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UNDERSTANDING CONSUMERS USE OF RESTAURANTS IN SHOPPING CENTRES - AN APPLICATION OF THE EKB MODEL

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UNDERSTANDING CONSUMERS USE OF RESTAURANTS IN SHOPPING CENTRES - AN APPLICATION OF THE EKB MODEL

Thesis presented to *Escola Superior de Biotecnologia* of the *Universidade Católica Portuguesa* to fulfil the requirements of Master of Science degree in Food Innovation

by

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Abstract

Food and eating habits are getting very complex. The study of eating has become a multidisciplinary task resorting to scientists from various fields of science like nutrition, public health, food engineering, marketing, management and, more recently, psychology.

Understanding consumer's lifestyles is of paramount importance in the actual customer-centric market where anticipating consumer needs and desires represents a decisive competitive advantage.

Restaurants are the epitome of this complexity producing numerous day-to-day interactions with consumers on a myriad of issues such as type of food, nutritional concerns, satisfaction of basic physiological needs and even socialization with staff and other costumers.

Nowadays restaurants are facing rough times with VAT increase and diminishing use due to the economic downturn. It has never been so important to understand consumer's needs in order to make businesses thrive.

The main objective of this study is to better understand how consumers choose one restaurant hoping to use the acquired knowledge to improve business strategy and tactics. For that, the renowned Engel-Kollat-Backwell model was used as a theoretical framework assuming that consumption occurs to resolve a certain need. Due to methodological simplification purposes, work focuses on restaurants located inside shopping centres, particularly on weekdays.

Literature review of the theoretical model and its application to restaurants combined with the study of the different aspects of a meal was used to develop a survey about the consumer decision process when using a restaurant. In order to validate empirical knowledge where substantial differences between lunch and dinner time occur, participants were asked to share their opinions about both meal times.

Time and money spent were chosen to be studied as dependent variables. Factorial analysis was used to identify common factors amongst the independent variables. The independent variables with the highest absolute loading factor were used to perform four linear regressions in order to find which variables influenced time and money spent in a restaurant located inside a shopping centre on weekdays. Demographic variables where also included in the regression models.

Money and time spent is influenced by different variables when it comes to meal time. Lunch time seems to have a simple process with less relevant variables and dimensions. Attitudes and values on food-related issues were found to be very significant in explaining the behaviour of the dependent variables despite some conflicts between attitudes and actual behaviour. Cooking habits as in the absence of time and will to cook also turned out to be good predictors despite the overall high cooking skills of the respondents.

Companies should use some of the information delivered to improve some areas of their businesses.

This paper provides a general exploration of the consumer decision process when choosing a restaurant inside a shopping centre opening the door to further work on a matter that has not received proper attention from investigators, at least in Portugal.

Resumo

A alimentação e os hábitos alimentares estão cada vez mais complexos. O estudo da alimentação em geral transformou-se numa tarefa multidisciplinar recorrendo a cientistas das mais variadas áreas como a nutrição, saúde pública, engenharia alimentar, marketing, gestão e, mais recentemente, a psicologia.

No atual contexto em que os mercados adotam uma postura centrada no consumidor, torna-se fundamental entender o seu estilo de vida. A capacidade de antecipar as necessidades dos consumidores representa uma vantagem competitiva decisiva.

Os restaurantes são o corolário desta complexidade sendo responsáveis por inúmeras interações diárias com os consumidores em áreas tão díspares como o tipo de comida, preocupações nutricionais, satisfação de necessidades básicas e a socialização com outros consumidores e com os colaboradores dos restaurantes.

Atualmente, o negócio da restauração encontra-se extremamente pressionado pela subida do IVA e pela retração do consumo provocada pela crise económica. Entender as necessidades dos consumidores torna-se, mais que nunca, imprescindível para garantir que os negócios têm sucesso.

Este estudo pretende essencialmente perceber como os consumidores escolhem um restaurante na expectativa de utilizar o conhecimento adquirido para melhorar as estratégias e táticas dos negócios. Para isso, recorreu-se ao reputado modelo Engel-Kollat-Backwell como suporte teórico partindo da premissa que o consumo ocorre para satisfazer uma determinada necessidade. Por questões metodológicas, o trabalho centra-se no consumo em restaurantes localizados em centros comerciais durante os dias da semana.

A informação disponível sobre o modelo teórico e a sua aplicação ao negócio da restauração, aliada ao estudo conceptual das dimensões de uma refeição, deu origem a um inquérito sobre o processo de escolha e utilização de restaurantes localizados em centros comerciais. Com o intuito de validar a evidência empírica de que há diferenças significativas entre os diferentes períodos de refeição, foi pedido a cada participante que respondesse ao inquérito em contexto de almoço e de jantar.

Foram escolhidas como variáveis dependentes o tempo e dinheiro totais gastos nos trinta dias que antecederam o preenchimento do inquérito. Foi efetuada uma análise fatorial com o intuito de identificar fatores comuns entre as variáveis independentes. As variáveis independentes que apresentaram o fator com o maior valor absoluto foram utilizadas em várias regressões lineares que pretendem explicar quais as variáveis independentes que influenciam as variáveis dependentes e de que forma o fazem. Foram ainda incluídas nas regressões as variáveis demográficas escolhidas para caraterizar a amostra de participantes.

Constatou-se que o tempo e dinheiro gasto nas refeições são influenciados por diferentes variáveis consoante o período de refeição. Aparentemente, o almoço é um processo mais simples em que o tempo e dinheiro gasto são explicados por um número mais reduzido de variáveis. As atitudes e valores sobre determinados assuntos relacionados com a alimentação mostraram ser muito relevantes na explicação do comportamento das variáveis dependentes apesar de poderem ocorrer alguns conflitos entre convicções e o comportamento real. A falta de tempo ou vontade para cozinhar

também se revelou decisiva na explicação dos modelos apesar de a amostra em estudo revelar competências culinárias médias elevadas.

As empresas deverão utilizar a informação produzida para melhorar algumas áreas dos seus negócios. Este estudo disponibiliza uma visão generalizada do processo de decisão na escolha de um restaurante localizado num centro comercial, criando oportunidades futuras de investigação num tema que não tem suscitado a devida atenção por parte dos investigadores, pelo menos em Portugal.

Acknowledgments

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I would also like to thank Tim Hogg for helping me to venture into this enterprise and for his useful insights correcting the thesis. A special thanks with the English language!

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1. Introduction

1.1 Problem statement

Eating is no longer a way to deal with physiological needs or a matter of pure and simple survival. Due to the importance of such an act, eating became much more of a complex theme. Cultural, sociological, economical and psychological dimensions make the habit of eating a multidisciplinary subject of study by different types of sciences.

In particular, the habit of eating in a group brought to the table another array of questions to be answered by the different branches of knowledge.

The cultural and psychological aspects increasingly compete with the biological aspects of a meal, growing in importance and relevance when it comes to understand what drives individuals to decide how they nourish themselves.

As stated by (Ford 2000), food and human society are extremely related. Food and culture relationship has been replaced by food **as** culture.

The physical environment where the food his consumed, or its tangible aspects, also plays a very important role in meal consumption.

Restaurants, as physical locations where people are brought together in contact with the vast dimensions of a meal, represent a significant portion of this complex system.

Restaurants have numerous contact points with costumers that account for a great deal of the meal experience. Lighting, noise, comfortable chairs, space between tables, and of course the food, contributes to the overall judgment of costumers. At the same time, the human factor (staff) also contributes to the meal experience.

The development of shopping centres (SC) in the early 1980's changed the way restaurants do business. Markets where invaded by international foodservice chain operators with standardize offerings and highly professional and efficient operations and marketing procedures. Nowadays restaurants in shopping centres play a decisive role in the food service sector.

Adding up to this complexity, markets have never been so stressed and competitive, leaving no room form improvisation and failure.

Recent data from (Anon 2011b) shows that the restaurant business in Portugal has seen decreasing sales since 2008 (-8.8% in 2008, -5.34% in 2009 and -5.6% in 2010). In the year of 2010 alone, restaurant businesses lost approximately 440 million Euros on sales. Data also shows that since 2007 the restaurant food business lost over 5.000 restaurants. According to (Anon 2011b) fast-food was the only segment to experience a rise in sales.

With the latest VAT tax changes (from 13% to 23%), the Portuguese Restaurant Association (AHRESP) predicts further closedown of 21.000 companies and over 47.000 professionals unemployed.

The food service market is much disseminated with a majority of small and medium enterprises comprising over 74.500 points of sale in 2010 from which 4% are located inside SC's and responsible for over 7% of total revenue. This clearly indicates that the average revenue of a restaurant inside a

SC is higher than restaurants located outside of SC's making this segment highly attractive but at the same time very competitive. Furthermore, SC's account, directly and indirectly to over 200.000 jobs (Anon 2011a), restaurants included.
In order to survive restaurants have to constantly provide their customers with products and services they recognize as valuable and in harmonisation with their needs.
Predicting consumers' needs can become a competitive edge, decisive for business survival. For that, it is mandatory to know one's costumer behaviour.
This work aims to shed some light into the consumer decision process when choosing a restaurant inside a SC integrating findings in businesses strategies and operational procedures.
How a person does chose a certain restaurant? Does he/she goes straight to the pre chosen restaurant or strolls around the food court in search of inspiration?
Behavioural patterns remain unchanged despite context? Does meal time influence consumer's decisions? And what about income?
As said before, choosing a restaurant is a very complex and multidisciplinary task. A considerable array of factors will influence consumer's behaviour. Hopefully this paper produces some evidence to help answer these questions and explain the process by which consumers chose restaurants

1.2 Consumer decision process – An overview

1.2.1 Introduction

Consumer behaviour influences practically every aspect of the modern day living. People are constantly asked to make decisions ranging from what food to eat to which college degree they will follow.
It can be defined as activities people undertake when obtaining, consuming and disposing of products and services (Blackwell, Miniard et al. 2006) and has traditionally been considered as the science that studies why people buy things.
The definition comprises three main activities - Obtaining, consuming and disposing of products or services thus making consumer behaviour also known as a field of study that focuses on consumer activities (Blackwell, Miniard et al. 2006).
Consumer behaviour is influenced by a number of variables making a consumer's behaviour highly individual and unique.
Individual related influences such as culture, attitudes, motivations and knowledge determine the response of each person therefore shaping its behaviour as a consumer.
Brand importance, the impact of advertising, price awareness, to name a few, contributes as well in shaping consumer behaviour.
In an historical perspective, the importance of consumer behaviour has been growing along with increasing influence of consumers in the markets.

Table 1.1: Consumer behaviour definition – Main activities

Obtaining	Consuming	Disposing
Development of buying needs	Usage of product	Getting rid of remaining product
Other products considered	Storage at home	Throw away
Where to buy	Who are the users	Reselling
Price to pay	Quantities consumed	Recycling
Transportation of goods	Comparison with expectations	

Adapted from (Blackwell, Miniard et al. 2006) (pp. 5)

With the beginning of the XXI century consumer becomes ever so more relevant and taken into account in every decision (customer-centric organization). The new decider is no longer the intermediate but the end user who has to be understood in its needs aspirations and motivations thus making the consumer behaviour studies more important than ever. The key issue is now what products to make in order to meet consumer's demands.

