secure and in control in this setting and therefore know what to buy and where to find it. Conclusively, the proposition is confirmed as the environmental factors score higher for in-store decision and brand choice, but as mentioned, their importance should be downplayed.

5.7 Proposition 7

The emotional state dominance should strike higher than arousal and pleasure.

The Cronbach's alpha test measuring emotional states shows that only the emotional states of pleasure and dominance are reliable in this setting and not arousal. The M-R model, in this regard, was not possible to implement in this setting. However, the measurement of the emotional state dominance is higher than pleasure, and possibly arousal, although as mentioned, this is not of current interest as the alpha value of arousal is not reliable. The mean for dominance is much higher than pleasure and thus the proposition is not totally rejected. Concerning the reliability, the results of dominance present similar findings to prior research, such as Foxall (1997), Foxall and Greenley (1999) and Foxall and Greenley (2000). The emotional state dominance is contradictory to earlier research such as Donovan and Rossiter (1982) as they found no support for dominance in the retail setting. However the results in this paper support Foxall and Greenley's (1999) conclusion that dominance is measurable and influential in grocery shopping. In this regard it supports the confirmation of the proposition.

Concerning the total measurement of the emotional states it can possibly be related to what has been stressed in the theory about where the decision is taken, and that consumer attitudes are shaped out-store. Thus it gives support to what Lusk et al. (2004), Bogue et al, (2005) and the Focus International study (2004) concluded, that attitudes are shaped out-store regarding functional food. The high influence of dominance in this study can be explained by Donovan and Rossiter (1982) and Donovan et al. (1994), among others, who state that familiarity with the setting may have an impact on the emotional states (although they did not include dominance themselves in their study). Foxall & Greenley (1999; 2000) emphasizes that the retail grocery store induces customers to feel in control and not controlled by the setting and therefore renders high scores of dominance. Familiarity with the setting could then induce feelings of security and control, i.e.

dominance, and carrying out the groceries on routine does not seem to be too far from these feelings. Given this it would explain the dilemma addressed in the previous propositions that environmental factors are scoring low even though the purchase is unplanned.

As noted, Foxall and Greenley (1999) claimed that dominance is strong in the grocery setting, and pleasure and arousal should be insignificant. The results indicate that customers also are experiencing pleasure in the dairy department. Even though the score of pleasure is not particularly high there is still some tendency towards pleasure. The high score of dominance, however, strengthens the argument of a correct measurement following findings of other research (Mehrabian & Russell, 1974; Foxall, 1997; Foxall, 1999; Foxall & Greenley, 2000).

5.8 Chapter summary

Proposition one was partly confirmed as health aspects and nutritional properties were very important and price is not important when making the purchase decision. It is disconfirmed as taste is scoring as high as health aspects and nutritional properties. On the other hand is taste not as important for Proviva customers as it is for Bravo customers which compensates for the disconfirmation. Related to this is proposition two which is confirmed on all three variables except for the price variable, which are rather low on both groups but still less important for Proviva customers. Proposition three is confirmed but not statistically proven in comparison to Bravo customers. This also disconfirms proposition four as the environmental factors score low for Bravo customers. Proposition five is fully confirmed as Proviva customers make their purchase decision outside the store. Further proposition six is supported as the environmental factors are scoring higher for in-store product decision and brand choice. Finally, regarding the emotional states of the M-R model, only dominance and pleasure provided to be reliable measures and not arousal. With respect to this, proposition three could not be supported.

Relating the propositions to theory, it is concluded that health aspects and nutritional properties are the most influential factors when purchasing Proviva and this should be based on a health awareness and consciousness as the decision to purchase the product and the specific brand was made before entering the store. Aspects of merchandising related to environmental factors showed to have no or little influence on both product categories. This does not support theory at all. The environmental factors only seemed to be more important concerning in-store decisions as theories suggest. Although the environmental stimuli were somewhat more important for in-store decisions and choices, the environmental variables did not score particularly high. The emotional state dominance, on the other hand, supports theory. It is suggested that the feelings of dominance and the fact that much grocery shopping is made on routine underlines the purchase behavior. This also connects to the idea of shopping motives and the interconnectedness with emotional states.

6. Conclusion

In the following chapter inferences that are made from the analysis of the results will be discussed in relation to the research purpose. Limitations will be considered and future research will be recommended.

The research question of this paper is to explain the relative influence of environmental factors and health factors when buying a functional food product in Sweden. To answer this question a quantitative strategy using questionnaires was conducted. Research about health and functional food stressed the importance of taste and price which is why they were included when studying the influence of health variables. From the results and analysis it is concluded that health aspects and nutritional properties were the main drivers when buying functional food and taste has to be regarded as a very influential variable as well. Price, on the other hand, was not that important. The environmental factors show no or little influence when purchasing the functional food product. This is also the case with the control group which is showing very low values as well on the environmental stimuli variables. It is thus concluded that health factors influenced the purchase decision to a great extent whereas the environmental factors had very little influence on the purchase decision. The stimuli for making the purchase were thus based on attitudes, or cognitive factors, and not on the environmental stimuli of merchandising.