So, the need arises for rapid and useful information about consumer motivation and behaviour which defines the way research in behavioural sciences is made.

This customer-centricity can be described as the process of developing products focusing on what customers really want as a result of listening to their opinions and needs.

Consumers will not spend their money on products or services that do not meet their needs. Unless companies invest in knowing what those needs are, there is a high probability that customers will not buy the products the companies have to offer.

The previous understanding of these needs will dramatically reduce the risks involved in product development maximizing the short-term success of the business venture.

The restaurant business is no exception. Indeed it experiences high levels of failure when creating and operating restaurants.

The study of consumer behaviour provides powerful insight into the knowledge of what lies behind every consumer's decision.

This information should be used in every aspect of the **marketing concept** – the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives (Blackwell, Miniard et al. 2006) helping improving existing products and placing products in the right marketplace so being decisive in the company's success.

At the present moment, the main challenges in consumer studies are:

- Collecting information in such a way that it can be used to serve the needs of organizations;
- Developing consumer research methods that are able to keep track with the fast moving consumer and its trends and lifestyles;
- Seeing consumer behaviour from a broad perspective and part of everyday life.

As for many other consumption goods, consumers go through a complex decision process when choosing a restaurant.

Nowadays food industry is highly developed and going to a restaurant goes much beyond eating. As (Pine and Gilmore 1998) states, "*Even the smallest cue can aid the creation of a unique experience. When a restaurant host says, "Your table is ready," no particular cue is given. But when a Rainforest Cafe host declares, "Your adventure is about to begin, "it sets the stage for something special"*". It is then, becoming increasingly important to understand the multiplicity of factors involved when eating out (Edwards John S. A. 2008).

1.2.2 EKB model

The model of the consumer decision process (CDP) to be used as a theoretical framework was first developed in 1967 by Engel, Kollat and Blackwell at the Ohio State University becoming known as the EKB model. Most recently, Professor Paul W. Miniard joined the team and the model was renamed EBM model. Nonetheless, it has been widely known as the EKB model and will be referred as such throughout the entire document. Except when otherwise stated all the information referring to the EKB model originates from their reference work – Consumer Behaviour (Blackwell, Miniard et al. 2006)

Buying and using goods and services occurs as a result of consumer decision making. That is why marketers need a systematic, comprehensive way to understand how and why consumers make decisions.
This model consists of seven stages of decision making and the variables that affect the activities of each stage – Figure 1.1.

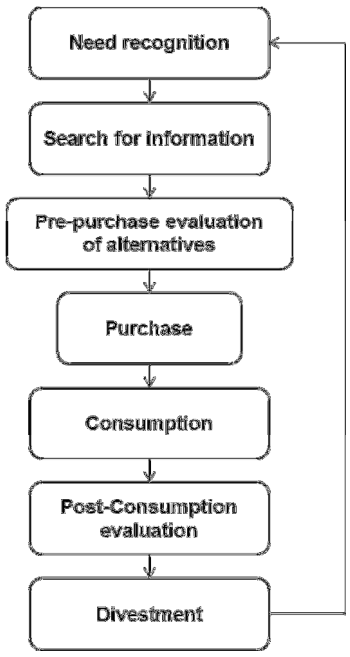

Figure 1.1: Simplified EKB model

The model depicts how consumer's minds work through the process of solving everyday needs. In fact, no one buys anything unless they have a specific problem, a need or want. Buying and using products or services is the main response to those problems needs or wants.

This provides powerful insight into consumers' way of thinking, giving marketers and managers resources to maximize their efforts in the selling process.

Need recognition

Need recognition is also known as problem recognition. When a consumer feels a difference between a given status and his conception of the ideal for that status, he has a problem and need arises in order to eliminate that gap.
Consumers buy things when they believe it will help close the perceived gap and the product's ability to solve the identified problem is higher than the cost of buying.
Apart from needs, consumers also have desires. Nevertheless, the balance between fulfilling needs and desires and the cost of doing so will always be present. Costs must be kept in line with what people can afford otherwise people will not buy them.
Need recognition varies according to the degree of the gap between the actual status and the perceived ideal status. Need recognition will only manifest itself if the gap reaches certain intensity. Moreover, actual and ideal status is highly dynamic changing constantly due to several internal and external factors.

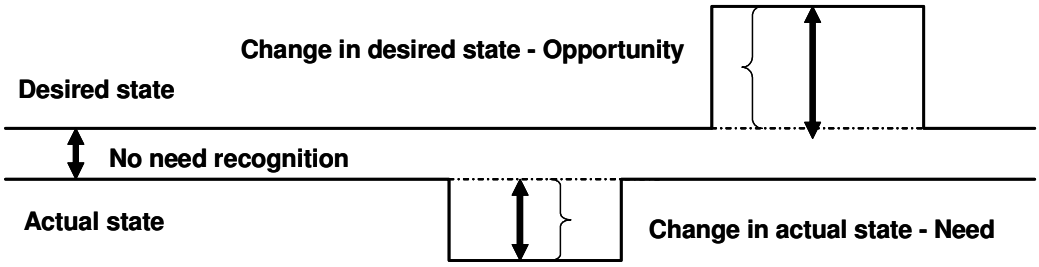

Figure 1.2: Gap perception in need recognition

Change can happen either in the actual state or the desired state, both leading to need recognition. As an example, my actual product breaks-down – change in the actual state and I recognize the need for a new one but even if my product runs perfectly well new alternatives and experiences might make me change the settings of what I considered to be a good product, thus creating a need for a better, more modern product – change in the ideal state.
Need recognition can also appear after an anticipated need in the immediate future as a change in the current situation occurred.

Search for information

Having recognized a need, the consumer starts searching for information that can lead him to the potential problem-solver.
He can search internally, that is to say, reaching into his "memory databank" or externally through several sources of information from the marketplace.

Consumers might start being more attentive towards information they previously ignored or decide to actively search for the information they need. Search refers to a receptivity of information that solves problems or needs, rather than a search for specific.
The need to search for information is present both in planned and unexpected buying. The main difference lies on the time available to search for the relevant information, generally traducing in lesser time spent in an unexpected buy (Example: New refrigerator versus new house).
The extent of information search depends on several variables such as personality, social class, and income, size of purchase, past experiences, prior brand perceptions, and consumer satisfaction.
Search can be described as the motivated activation of knowledge stored in memory or acquisition of information from the environment about potential need satisfiers.

Pre-purchase evaluation of alternatives

After gathering all the information the consumer now has to evaluate the different options trying to decide which one is best for him. Consumers compare the knowledge they have on specific products with what they consider most important.
Different consumers use different evaluation criteria. Choices are influenced by both individual and environmental influences.
Consumers evaluate products or services according to their different attributes:

- Salient attributes – price, reliability and factors that probably vary little between similar types of products – Generally the most important ones;
- Determinant attributes – Details associated with the product that normally associated with brand and store loyalty.

The most common attributes screened by consumers are quantity, size quality and price. Consumer behaviour can be altered if these attributes change affecting brand and product choices.

Purchase

Consumers then decide on an array of aspects regarding the purchase itself, namely their willingness to buy, the best occasion, what to buy (product type and brand), where to buy (type of retailer and specific retailer) and how they choose to pay (cash, credit card).

The decision to buy can lead either to a fully planned purchase, a partially planned purchase or even an unplanned purchase.
In fully planned purchase both the product and brand are chosen in advance. Normally it occurs when involvement with the product is high but can also occur when involvement is low. Time constrains help consumers stick to their planned purchases. In-store activities such as promotions, coupons, product samples might shift consumers from their initial choices.
With partially planned purchase the intent to buy the product exists but brand choice is deferred until shopping. When involvement is low, people tend to buy from the brands they know;

Finally, as for unplanned purchase, product and brand are chosen at point of sale. Impulse buy is very much influence by in-store activities.

The process of choosing a specific store involves matching consumer characteristics and purchase characteristics with store characteristics.
Criteria used to evaluate the possibilities varies according to each consumer's needs and therefore to the type of purchase. Individual characteristics like lifestyle, economic status and personal feelings about shopping will influence the way a consumer evaluates the items to be purchased. At the same time, the purchase characteristics such as type of product, time constrains and price/quality relation will also be decisive in the purchase.
Consumers in different market segments form images of stores based on their perception of the attributes they consider important.
Once again, top-of-mind associations, *i.e.*, the first name that comes up when thinking about a specific attribute is one of the main goals when defining a marketing strategy, especially in segments where decision-making is simple and involvement is low.
Consumers rely on the overall perception of a store – Store image which is a mixture of functional attributes and psychological attributes. In order to convince consumers to try a new restaurant, the visibility of the main functional attributes (clean shop, good product display, appealing photos and efficient communication – Ex.: prices) has to be high since it will be the biggest contribute to catch consumers attention.

Consumption

When the consumer gets ownership of the product, consumption can occur. Consumption can be defined as the usage of the acquired product, which means that purchase alone is insufficient to guarantee business sustainability. Consumption can either occur immediately or be postponed.
The way consumers use the products relates to how satisfied they get with it and influences their future decisions for a particular product or brand. How did the product perform? Did it deliver what was expected? The answer to these questions determines if the consumer wants to buy the product again in the future. Moreover, usage frequency will define when the next purchase moment occurs. Companies should invest in new consumption moments or constantly remember consumers about their products, hoping to increase consumption. The place of consumption also deserves some attention. Location and situation have been found to have a great influence on consumption. Some businesses and products are more easily affected by the surroundings. Items like champagne, expensive wines or even caviar encompass status claims by consumers which make them adequate for some specific social occasions. Understanding how the product is consumed and how much of it also contributes to a better understanding of this stage. Packaging design, for example, should be supported by this kind of information focusing on size and usage characteristics like easy-opening, heat protection just to name a few.

Regardless of the circumstances, getting consumers to use products and then buy them again often makes businesses thrive.

Post-consumption evaluation

After consumption, consumers evaluate how good (or bad) the experience was. When the perceived performance matches consumer's expectations satisfaction occurs. If a gap is detected consumers experience dissatisfaction.

The way consumers use the product is one of the most important determinants of satisfaction. Even when the purchase turned out a good one, consumers tend to ask themselves if they chose the best option. Second-guessing is very common, especially with more expensive buys. Consumers revisit the pre-purchase alternatives and evaluate the fairness of the purchase. All these factors affect overall satisfaction and usage.

All the evaluations are stored in the consumer's memory data-bank, available for future use, which makes post-consumption analysis a very important stage of the EKB. As stated by (Heesup, Back et al. 2009) the evaluation process is an essential element underlying customer satisfaction. High levels of satisfaction correlate positively with brand or product patronage. On the other hand, dissatisfaction leads to complains and most important, to harmful word-of-mouth about the company and its products. Overall, consumer satisfaction is achieved by having good products or services but also from consumer's feelings and expectations. Indeed, satisfaction is intimately related to good feelings. As for expectations, it is essential to manage the gap between pre-purchase expectations and the consequence of consumption. This comparison can result in three different scenarios. When the product does not live up to the expectations, negative disconfirmation occurs, often leading either to regret or rage. When the product exceeds the expectations, positive disconfirmation happens. When the product meets expectations, confirmation occurs.

Divestment

Divestment occurs when consumers no longer want to possess a certain product. Disposal, recycling and remarketing are some of the options available. Making divestment easy for consumers is sometimes used as a strategy to make consumers purchase new goods. The automotive industry is a very good example. Giving a better deal over a used car tends to persuade consumers into buying a new one. Online auctions also help consumers dispose of the products they no longer want to have with some extra revenue.

1.2.3 Variables that affect the consumer decision process

As decision making is a very complex and dynamic process, it is of paramount importance to understand which variables influence the decision process along the different stages, and how it happens.
Globally, decision making is influenced by three main categories:

- Individual influences – Related to the Human being;
- Environmental influences – Related to the context in which the human being exists and interacts;
- Psychological process.

Individual influences comprise such dimensions as demographics, values and personality, consumer resources, motivation, knowledge and attitudes.
Environmental influences are mainly due to culture, social class, family, personal influence and situation.
Last, but not least, the psychological process relates to the process of information processing, learning and attitude behavioural change, the latter being one of the most important “moments of truth” in getting consumers to try something new.

1.2.3.1 Individual influences

Each stage of the EKB is influenced by personal variables, making each consumer unique. This individuality makes it quite difficult to influence consumer behaviour. Knowing which variables are important and how they work will assist business and make their task of understanding consumers much easier. That knowledge can then be used to better influence consumer behaviour according to each business’s objectives.

Demographics

Demographics are best described as the size, structure and distribution of a given population. This information is the basis of most forecasts and decisions about the future business. Predicting the aging of most western countries population or the evolution of some youth groups like generation Y and Z helps to define how products should be and which main attributes they should have in the near future to incorporate these needs in the strategic planning of companies. By doing so, companies become more equipped to maintain sales and profits. Demographic normally provides criteria for marketing segmentation.

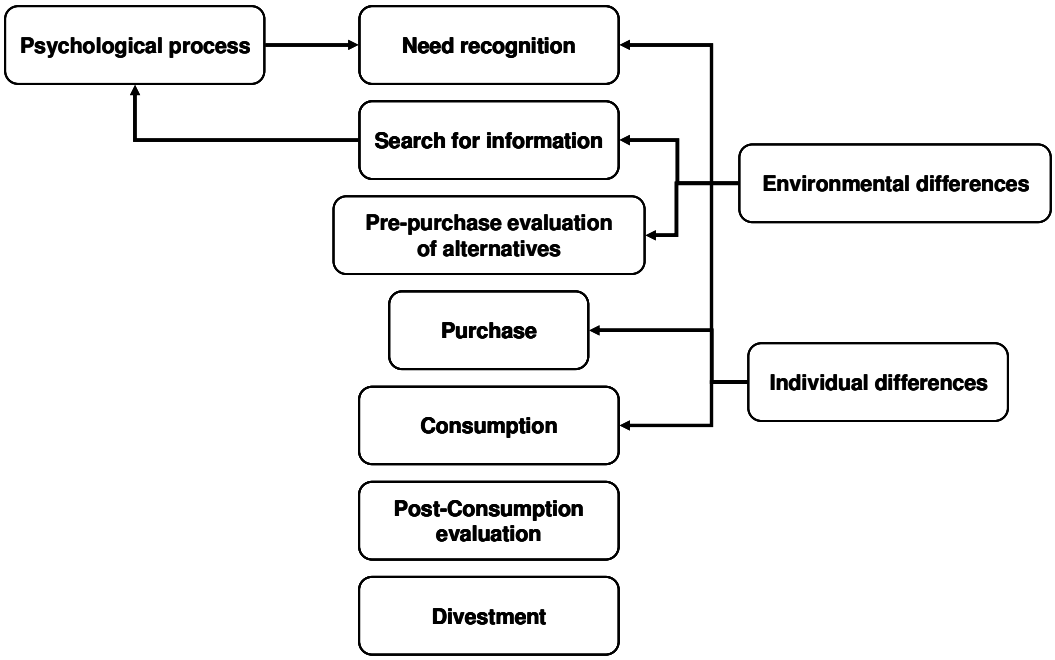

Figure 1.3: Variables that influence the decision process

Motivation

Motivation intensity is also a very important factor in consumer response. The degree in which consumers are motivated to satisfy certain needs will dictate his behaviour. As consumers get hungrier their motivation to search for a restaurant will definitely increase putting an extra effort in the task.

Different consumers have different motivations. Understanding consumer motivation helps businesses to use the best arguments possible to convince consumers into buying their products. If a certain group of consumers is highly motivated by money, giving discounts or even product vouchers could trigger purchase and consumption. Generally, different kinds of products are associated with different types of motivation. Besides the obvious reasons in buying a car (need of transportation), needs like safety and even status can be decisive in consumer's decisions. That is why some car manufactures are not selling cars but a sense of belonging to a closed group.

Knowledge and consumer resources

Knowledge is mainly information stored in memory that will eventually be useful in a purchase situation. Consumer knowledge plays an important role in the search stage of the EKB. Only the information consumers know will be used in the decision process. Previous work has pointed out that lack of knowledge about a new product highly contributes to the low accuracy of intentions-based new products predictions (Ozer 2011). As the work of (West, Brown et al. 1996) suggests, the effect of consumer knowledge increases better-defined and more consistent preferences. Additionally consumers need to go beyond simple possessing the knowledge. It has to be retrievable from their memory. Firstly, however, stimuli have to be interpreted and accepted so they become knowledge.

Consumer knowledge can manifest itself in different categories – Product, brand, competition, price and knowledge associated with experiencing the product. The amount of knowledge in each category will determine the consumer's behaviour when purchasing goods.

When comparing the initial purchase intentions solely based on the idea of a certain product and subsequent actual behaviours after the effective purchase and use, product knowledge was positively related to the predictive accuracy and consistency of intentions-based new product forecasting (Ozer 2011). The main goal of businesses is to generate awareness, especially brand awareness, putting their brands in the top-of-mind of each consumer – The first brand they remember when thinking about a product or a product category. Nowadays with the internet, knowledge is widely spread making it very easy for everyone to acquire knowledge.

Consumer knowledge comes from both personal and impersonal sources depending on the intervention of other people. At the same time, knowledge can be business-controlled or non-business-controlled. Word of mouth is a good example of a non-business controlled source of knowledge that is personal when someone like a friend or family member shares with us is opinion about a product or impersonal when that same opinion is written in a *blog* instead. Understanding consumer knowledge helps businesses adjust their positioning in the markets and having the right products that consumers really want. It also enables them to better understand purchase constrains that could lead to decreasing sales or even discover new forms of usage for the product that open new markets and consumption opportunities.

With consumer resources – Economic resources or ability to buy it is a key demographic variable in explaining why, what, and when people buy. Consumer confidence also shapes the way people buy products. Expectations about what the future will be determine how consumers behave today. Fears of unemployment and high interest rates that would result in diminishing income reduce actual consumption. Time is also a resource that influences how people buy products. Time poor and cash rich consumers are willing to pay extra money for convenience. Finally, cognitive resources or the mental ability to undertake information-processing activities decides if a person understands and translates the stimuli to which he is exposed as a consumer in the market thus paying attention to its contents. The capacity to focus on a determined stimulus defines one of the dimensions in the attention process – Direction. The amount of capacity focused on a certain direction relates to intensity, the other dimension in the attention process. In "Dining-out: A matter of education", (Spielberg 2005) reveals some correlations between level of education and consumer choices. By linking education with financial resources, she finds it normal that fast-food restaurants are more common in low-income areas.

Attitudes, intentions, beliefs and feelings

Consumer's beliefs and attitudes are responsible for a majority of consumer behaviours. Attitude is a comprehensive evaluation of alternatives, both positive and negative. Attitude can be defined as an evaluative judgment about objects, which represents a person's enduring favourable or unfavourable evaluations and emotional feelings guiding action tendencies toward those objects (Kwun 2011). Attitudes have two main proprieties. Attitude valence deals with the attitude being positive, negative or

neutral. Attitude extremity expresses how much one likes or dislikes something. Attitudes can be prone to change. The difficulty associated with attitude changing refers to other property – Attitude resistance. The certainty of a given attitude being the correct one describes attitude confidence. Lastly, attitude accessibility defines how easy is to retrieve that attitude from the memory data-bank.

Intentions are subjective judgments about how people think they'll behave in the future. Being capable of predicting peoples behaviours helps define future demand and business planning. As mentioned earlier, consumer attitudes translate into consumer intentions. However, attitudes do not explain all the phenomena in forming consumer intentions. Social acceptance also contributes to behaviour forming. The subjective norm results from the will of conformity towards a certain opinion of an individual and the degree of approval that same individual has over certain behaviour. Finally, consumers may doubt on their ability to pursue certain behaviour. The perception of behavioural control is the product between the belief of a certain limitation and the consequences of that limitation.

Beliefs relate to subject judgments about the relationship between two or more things. Expectations are beliefs about the future. Other example is wine. Consumers believe that if a wine is expensive it is probably good. This is an example of inferential belief where consumers use information about something to form beliefs about something else. According to (McCall and Lynn 2008) consumers also use this strategy when choosing a restaurant.

Last, but not least, feelings are characterized by affective states such as mood or reactions to a certain stimulus. Getting people in a good mood is of paramount importance. Purchase and consumption of goods creates feelings about the experience resulting in consumers making associations between a certain feeling and the usage of a certain product. In the previous mentioned work of (Cullen 2005), costumers tended to rate attributes differently according to their mood. Moreover, *"consumer's emotional bonding with the service provider is strongly linked to their future purchase intentions"* (Mattila 2001).

Personality, values and lifestyles

The study of individual personality, values, beliefs and preferred behaviour patterns and their relationship with marketing segments relates to psychographics. Personality can be defined as consistent responses to environmental stimuli. On the other hand, values stand for consumer beliefs about life and accepted behaviour. As seen in need recognition, human beings have different types of needs ranging from basic biological needs to the need to belong and interact in a group that functions. Each individual rates these needs in a different way, giving more importance to some needs instead of others. These differences account for the differences in each individual's personal values. When asking the question: "Is this product for me?", a consumer is letting personal values interfere especially in need recognition and determining evaluation criteria in pre-purchase evaluation of alternatives.

1.2.3.2 Environmental influences

In addition to individual aspects refereed previously, consumers are not alone, interacting with each other and with society. Environment also plays a decisive role in shaping what a human being is.
Issues like society, personal influence, family and house hold and consumption situation intervene in the EKB model making it also very important to understand what lies behind their influence in order to take advantage of the desired effects.