6.1 Theoretical contribution

Given the results and the analysis, the M-R model, as operationalized in this setting, and consequently literature on store atmosphere could not explain purchase behavior of functional food products. In this regard, the theories therefore fall short in this paper regarding the M-R model and store atmosphere. However, when the purchase decisions where divided into in-store and out-store decisions, the tables turned. Unplanned purchases were more influenced by the environmental stimuli and this fact supports theory, mainly Donovan and Rossiter (1982) and Donovan et al. (1994). However, the impact of environmental stimuli should be downplayed as it did not reach any higher levels. Still, this can be the reason why the environmental impact were so low for functional food purchases since customers had already made up their minds before entering the store. This also confirms research that claims that the knowledge about the benefits of consuming these products is crucial for health and functional food and this is mostly created outside the store.

As the knowledge about health is profound, the functional food customer knows what to shop for. This goes in line with previous research (Lappalainen, 1998; Saher et al. 2004; Urala & Lähteenmäki, 2004; Verbeke, 2005), which signify that health attitudes are the main driver. This is maybe already known but not in contrast to other variables and especially not in relation to environmental variables. Given this, the purchase decision is

thus made outside the store. In turn, as the purchase is planned, the environmental stimuli are lower, even though it is possible that the environmental stimuli may still cause positive emotions of pleasure and arousal in the customer. Thus the argument of planned and unplanned decisions and the impact of environmental stimuli supports theory (Donovan and Rossiter, 1982; Donovan et al. 1994).

Further, to explain the low impact of environmental stimuli, Foxall (1997) and Foxall and Greenley (1999;2000) discuss that grocery shopping has to do with routine purchasing and this causes feelings of dominance rather than pleasure and arousal. The findings support this as dominance scored very high in the dairy department and pleasure did not score particularly high. On the other hand, the M-R model could not be entirely relied on in this setting as all but one emotional state (arousal) provided stable values. The reason for this could be that the operationalization of this variable was not properly done. In chapter two it was mentioned that the translation of this variable was rather cumbersome and this could possibly have blurred the results. This was concluded from the pilot testing and it was tried to be offset before making the survey. Nevertheless, this shortcoming can be contrasted with Donovan and Rossiter (1982) who excluded dominance from their study as they could not related it to their findings in any way. It could then be possible that arousal is impossible to relate to in the grocery retail setting.

Although this study did not consider familiarity with the store (Donovan et al. 1994) or routine purchasing (Foxall, 1997) the high level of dominance could indicate that the customers are making the purchases on routine and are familiar with the store. Moreover, Mehrabian and Russell (1974) could not find support that dominance led to approach to the setting and Donovan and Rossiter (1982) excluded this variable entirely. Although Foxall (1997) gave support to this variable in the grocery setting, it is in this study not clear what the role of dominance is. It is possible that security and the feeling of being in control, which are linked to dominance, stem from the knowledge about health as this makes the purchase behavior preprogrammed. Knowing what you are searching for can in this case decrease the influence of environmental stimuli. Further environmental variables could affect the choice of store more than the choice of product (Chebat & Michon, 2003).

Hence, the findings of this paper show that environmental factors concerning merchandising have no impact on the purchase of a product with strong health connotations. Instead health factors related to the product seem to make up the purchase decision together with taste. As the health factors influence the purchase out-store, the environmental influence is consequently low. Regarding the M-R model this amounts to two alternative conclusions. On the one hand, the M-R model as it is conceptualized in previous research is only viable when studying purchase and shopping behavior when the customer merely has vague idea of what he/she is going to purchase. Additionally it is only suitable when using customers who are not familiar with the store. On the other hand, the M-R model should be stretched to encompass influential factors pertinent to the customer, as this has been shown to influence purchase behavior. In this case not only unplanned purchases should be considered. In this paper the influential factors pertaining to the customer have been health attitudes, but should in other contexts with other

products concern variables that are important there. The alternatives would then be either to use the M-R model in a restricted manner or to enlarge it with additional variables.

6.2 Practical implications

It is important to emphasis for marketers that the functional food customers have already made up their mind before entering the store. Their mind is set on what to purchase and they are very decisive in what to buy. Therefore should marketing in Sweden foremost be applied out-store.

Concerning the environmental factors influencing consumers, practitioners are recommended to be aware the low impact of environmental factors compared to health attitudes, which are more forming the customer and their shopping habits. The impact of the health variables is stronger and more central than environmental factors. These health attitudes are established out-store and their influence cannot be neglected in-store as they are explaining what variables that are affecting the customers. However, it is important to stress that environmental factors should not be dismissed, as it can capture unplanned purchases.