Society and culture

Culture can be defined as a set of values, ideas, artefacts and other meaningful symbols that help individuals communicate, interpret and evaluate as members of society. Culture is influenced by ethnicity, race, religion and regional or national identity and defined according to its main elements – Abstract and physical elements. Abstract elements refer to values, norms, rituals and symbols. As for physical elements, artefacts, technology and infrastructure are the key elements. Ethnicity is a process of group identification. People use certain labels to define themselves and others.
Social class is a relatively permanent and homogeneous division in a society into which individuals or families sharing similar values, lifestyles, interests, wealth, status, education, economic positions and behaviours can be categorized. Social class is often used to segment markets.
Culture has a profound effect on why and how people buy and consume products and services. It affects the type of products people buy, the structure of consumption, the individual decision making process and the way people communicate.
The way consumers rank the different attributes changes completely the evaluation they make of a certain product thus originating distinct levels of commitment.

Family and household

Family is a group of two or more people related by blood, marriage or adoption who reside together. Household describes persons, both related and unrelated, who occupy a housing unit. Family and household structure influences consumer purchasing. The existence of children changes completely consumer behaviour of the family and household. Family members play different roles inside the family, contributing in different ways for buying patterns. Initiators star the EKB, generally by gathering information about the item to be purchased. Influencers have opinions that are looked upon setting most of the criteria used in purchasing goods. The decider, commonly the one with authority over the family's budget, defines how much money goes into each product and approves the buy. The buyer, often a third party, is responsible for the actual buying or ordering. Finally, the user is the person who uses the product. Family members can experience different roles in different situations or stages of the family history. Product type is highly influenced by marriage structure and gender.
Families go through several stages during their life in common. The consumer life cycle also influences EKB. Priorities change along the cycle and so does the EKB stages. Newly married couples

have their minds on furniture and household appliances while the birth of a child opens the door to new consumer needs.
The ever changing role of women in the society has contributed to a massive change in household structure and functioning, creating new unmet needs and business opportunities.

Personal influence

Apart from families, other people, individually or in groups strongly influence consumers. When a group of persons exerts considerable influence over consumers it can be described as a reference group. Reference groups influence consumers in different ways and in different stages of the EKB.
When consumers alter their behaviour just to blend into a certain group, normative influence occurs. On the other hand, value-expressive influence happens when the need for psychological association with a group makes consumers adopt its rules. The difficulty in getting enough information about a certain product causing consumers to support their decisions and behaviour on others represents the third type of influence that occurs – Informational influence.
Reference groups are responsible for the socialization of the individual and contribute to his own self-concept definition. The need for social comparison and conformity also makes consumers adopt reference group's opinions.
The different influences exert more pressure in some segments and/or products. Teenagers for example are especially sensitive to social comparison and conformity.
Personal influence is present at the search stage of the EKB and is considered one of the most decisive factors. Consumers resort not only to their own knowledge about the products but also to information provided by other consumers. Word-of-mouth, blogs and peer-to-peer reviews like trip advisor for instance, are becoming the most important sources of information for some products mainly when involvement is high and the perceived risk associated with the purchase is substantial.

Consumption situation

The EKB cannot be dissociated from the actual context in which a certain product is used. The way a product is used and the objectives associated with its use influence consumer behaviour. Buying goods to offer as a gift differs from buying goods for personal use. Attribute relevance changes considerably and people tend to valuate other aspects of the product such as brand importance, status and style as for personal use, attributes like price and functionality support most of the buying decisions.
The same happens when using a restaurant. When taking a girlfriend or a spouse to a restaurant to celebrate a special event, ambiance and fashion take over. Price and speed of service are not taken into account when choosing the restaurant because the primary objective is to impress and build long lasting happy memories.

1.2.3.3 Psychological processes

As already mentioned previously the search stage of EKB, exposes consumers to information that has to be processed. Information processing starts with exposure to different types of stimuli that hopefully leads to changes in consumer's knowledge. The ultimate goal is to change consumer's behaviours by means of acceptance and retention.

Exposure

On their quest, consumers are exposed to several kinds of information. The main sources of information can be categorized as marketer-dominated and non-marketer dominated sources.
Marketer-dominated information relates to supplier actions dedicated to inform and persuade customers and non-marketer-dominated information comes from friends, family, opinion leaders and the media.
As consumers come in contact with information during their external search, they start processing the stimuli received – Processing information sequence.
Consumers undergo different phases when processing information, despite its origin (marketer or non-marketer dominated).

Stimuli perception

Exposure occurs when one of the five senses has the opportunity to be activated. Senses are activated by a physical proximity to a certain stimulus that exceeds the minimum threshold for a specific sensation. The main goal is making contact with the consumer. When a stimulus is well known and familiar, it loses the ability to trigger one of the senses. Habituation occurs when this happens and is generally related to overexposure.

After making contact, consumers should stay focused on the stimuli being rendered. Attention is the act of keeping one's mind closely on something or the ability to do this. Attention is processed using short-term memory, where thinking occurs. There are several techniques to grab consumer's attention. Exposing consumers to a single stimulus or isolation, helps consumers focus on the message. Size can also contribute to increase consumer's attention. Growth of stimulus has an increasing impact on senses. Colour, location and the surprise factor also contribute to the process.
Comprehension follows and involves the interpretation of stimuli. Firstly, consumers categorize the stimulus classifying it in predefined mental concepts or categories. Secondly consumers allocate different amounts of energy processing the information. The amount of processing influences the degree and extension of comprehension. Creating associations between certain stimuli and products or brands helps shaping consumer's opinions.

Acceptance and retention

After understanding the stimuli, consumers either like them or not. If they like them they will accept them and the information acquired and processed will then be used in changing opinions or formulating new ones.
Cognitive learning occurs when information processed in the short-term memory is then stored in long-term memory - Retention. This is very important, namely in internal search stage. One of the first sources of information is memory. It is then vital for business to have their brands or products "stored" in consumer's memory data-bank. The degree of elaboration on information results in different levels of learning. The increase of elaboration makes it easier to store information in memory. Understanding facilitates memorization. For consumers to elaborate on information depends on their motivation and ability to do so. For the information stored in the long-term memory to be useful it has to be available. Retrieval consists in activating information in the long-term memory and transferring it to the short-term memory. Business can help consumers remember by getting consumers to pay more attention to their information and constantly using reminders about their products or brands. Repetition is also a good strategy to help consumers remember as is encouraging elaboration on the information provided since, as seen before, elaboration helps the learning process. Putting consumers in a good mood also helps them remember things.

1.3 Consumer decision process when choosing a restaurant

Consumer behaviour is influenced by two major aspects – First time purchase and the degree of complexity in the problem solving process.
According to (Johns and Kivela 2001) consumers experience great anxiety when choosing a restaurant for the first time. They diminish stress by going in a group or with someone that has already gone to that restaurant. On the other hand, repeat purchase originates from either repeated problem solving or habitual decision making.
In repeated problem solving consumers manage a trade-off between sticking to the usual decision and investing time in a new decision. Normally this happens when consumers are not satisfied with the current product or when the usual product is not available.
Habitual decision making is a mechanism that consumers use to make their lives simpler. It both occurs due to brand loyalty or pure and simple inertia.
In the restaurant business, consumers may adopt different behaviours according to situational factors. As for having lunch, the involvement is much lower, sometimes almost inexistent anchored in inertia-based habits. Indeed, personal involvement is considered to be low when it comes to food and consumer choices are often habitual and impulse (Botonaki and Mattas 2010). Low involvement decision making accounts for the vast majority of the purchasing decisions (Hamlin 2010). On opposite sides of the scale, the decision to celebrate a special event will definitely comprise a much complex decision.

The consequences of a buying decision, the amount of money involved, the availability of useful information will influence the decision making process. The main factors influencing the extent of problem solving are degree of involvement, degree of differentiation between alternatives and amount of time for deliberation. In its view of the situational influences on eating out (Schutz 1995), already considered the time available as one of the significant variables.

As a consequence, extended problem solving results in consumers following all the seven stages of the consumer decision process. With limited problem solving there is little or none information search and evaluation because the purchase is of low importance. This could present an opportunity when promoting new products or services since consumers will be considerably open to experiment new things in a "Why not try it" state of mind.

The work of (Gregory and Kim 2004) focuses on the role of information in the process of choosing a restaurant. Its main conclusions point out a relevant difference in the importance of food quality and location in choosing a restaurant based on availability or lack of information.

The type of decision should also be well characterized since there are considerable differences in the decision process according to the actual situation. According to (Edwards John S. A. 2008) eating out involves several additional factors that go beyond food itself. If a consumer is asked where he wants to have dinner, in a restaurant or a pub, he will probably answer: Depends on the situation.

As said by (Auty 1992), while consumers identify food type and quality as the main factors influencing restaurant choice, once a choice set appropriate to the occasion and segment has been evoked, a restaurant's style and atmosphere become the deciding factors. The study revealed that the importance of the considered attributes changed whereas the occasion was a celebration or quick meal. Celebration and leisure makes image and atmosphere become more important than when the occasion is just a quick meal.

Related work by (Rydell, Harnack et al. 2008) showed that consumers mainly seek for convenience when choosing a fast-food restaurant. In contrast, and according to (Ryu, Han et al. 2008), restaurant image can have huge impact on customers' perceptions of customer value and satisfaction.

1.3.1 Need recognition

In the restaurant business, need recognition originates mainly from:

- Physiological needs – Unger or thirst related;
- Cultural needs – Sense of belonging, recreation or even social status.

The type of problem solving originated will differ according to the prevailing type of need recognition. As stated by (Andersson and Mossberg 2004), costumers satisfy social needs when dining at evening restaurants and satisfy physiological needs at lunch restaurants.

Physiological based needs will often lead to a much simpler decision process. In fact, and according to (Gregory and Kim 2004), if consumers recognizes hunger or thirst they will not undergo extensive information search. Most probably they will choose the first brand that comes to their minds. This "Top-of-mind" response should be the first priority when it comes to restaurants that are associated with convenience eating (Muller and Woods 1994).

Need recognition can be influence both generically and selectively. When the goal is to increase sells in a global market for a certain product, generic need recognition is chosen. It applies mostly to products seen as similar to their competitors – commodities such as water, milk, meat or olive oil.
When the objective is to stimulate sales of a specific product or brand selective need recognition is used. Now the main goal is convincing costumers that their needs will only be met by that specific brand.

1.3.2 Search for information

As in many other businesses, information search is decisive in the restaurant business. Information search can influence consumers' perceived meal experiences in restaurants (Øystein Jensen 2007). The source of information also influences the choice of a particular restaurant (Gregory and Kim 2004). They concluded that friends and relatives influences restaurant choice much more than other sources of information.

Internal search
Sometimes, going through the "memory data-bank" is enough resulting in lesser or none external search. First of all, knowledge needs to be easy retrieved. Then confidence in the results of the internal search depends on existing knowledge being up to date and accurate. Satisfaction with prior purchases also contributes positively to keep within internal search.

External search
When internal search does not produce the wanted result, consumers undertake an external search.
In the work of (Brucks 1985) the degree of objective knowledge is positively related to the amount of information searched for and to the number of attributes used during information processing.
According to (Bettman and Park 1980) consumers with moderate knowledge and experience did more processing of available information than did the high or low knowledge groups.
When consumers conduct a pre-purchase search they make some additional decisions regarding their search behaviour and criteria:

- What should be searched? – External search set – Those choice alternatives that consumer gathers information about during pre-purchase search (Blackwell, Miniard et al. 2006). Moving further, consumers also need to determine what kind of information they need to acquire regarding each of the search set components.
- Where should the consumer search? – Consumers must decide where to look for the information they considered to be the most important. Consumers rely more on peer-to-peer information than on companies or institutions that might have an interest in selling – as mentioned above in (Gregory and Kim 2004). Internet plays a fundamental role in this process since it makes information readily available in such a way it can actively be used to compare products and services instantaneously. On the other hand, peer-to-peer evaluation finds in the

web perfect grounds for its rapid expansion, being one of the biggest criteria of choice in segments like hotels. Food businesses are no exception.

- How much search should be undertaken? – It depends on numerous factors like the importance and complexity of the purchase and the personality of the consumer. Search is undertaken to diminish the risk associated with the purchase.

  On average the least a consumer knows, the bigger the search will be. However, some consumers have little or none knowledge but still search very little mostly because they find it difficult to conduct a search. On opposite sides of the scale, consumers with great knowledge do not feel the need to search for further information.

  People search for decision-relevant information when the perceived benefits of the new information are greater than the perceived costs of acquiring this information (Blackwell, Miniard et al. 2006).

Household influences this stage. Despite previous results, (Labrecque and Ricard 2001) found that children are not aware of their real influence when it comes to decide when to visit a restaurant. As for choosing what restaurant, they have a clear picture of their influence which in this case is shared by their parents. Other studies point out that as children get older their influence increases. The main results of (Labrecque and Ricard 2001) show that children aged 9 to 12 are influential when choosing a restaurant for a family meal.

1.3.3 Pre-purchase evaluation of alternatives

The probability of a product being purchased depends on whether it is favourable evaluated by consumers. The manner in which choice alternatives are evaluated is the focus of pre-purchase evaluation. The consideration set, also known as evoked set, only take into account a fraction of the alternatives available.

The consideration set can either be constructed from internal or external search processes. In some cases internal search results account for the entire consideration set. Brand loyalty often converts the evoked set to a one-member only set (Court, Elzinga et al. 2009).

Gaining access to the evoke set is of paramount importance as it opens the door for further purchasing of a product or service. In fact, as (Eliaz and Spiegler 2011) mention, businesses invest high sums in marketing in order to influence the set of alternatives which consumers perceive as relevant.

First of all, consumers search on their “memory data-bank” for alternatives. The recall of choice alternatives from memory makes the retrieval set. Not all the alternatives will be considered and, of course, previously the consumer has to build his own memory data-bank by acquiring knowledge about some of the alternatives. In an ever so complex and growing foodservice market, consumers tend to simplify their search by reducing the number of products, brands or services in the search criteria (Laroche and Toffoli 1999). According to (Laroche, Takahashi et al. 2005) consumers focus on a limited set of brands for comparing and making the final choice. This reinforces the main goal of

becoming part of every consumer's evoked set especially now, as the number of products and brands has increased enormously in the past few years, making it vital to understand the mechanisms behind the construction of the evoked set (Yoon, Thompson et al. 2009); (Eliaz and Spiegler 2011). From a marketing point-of-view, marketers are being advised to influence consumer-driven touch points (Court, Elzinga et al. 2009)

In first-time consumers, knowledge is often low or inexistent which leads consumers on an information search. This opens a huge opportunity for business to present their products or services.

The way the construction set is defined plays an important role in deciding the marketing strategy of a business. When the construction of the evoked set is mainly from internal memory search, focus should be on recalling the company's offer constantly. This will contribute to the "top-of-mind" effect about the products or services the company has to offer.

On the other hand, when construction of the evoke set is mainly from external memory search focus should be on recognition leading costumers to purchase the products they most easily recognize.

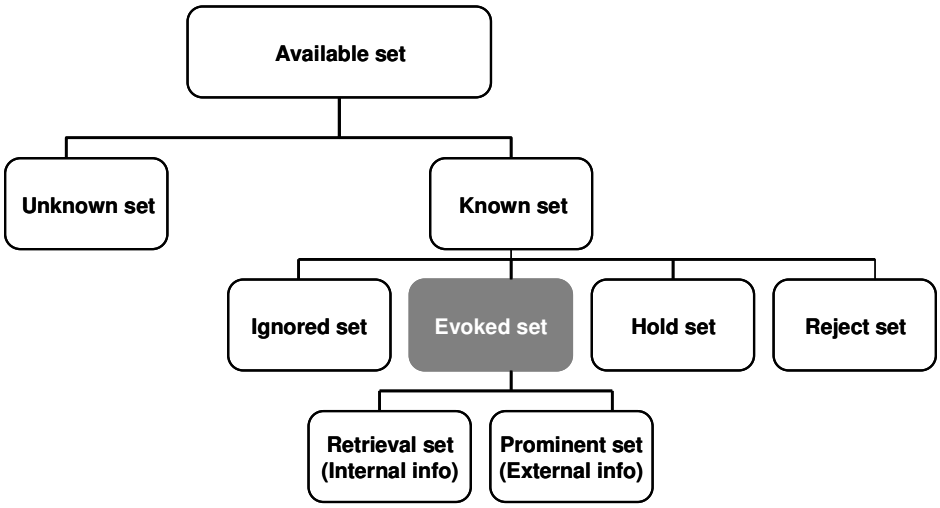

Figure 1.4: Construction of the evoked set

Deciding how to evaluate the choice alternatives can be performed in different ways:

Rely on pre-existing evaluations – Related to prior purchase and consumption experiences but also through other people's experiences such as the impression formed after listening to other people's opinions. Consumers trust much more on evaluations originated from their own consumption experiences, making them rely on pre-existing evaluations. This is particularly relevant within the categories associated with high levels of experimentation like day-to-day grocery shopping or restaurant going. According to (Yoon, Thompson et al. 2009) speed of service, taste, price, quality and location of a branded restaurant significantly influences the Evoked set.

Constructing new evaluations – Circumstances might dictate the need for new alternatives. As discussed earlier, consumer's confidence in knowledge and previous purchase experiences are factors that influence the internal search process which can also influence need for new alternatives.

The lack of confidence in evaluating a brand, dissatisfaction with a brand and a negative intention to eat at a restaurant were found to be significant factors in placing a brand in a consumers' Reject Set (Yoon, Thompson et al. 2009). Moreover, "*In order for consumers to even consider a given restaurant, that is, for the restaurant to be placed in the Evoked Set, brands must score at an acceptable level for attribute salience*." (Yoon, Thompson et al. 2009).

According to (Michel, Chankon et al. 2003) *60.7% of a consumer's decision-making process used a conjunctive rule decision heuristic: in the brand consideration process, a cut-off point on each salient attribute must be met by the brand to be included in the consideration set. Similar to the conjunctive rule, the lexicographic rule explained 39.7% of a consumer's decision-making heuristic; in the case of a tie using the conjunctive rule, a cut-off point on the next most salient attribute must be met by the brand to be included in the consideration set.*

Amongst several studies, work by (Cullen 2005) identified several attributes and their relative importance, as seen in table 1.2.

Table 1.2: Attributes Considered When Selecting a Restaurant for a Social Occasion in Dublin – Adapted from (Cullen 2005)

Attribute response for restaurant selection	
Quality of food	94%
Type of food	86%
Location	76%
Cleanliness factor	75%
Ambience/atmosphere	74%
Good reputation	71%
Quality of service	67%
Cost of food	64%
Friendliness of staff	56%
Comfort level of restaurant	51%
Menu item variety	46%
New meal experience	44%
Competent waiting staff	35%
Speed of service	34%
Restaurant décor	30%
Food portion size	27%
Parking facilities	26%
Handling of reservations	20%
Restaurant is spacious	14%
Prompt handling of complaints	13%

In (Yoon, Thompson et al. 2009) how consumers make a decision when selecting a specific brand when equally competitive multiple brands are available was analysed. The work showed that

consumers categorize a multitude of brands into several groups by way of their brand attitudes and purchase intentions, capturing consumer goals, perspectives and situations as necessary variables relative to their judgments (Yoon, Thompson et al. 2009). In relation to (Cullen 2005) consumers are found to buy bundles of attributes that altogether represent a certain level of service quality at a certain price.

As stated by (Kwun 2011), some previous studies by (Auty 1992) and (Jaksa, Robert et al. 1999.a), to name a few, suggest that consumers rate their dining experiences according to an array of attributes to which they assign different levels of significance. This process of rating service is also anchored in consumer's perception of similar alternatives. As mentioned by (Zeithaml 1988) quality evaluation depends on individual perception about what really matters to each consumer. The work of (Johns and Pine 2002) reiterates this idea considering that in a service such as a restaurant, meal consumers are believed to view it in terms of a set of attributes: i.e. characteristics that make it desirable, ascribing different levels of importance to each attribute.

So, it is fair to say that the main attributes of the restaurant will play a decisive role in this part of the consumer decision process.

Food quality as in flavour, aroma, texture and temperature, is one of the most important attributes in the restaurant business. Service quality is also determinant and increasing in relevance. These are considered to be the two most important attributes in the consumer decision process when choosing a restaurant (Kwun 2011).

The work of (Yoon, Thompson et al. 2009) reinforces the importance of these attributes as they concluded that consumers are influenced positively by restaurant performance in speed (seen as service quality) and product quality.

Other research like the one conducted by (Barber, Goodman et al. 2011) suggests that consumers are more prone to repeat a restaurant due to an higher performance in the cleanliness factor pointing out that many other attributes will play an important role in EKB.

Previous work by (Auty 1992) had already shown that image and atmosphere are important factors in consumer's choices.

1.3.4 Purchase

When choosing a SC, consumers decide on a retail level. Inside the food court, choosing a particular restaurant is very similar to the in-door choice process where businesses have to influence potential consumers through local promotions, product display and even interaction by salesperson.

Having decided to eat at the food court, the final decision of which restaurant to choose will most certainly be influenced by in-store marketing and the ability to communicate the essential attributes of the restaurant, the latter of supreme importance when dealing with new concepts that have not yet entered consumer's data-bank of memories.

Going to the SC to eat can encompass different degrees of planning. Consumers know they want to eat but are not sure what or where. Sometimes they've got it all figured out, heading straight to the pre-chosen brand and immediately ordering their favourite item. Sometimes they just stroll around seeking for something that attracts them.

The perceived level of crowd tends to diminish sales but there are some exceptions. In the restaurant business, a crowd normally means a good quality restaurant, attracting even more people. Nevertheless, when consumers feel that the crowd is a direct consequence of low efficiency they might move to another restaurant. This is quite common in the food court once there are easily available alternatives. Time constrains can have the same effect when facing a crowded restaurant. In fact, the work of (Noone and Mattila 2009) concluded that when the consumption goal is convenience driven, a non-crowded restaurant environment results in higher service quality evaluations. On the other hand, with leisure associated consumption, higher service quality evaluations are associated with a crowded environment. Findings also indicate that customer attributions for crowding have a direct effect on service quality ratings.