Functional food consumers are not that concerned about the price, it is more important for them that it is healthy together with good taste. Thus, the result of this study goes in line with what the Gira (2003) report stress, that consumer attitude towards price in Sweden is not playing the first fiddle. However this is somewhat contradictory, as price according to the survey conducted by HealthFocus International (2004) report that Swedish consumers are to a large extent influenced by price. Therefore a recommendation is to tone down its role both in-store and out-store, as it is a weakest parameter influencing customers.

Taste is important and maybe it is obvious that consumers prefer a product that tastes good. Compared to Bravo, there is a difference, although the difference is not that huge and nothing indicates that functional food consumers are ignoring good taste in their choice. Therefore one suggestion is to develop more flavors and get hold of more customers as taste are utterly important even in-store and have a direct influence on consumers. By doing so, more customers can be reached.

6.3 Limitations

When studying the environmental factors in this paper, they have been reduced to only three variables concerning merchandising. This has been done in order to enable the conduction of this study and the variables had to be heavily downsized. In reality there are multiple variables in the retail setting influencing the customer. The chosen variables cannot represent the whole environmental stimuli. Therefore when speaking of the environmental stimuli in this thesis, it should not be interpreted as encompassing the full range of the store atmosphere. Variables that seemed important at the point of purchase were therefore opted for as the impact of, for example, smell or sound should have very little impact at the purchase decision in the dairy department. Still, some important

variables that have great influence on purchase behavior could have been overlooked. This is also true for the health factors, some variables related to consumer attitudes that are significant could have been left unnoticed. Moreover, any far reaching conclusion about the M-R model and the emotional states could not be drawn. The model failed to serve its purpose in all its aspects since the results of one emotional state proved to be invalid. Further, the findings only relates to customers of one store in one part of Sweden. Before establishing that the findings in this paper are correct similar, it is thus important to conduct similar studies.

6.4 Future research

As been touched upon, there are some limitations to the conduction as well as the findings in this paper. It is thus suggested that other environmental variables are studied as they also should affect the customers. Consumer attitudes towards products and the relative influence of the store atmosphere in other settings are also recommended as subject of future research. More importantly, the research should extend the knowledge concerning the two alternative conclusion discussed in the theoretical contribution. This concerns whether the M-R model actually is restricted to unplanned purchases or if it can be expanded with additional variables, and if so, to what extent. By and large, the M-R model should be tested on actual customer in real and diverse setting, since in much research on this model, the setting is treated from an out-store perspective and non-customers are often used.

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Appendix

Questionnaire

The following study is carried out by students from Lund University. It treats purchase decisions of fruit beverages and examines factors related the choice of product. We wish to know what led to your purchase decision.

1. **How many times a week do you purchase this product?**

   Less than once   ☐
   1 to 2 times   ☐
   2 to 3 times   ☐
   3 to 4 times   ☐
   More than 4 times   ☐

2. **To whom do you buy the product?**

   Myself   ☐
   To somebody else   ☐
   To myself and somebody else   ☐

3. **The taste affected my choice of product.**

   Strongly disagree   ☐
   Disagree to some extent   ☐
   Neither agree nor disagree   ☐
   Agree to some extent   ☐
   Strongly agree   ☐
   Do not know   ☐

4. **Health aspects affected my choice of product.**

   Strongly disagree   ☐
   Disagree to some extent   ☐
   Neither agree nor disagree   ☐
   Agree to some extent   ☐
   Strongly agree   ☐
   Do not know   ☐

5. **Price affected my choice of product.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

6. **The product's nutritional properties affected my choice of product.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

7. **That the product was available affect my choice.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

8. **That the product was easy to find affected my choice.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

9. **The placement of the product affected my choice.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

10. **The decision to purchase this product was made in the store.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

11. **The choice of brand was made in the store.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

12. **I replace the product with another taste within the same brand, if the product is out of stock.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

13. **I replace the product with another brand but within the same product category.**

Strongly disagree ☐
Disagree to some extent ☐
Neither agree nor disagree ☐
Agree to some extent ☐
Strongly agree ☐
Do not know ☐

17. I associate the following feelings or impression with my visit in the dairy department:

| Happy | ___ : ___ : ___ : ___ : ___ : ___ : ___ | Unhappy |
| | 1   2   3   4   5   6   7 | |

Happy   ___ : ___ : ___ : ___ : ___ : ___ : ___   Unhappy
               1   2   3   4   5   6   7

Satisfied   ___ : ___ : ___ : ___ : ___ : ___ : ___   Unsatisfied
               1   2   3   4   5   6   7

Excited   ___ : ___ : ___ : ___ : ___ : ___ : ___   Calm
               1   2   3   4   5   6   7

Aroused   ___ : ___ : ___ : ___ : ___ : ___ : ___   Unaroused
               1   2   3   4   5   6   7

Dominant   ___ : ___ : ___ : ___ : ___ : ___ : ___   Submissive
               1   2   3   4   5   6   7

Controlling   ___ : ___ : ___ : ___ : ___ : ___ : ___   Controlled
               1   2   3   4   5   6   7