Consumers evaluate their options according to well defined criteria:

- Location – Besides distance, location is also perceived in terms of the annoyance and time consumed in the purchase experience.
- Nature and quality of assortment – Depth, wideness and quality of the range of products available. According to (Cannon nd) variety is one of the most important aspects costumers value in the restaurant business;
- Price – One of the most important attributes when choosing a store to purchase even though the importance of price depends on the nature of the buyer. Most of the times, price perception is more important than the price itself;
- Advertising and promotion (positioning) – Create consumer perceptions about the store and overall image thru images (intangible aspects) and information (tangible aspects);
- Sales personnel – Intervention of a salesperson is still a very important aspect of buying playing an important role in choosing a store. In fine dining, (Njite, Dunn et al. 2008) concluded that employee–customer relationship is a more relevant attribute than price;
- Services offered – Other services such as delivery, credit, ease of merchandise return help complement the core activity and create a differentiation between businesses;
- Physical store attributes – Elevators, lighting, air conditioning, washrooms, lay-out, parking facilities, music, also known as store atmospherics. According to (Ryu, Han et al. 2008) in quick-casual restaurant image is found to positively influence perceived value;
- Store clientele – The type of people who shops in a store affects consumer purchase intention because of the tendency to match one's self-image with that of the store(Blackwell, Miniard et al. 2006) (pp167);
- Point-of-purchase materials – Displays and signs used to catch people's attention;
- Consumer logistics – Speed and ease with which consumers move through the retail and shopping process (Blackwell, Miniard et al. 2006) (pp. 169). In a counter-based restaurant concept, this last criterion is decisive. Costumer flow through the buying process and along the physical boundaries of the restaurant must be simple and invite people to try it without fear of not understanding how they should act.

At this stage, consumer's decisions are mostly influenced by individual characteristics like attitude and personality and values.

Attitude highly influences the EKB model. In the work with university campus foodservice, (Kwun 2011) studied the relationship between foodservice attributes, perceived value and satisfaction and the attitudes towards consumer attitude. Results endorse a positive relationship between service, product quality, menus and location and perceived value which was connected to consumer's attitude.

Consumer attitudes are shaped by consumer beliefs and feelings, generating consumer intentions, then materialized in some form of consumer behaviour. The main results of (Bhuyan 2011) highlight that eating out behaviour is influenced by consumer's attitudes towards eating out. Negative attitudes towards eating out lead to a decrease in eating out frequency which is also influenced by other several factors such as knowledge about food, health, and nutrition, age and income as well as household size.

Attitudes towards foods in general and towards some foods in particular, like healthy foods and genetically modified organisms have long been studied (Bhuyan 2011), (Botonaki and Mattas 2010), (Rozin, Fischler et al. 1999), to name a few.

Personality and values also contributes to how the EKB develops. Values are believed to highly influence consumer behaviour. According to a variety of studies, values are decisive in consumer behaviour towards foods. (Rose and Kahle 1995) showed that, working women preferences for convenience over price and the frequency of eating out where significantly related to their values (employment-status, family income, number of children and personal values). Moreover (Lindeman and Sirelius 2001) found that personal values affect food choices, when studying the relationship between food choice ideologies and food choice motives. The work of (Osinga 2004) focused on the influence of different perceptions of food due to different social systems. The existence of an "effect of culture" in the way consumers from different social systems have different and significant perceptions of food was one of the main conclusions.

Food related lifestyles are also influenced by consumer's values. In (Brunsø, Scholderer et al. 2004) consumers were surveyed about their value priorities (following Schwartz structure of values) and about their food-related lifestyle in Germany and Spain finding important relationships amongst the two.

The relationship between food health concerns and values was analysed by (Worsley and Skrzypiec 1998) through a survey that related food health concerns with personal values. Findings suggest a strong connection among values and concerns.

Last, but not least, the relevance of personal values in convenience food consumption and consumption of food away from home was studied. In the work of (De Boer and McCarthy 2005) convenience food attributes were studied amongst hedonistic and adventurous consumers. For the hedonistic consumer, saving time, convenience, flexibility, having a treat, and limiting waste of food were highlighted. As for the adventurous consumer emphasis was on saving time, convenience, flexibility, and variety in the daily meal pattern. Additionally and according to (Costa, Schoolmeester et al. 2007) before shifting from homemade meals to ready meals consumers perform a trade-off

analysis. The outcome is highly related to each consumer's valuation of sensory and health-related issues against convenience.

1.3.5 Consumption

Once again, applying these concepts to the restaurant business, consumption is normally immediate. Purchase and consumption are strongly connected and happen in a continuous way, mostly because the decision to purchase is due to the will to eat. Moreover, consumers go to restaurants willing to eat there which makes no room for delaying consumption. When making the purchase the consumer also decides when the consumption will occur.

The only exception might be take-away only when time is considered, since the motivations that drove consumer to purchase the food are exactly the same as if they were going to a restaurant. The gap happens just because the place and time of consumption differs from the place of purchase.

Portion size could be relevant in this phase of the decision process. If the portions are too big consumers may consider that value for money and use the left-over food in another occasion thus reducing their overall food budget. On the other hand, bigger portions may delay the next trip to the restaurant or even result in sharing food thus diminishing the restaurant's revenue.

A given population can be divided in two – User and non-users of a product. The non-users represent the growth potential of that product in that population and should be address for further growth of the business.

For the users, it is very important to understand the characterization of their consumption. This characterization has four main dimensions.

When is the item consumed?

The time of day is very important and strongly connected to the product. When building a restaurant concept special attention should be given to the development of adequate products for each time of day if the business expects to be selling food all day and not only on main meals time. Breakfast, afternoon break and late night require specific products designed entirely for those consumption moments.

Lunch is often related to convenience, mainly on work days as dinner is more about leisure. This influence the way consumers interact with restaurants. The same comparison can be made for weekdays and weekends. Indeed, weekends are essentially leisure occasions where social and hedonic needs are met.

The moment of consumption can also be useful in market segmentation. In fact sometimes there is a high correlation between the moment of consumption and the type of consumers (Age, gender, racial, income).

Sometimes, consumption never occurs. In fact, as much as 12% of the products bought for the pantry escape consumption and ultimately are discarded (Wansink, Brasel et al. 2000). This normally does not happen in the restaurant business as consumption immediately follows purchase. However,

uneaten food could be seen by consumers as food bought unnecessarily thus generating a bad evaluation of the business.

Where does consumption occur?

The particular place or situation may shape consumer behaviour. In the food business, food is generally consumed inside the restaurant. Take-away may need extra analysis because the place of consumption will differ from the room of the restaurant. This opens up several possibilities that have to be anticipated in order to maintain the product's attributes.

Bigger distances from the restaurant may dictate the need for insulated packaging that maintains food temperature. Additionally, product size might need to be revised so people can eat on the go, using plastic utensils or sometimes even just a fork.

Some studies reveal a connection between location and food acceptability. The work of (Edwards, Meiselman et al. 2003) suggests that the same dish was rated differently in accordance with the location in which it was consumed. In fact, upscale restaurants received higher scores than institutional settings. A similar study by (Meiselman, Johnson et al. 2000) showed that food ratings varied with the location. The same food served in a restaurant was better evaluated than when served in a laboratory.

How is the product consumed?

Consumers can have different forms of consumption for the same product. At times, they even give the product a different usage from the originally intended.

In the food business, this can relate mainly to the way people actually eat the food they buy in the restaurants. Using a knife and fork or eating by hand? Using the product differently from what was expected or intended – For example, consuming items design to be main meals, as snacks.

Finally, and following society's trends, consumers often engage in different activities at the same time. Understanding what consumers are doing besides eating (like driving, working) could translate in a business advantage against competitors.

How much is consumed?

The amount of consumption of a given product is influenced by a range of factors. Visual perception, amount of product in stock and product shelf-life leads to different consumption behaviours. Generally, scarcity of a product in stock reduces consumption as abundance generates the exact opposite behaviour.

The combination of all factors results in usage volume segmentation according to the frequency and unitary intake of a product. Consumers are normally divided into heavy users, moderate users and light users.

In the restaurant business the quantities consumed are somewhat limited by two main aspects. Firstly, consumption is almost immediate thus avoiding stocking of food. Secondly, there is a limited amount of food a human being can intake in a small period of time.

The most common strategy has long been creating high-value offers that normally represent bigger quantities of food and increasing revenue.
Frequency of consumption is also related to the amount of food consumed and restaurant owners give it a lot of importance due to the limitations associated with food consumption in a given moment. Making people come more often to the restaurants is one of the biggest concerns of the industry.

Consumption experience
Regarding the consumption experience itself, how did it feel? Feelings are intimately related to attitude forming towards products. Consumer experiences either provide positive or negative reinforcement or punishment. Positive reinforcement happens when consumers gets a favourable outcome from using a product. Positive reinforcement will lead to repeated buying. Negative reinforcement occurs when product usage intends to reduce or avoid a certain negative outcome. Lastly, punishment appears when there is a negative outcome of the consumption experience.
Expectations are preconceptions of what the experience will be. Poorly managed expectations could lead to a negative outcome of the consumption experience even if the experience itself is not as bad as consumers find it. One way to minimize the probability of this occurring is shaping consumer's interpretation of the consumption experience by altering expectations prior to tasting

1.3.6 Post-consumption evaluation

In the restaurant business, post-consumption evaluation is related not only to consumer's health after eating (heartburn, satiety and bad after taste in the mouth, for instance) but mainly to the feelings associated with taste, texture visual aspect and flavour. Since consumption is often immediate, the way people use the product is not a key issue. Nevertheless, factors like temperature and texture can penalize consumer's evaluation of the restaurant especially if they consider the restaurant's fault (despite in some occasions being the consumers fault).
Most researchers consider satisfaction as one of the most decisive factors in long-term consumer behaviour (Heesup, Back et al. 2009).
Satisfaction influences repeat buying. Consumers who rate poorly a company hardly will buy from it again. On the other hand, satisfied consumers are most likely to return. In fact, customers' intention to repeat usages of the service or product is related to previous product or service experiences. Some researchers found that the total cost of getting a new consumer to the same level of profitability of a lost customer is approximately sixteen times greater (Adam, Robert et al. 2000).
Satisfaction is also the basis of word-of-mouth (WOM). The use of positive WOM endorsement relates to previous consumption experiences. Word-of-mouth tends to be more frequent when consumers are dissatisfied. According to (Barber, Goodman et al. 2011) unfulfilled expectations create consumers who may spread negative WOM. With the advent of Internet, WOM became a phenomena business can no longer ignore. The work of (Jeong and Jang 2011) suggests that restaurants' food quality, satisfactory restaurant experiences with service employees and a superior atmosphere in restaurants positively influences customers to spread positive web-based word-of-mouth (eWOM). The power of

the internet and peer-to-peer evaluation of consumer experiences has become the most important channel to express consumer satisfaction in some areas of business. Unlike traditional WOM, eWOM spreads more widely and rapidly due to eWOM's unique characteristics. In particular, eWOM is directed at multiple individuals, is anonymous and is available at any time (Litvin, Goldsmith et al. 2008). Consequently, the potential impact of eWOM on customers' decision-making processes can be more powerful than the impact of traditional WOM (Jeong and Jang 2011). In another study by (Zhang, Ye et al. 2010) consumer-generated ratings about the quality of food, online consumer reviews are positively associated with the online popularity of restaurants where environment and service of restaurants are concerned.

Dissatisfaction leads to complaints. Dissatisfied consumers may decide to make official their complaints in the form of a formalized complaint or even a lawsuit. When this happens business have a very difficult task in reverting the consumer's determination often leading to the loss of a couple of consumers (the one who complaints and is inner circle of acquaintances). Lyons (1996) identifies factors underlying complaining behaviour from focus group and interview data. She found that levels of customer involvement and dissatisfaction made complaints more likely. Huang and Smith (1996) studied consumer responses on unsatisfactory restaurant experiences, concluding that restaurants should always explain the reasons for unsatisfactory service and also offer compensation. in (Johns and Pine 2002)

Satisfaction also lowers consumer's price sensitivity whereas satisfied consumers finds more value in the products consumed. A considerable amount of studies point to a positive relationship between customer satisfaction and repurchase intention (Heesup, Back et al. 2009). A high level of customer satisfaction was found to decrease the perceived benefits of service provider switching, thus increasing repurchase intention (Anderson and Sullivan 1993).

Also the work of (Jaksa, Robert et al. 1999.a) revealed a strong positive relationship between dinning satisfaction and behavioural intentions.

In (Heesup, Back et al. 2009) positive correlations between excitement and comfort and customer satisfaction were found, the first in a higher degree. At the same time, a negative correlation was found between annoyance and customer satisfaction. They also found a string positive correlation between customer satisfactions and revisit intention. This study also showed that sometimes consumer dissatisfaction is not enough to drive consumers away. Factors like preference, monetary reasons and non-monetary switching costs like convenience, relational investment and lack of alternatives are decisive in maintaining consumers with low levels of satisfaction. This was also confirmed by (Jones, Mothersbaugh et al. 2000) where switching barriers positively influenced repurchase intentions even when satisfaction was low. Business should consider these factors when trying to influence post-consumption evaluation.

1.3.7 Divestment

Divestment will generally not apply because divestment is associated with durable goods. Disposal, recycling and remarketing are some of the options that obviously do not apply to food.

2. Materials and methods

2.1 Outline of study

In order to understand consumer's use of restaurants in shopping centres the EKB model was used as a theoretical framework. Literature review was used to identify the relevant stages of the EKB model and its application to the restaurant food business.

Information was used to develop a survey that was broadcasted through social networks (Facebook and linkedin) and personal e-mail contacts. The main objectives of the survey were collecting information about importance given to the different aspects of the EKB model, personal and demographic characteristics and some consumer patterns such as amount of visits and money spent at the restaurants inside a SC during work days in the thirty days prior to taking the survey.

Information was treated statistically firstly to find differences between consumers and non-consumers and secondly to understand which variables were influencing consumption and how, expressed in the total amount of time and money spent in the thirty days prior to the survey.

Factorial analysis was performed to identify common factors amongst variables and linear regression was used to further understand how the relevant variables were affecting total amount of time and money spent on each meal period – Lunch and dinner.

Results were interpreted according to the EKB theoretical framework and the existing knowledge about food businesses. Conclusions were then used to compile an array of recommendations to help business better understand their consumers thus improving operational efficiency and profitability.

2.2 Model development

2.2.1 Variable definition

By using the early described EKB model as a theoretical framework for the explanation of the process when using a restaurant in a shopping centre, the following independent variables (table 2.1) where chosen to depict consumer's behaviour at the different stages of the EKB.

The amount of different brands used, frequency of use and time and money spent on each visit were also considered. Frequency was related to both time and money spent to generate two new variables - Time spent and money spent:

- Time spent = frequency of use X time spent on each visit
- Money spent = frequency of use X money spent on each visit.

Lastly, some demographic data was elected to better understand the consumer's profile:

- Age;
- Gender;
- Education – Participant and biggest incomer of the household if not himself;
- Main activity – Participant and biggest incomer of the household if not himself;
- Size of the household;

- Composition of the household – Number of children under sixteen year old;
- Place of residence;

Education and leading activity of the main incomer were used to create a new variable – social class according to the ESOMAR standards (anex1) (Higgs 2002).

Table 2.1: Variable definition

Stage of the EKB	Independent Variables
Need recognition	Physiological needs Socialize with friends Socialize with co-workers Socialize with family Change from every day environment Does not want to cook Does not have time to cook Experiment new flavours To see and be seen Run some errands in the SC
Search for information	Previous personal experiences Advice from friends and/or relatives Blogs (written by consumers not professionals) Specialized magazines Food and restaurant internet portals Adds (TV, radio, press, others) Information at selling point (New items, promotions,…)
Pre purchase evaluation	Name and/or brand Price Location of the SC Nutritional value Variety of choice Décor Products for children (menus, playground,..) Type of food (Pizza, sandwiches, Indian food, hamburgers,…) Promotions available

Table 2.1(cont.): Variable definition

Stage of the EKB	Independent Variables
Purchase	Crowded restaurant Friendliness of staff Flavour Cleanliness and hygiene Speed and efficiency Consistent quality Comfort Portion size Straight to the pre chosen restaurant A stroll around the food court Promotions result in changing plans Other members of group influence decision
Consumption	Alone Friends Co-workers Family with children Family without children Full meal Light meal (including soup or salad) Own restaurant facilities Food court

To further understand consumer's behaviour, additional questions were asked on issues expectedly related to consumption of food in restaurants.

Firstly, cooking skills were considered important since they are apparently related to the usage of restaurants as a means to compensate the lack of ability to cook one's meals.

Then, it was deemed relevant to know more about consumer's values, beliefs and attitudes towards issues that are thought to influence restaurant businesses in the near future:

- Genetically modified foods;
- Animal testing;
- Exercise;
- Vegetarianism;
- Recycling;
- Local production;
- Sustainable development.

2.2.2 Survey design

In order to study the process of choosing a restaurant in a SC a survey was developed – Appendix 1.
A pilot trial amongst some chosen responders was conducted to identify possible flaws and improvement opportunities. Participants were asked to give feed-back on several aspects of the survey, namely structure, length and duration, clarity of contents, possible ambiguities, repetitions and even typing errors. Some, with the expertise to do so, were also asked to evaluate the adequacy of the survey to the investigation objectives.
All the contributions were integrated in the final version that was used for the thesis.
With the aim of identify participant's consumer patterns when it comes to having their meals in a SC, a filter question was introduced at the beginning of the survey – "*Have you used any restaurant (own room or counter) located inside a shopping centre in the past 30 days?*"

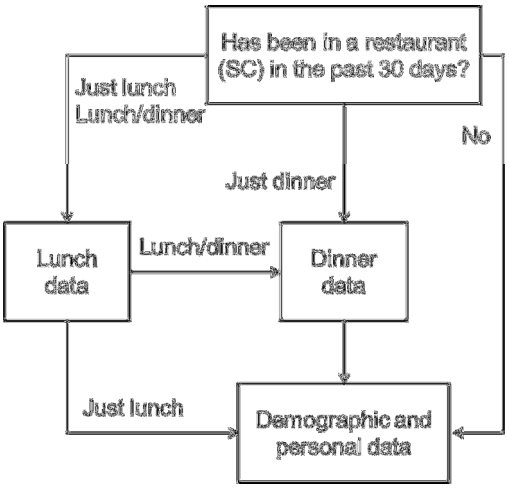

Figure 2.1: Survey answer paths

Depending on the answer responders are routed to different parts of the survey (Figure 2.1). When adequate, variables were rated according to a 5 point Likert scale to point out the relevance of each variable:

- Never/hardly ever – (1);
- Rarely – (2);
- Sometimes - (3);
- Often - (4);
- Very often/always – (5).

All answers were mandatory in order to prevent excluding individuals due to missing values.

2.3 Procedures

2.3.1 Data collection

The survey was loaded on Google documents and broadcasted during a two months period between February 7th and April 7th of 2012. Linkedin, Facebook and personal E-mail contacts were used to reach potential responders, making it a convenience sample. Besides finalising the survey, responders were asked to further divulge it through their own personal contact databases.
Responses were automatically captured on Google documents and further exported to SPSS v.17 where data was coded, organized and when necessary transformed for further statistical testing.

2.3.2 Hypothesis formulation

First of all, it is essential to understand if non-consumers share the same characteristics as consumers when it comes to their demographics and personal information. The first research question pretends to evaluate the similarity between non-users and users of restaurants located in SC.
Q1 – Are users characteristics (demographical and personal) equal to non-users?
Within users, the objective is to understand how each independent variable influences consumer profile as in time and money spent, and if it differs according to the situation – Lunch vs. Dinner. For that, four distinct questions have to be posed:
Q2 – Which variables influence time spent at lunch time and how?
Q3 – Which variables influence money spent at lunch time and how?
Q4 – Which variables influence time spent at dinner time and how?
Q5 –Which variables influence money spent at dinner time and how?
It is expected that amongst the array of variables, some will be related to each other and that some will have a different role in the EKB model. It is also expected that the set of variables influencing the lunch period will differ from the set influencing dinner period.

2.3.3 Statistical testing

Comparison between users and non-users:

Q1 – Are users characteristics (demographical and personal) equal to non-users?

According to (Maroco 2010), Chi-Square test is used to test if two or more independent populations or groups differ in some characteristics. Cell counts are shown as frequency tables.
The dependent variable (consumer profile) is qualitative, assuming two distinct values - Users and non-users. All the independent variables are also qualitative or transformed into qualitative via interval grouping which makes Chi square the ideal test to use in such experimental conditions (Maroco 2010).

Users and non-users were then compared through chi-square testing. Some of the variables needed to be grouped – Appendix 2 in order to meet the test's criteria (N>20; All observations >1; At least 80% of the observations >= to 5) (Maroco 2010)

Hypothesis testing:

H0: There are no significant differences between users and non-users regarding demographic and personal characteristics (the independent variables do not influence respondent's consumption profile);
H1: There are significant differences between users and non-users regarding demographic and personal characteristics (the independent variables influence respondent's consumption profile).
The level of type I error used was α=5% and the test result is given by the comparison between the test's level of significance (p value) and the chosen α (0.05):

p value > α – Do not reject H0;

p value < α – Reject H0, i.e., the independent variables influence respondent's consumption profile.

Users – Relationship between user's profile and situation (lunch vs. dinner):

Due to the high number of independent variables (47 for each meal time), a factorial analysis was performed to highlight potential inter-variable correlations and reduce the number of relevant variables to use in further statistical testing.
Assuming that some of the variables are connected it is necessary to perform factor extraction to estimate common factors amongst the entire selection of variables. According to (Maroco 2010) the best suited test is the sampling adequacy test, also known as Kaiser-Meyer-Olkin (KMO). This test is a measure of variable homogeneity which compares simple correlations with partial observed correlations between variables. Extraction was performed using the principal components method.
The identified factors were associated to the original independent variables by correlation coefficient analysis. The independent variable with the highest score for each of the factors identified was used in linear regression tests. A high score indicates that a certain factor is strongly related to a certain variable, making it a fairly good approximation to assume that the variable is one of the most relevant.
Factorial analysis reduces the number of variables to the most relevant ones but does not show how independent variables influence the dependent variables – Extension and direction of behaviour.
To explain the influence of the different relevant variables identified in the factorial analysis and the respondent's behaviour (time and money spent on meals) linear regression was performed. The potential relationship between variables is explained by each variable's regression coefficient value and significance level (p value). If p<α (0.10) value is considered significant and used to explain the relationship between variables.

Linear regression type I was used:

$(Y_j = \beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j} + \ldots + \beta_p X_{pj} + \varepsilon_j \ (j=1 \text{ to } n))$ (2.1)

β_i are the regression coefficients that represent the influence of the independent variable X_i on the dependent variable Y.

The fitness of each regression was evaluated by variance analysis and determination coefficients.

Variance analysis tests whether at least one β_i is different from zero meaning that at least one independent variable influences the dependent variable:

H0: $\beta_1 = \beta_2 = \ldots \beta_p = 0$

H1: $\exists_i: \beta_i \neq 0 \ (i=1 \text{ to } p)$

If p value ≤α (0.05) H0 is rejected and it is fair to say that at least one independent variable influences the dependent variable.

Determination coefficients (R^2) indicate how much of the total variation is explained by the regression model - $0 \leq R^2 \leq 1$. Nonetheless as stated by (Maroco 2010), the adjusted determination coefficient (R_a^2) should be used instead especially when the addition of variables to the model increases R^2 but will only increase R_a^2 if there is a better model fit with the additional variable.

Other significance tests were performed to evaluate the linear regression adequacy and validity. According to (Maroco 2010), the best suited test to evaluate linear regression validity is residue analysis.

Residue analysis tests if residues possess a normal distribution with null mean and constant variance. It also confirms wheather all covariance are equal to zero, i.e. errors are independent (Maroco 2010).

Normal distribution was validated by means of a normal probability plot whilst residue independence was confirmed using the Durbin-Watson test. Variation Inflation Factor (VIF) was used to test for correlation between independent variables. According to (Maroco 2010) VIF >5 denote estimation problems due to independent variable correlation.

The different methods of model optimization where used (Forward, backward and stepwise). The best fit was chosen by R_a^2 and standard error of the estimate analysis. For each dependent variable, the best model was the one which had simultaneously the biggest R_a^2 and lowest standard error of the estimate.

The level of significance of each obtained coefficient was used to decide if each variable should be present in the model. At the same time, the coefficient's value was used to explain extension and direction of behaviour. Relevance is given by the absolute value of each variable's coefficient and type of behaviour is given by the exact value – A negative value means that the dependent variable behaves inversely to the independent variable's behaviour.

The linear regression models were produced in order to answer the remaining research questions:

Q2 – Which variables influence time spent at lunch time and how?

Q3 – Which variables influence money spent at lunch time and how?

Q4 – Which variables influence time spent at dinner time and how?

Q5 –Which variables influence money spent at dinner time and how?

3. Results and discussion

3.1 Sample characterization - Demographics

During the two month period 589 responses were obtained. From these, 37 (6.28%) were discarded due to several inconsistencies thus resulting in 552 valid responses that were further analysed and studied. Detailed results are given in appendix 3.

There is a high percentage of non-users (30.8%). As expected, usage at lunch time is higher than at dinner (48.4% vs. 39.0%).

The sample is mostly composed of women (68.1%). This result differs from the overall composition of the Portuguese population which is composed by 52.2% women (PORDATA 2012)

The sample comprises a wide range of ages going from 19 to 70 years old with an average of approximately 37 (36.84). Due to the method used (web surveys) older people were expected to be less represented in the sample since they have little access to computers or social networks despite the fact that 43,9% of the households have at least one computer (PORDATA 2012). The observed discrepancy reflects the convenience of sampling based on the researcher's social network and personal contact database.

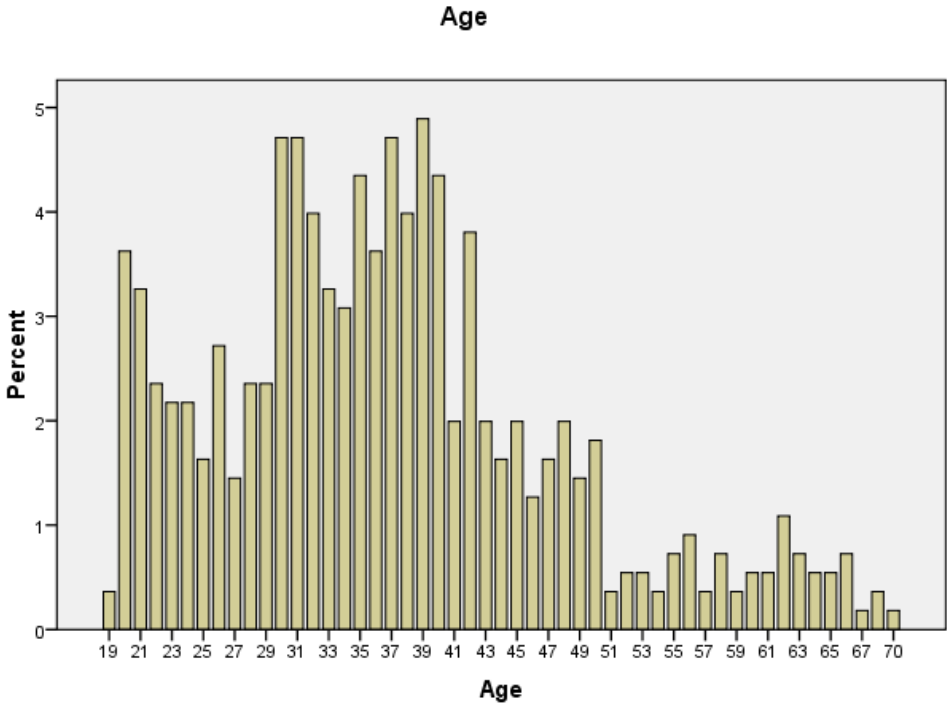

Figure 3.1: Age distribution of the respondents

Indeed, the age group ranging from 60 to 70 represents only 5.4% of the total population. When comparing the study's sample with the total population – Figure 3.2, the largest differences are in the [30 to 45[interval which are considerably over represented in the sample and the [15-19[and [50-75[interval which are both underrepresented.

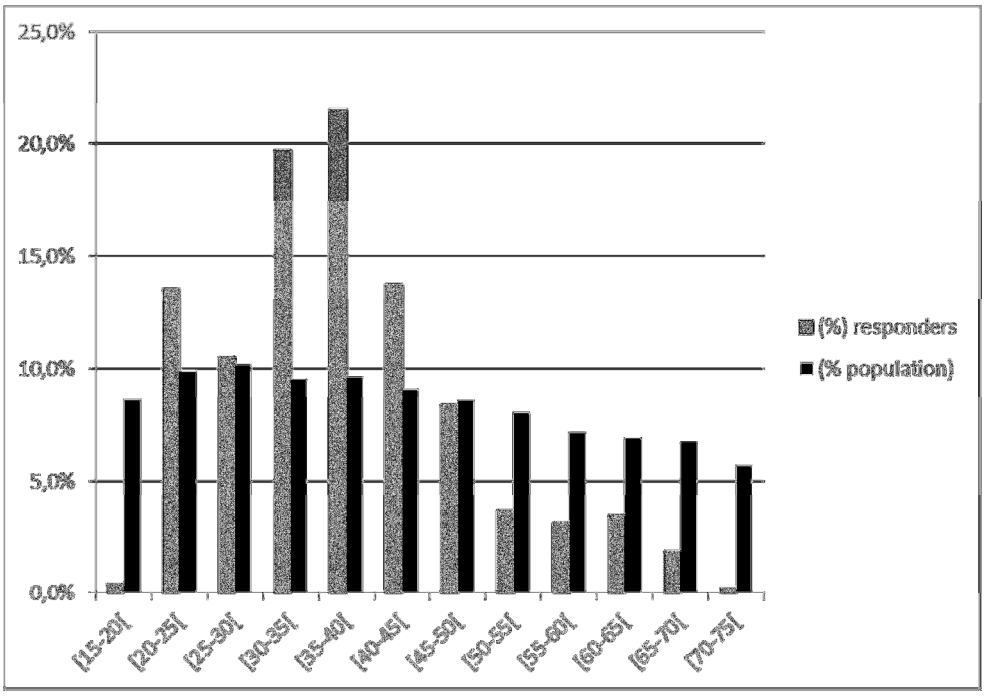

Figure 3.2: Age distribution comparison between sample and Portuguese population

Source: (PORDATA 2012) – 2001 data from Portuguese Census

College degrees (39.3%) and post-grad/master degrees (30.4%) account for the majority of responses when it comes to respondent's education while in general population only 11.8% have a college degree. Such an unusual concentration also reflects the convenience of sampling.

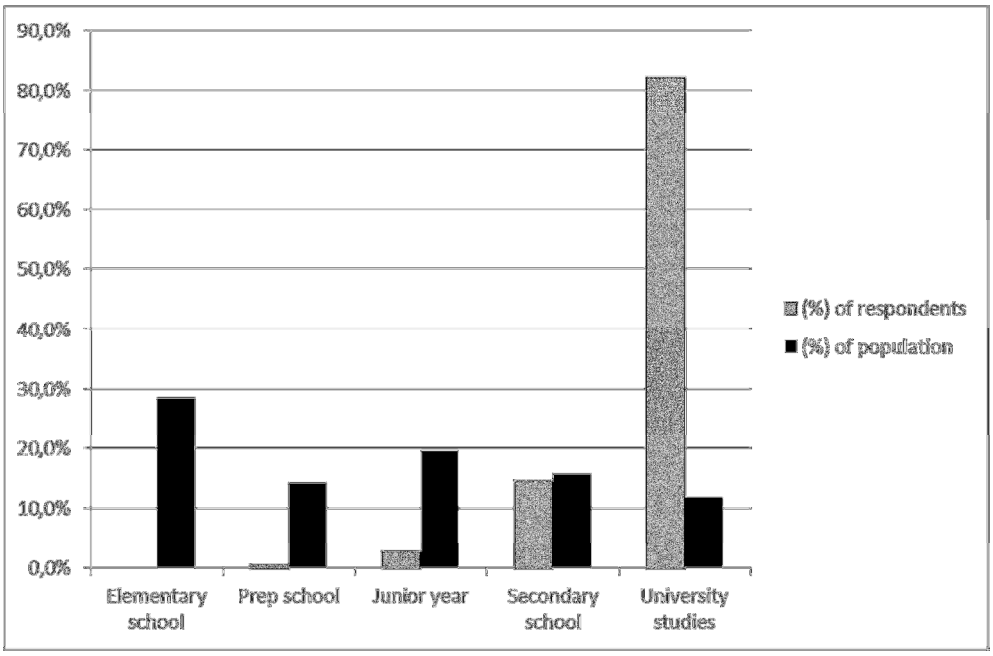

Figure 3.3: Comparison between sample and Portuguese population

Source: (PORDATA 2012) – 2010 data

Since all participants are older than 19, maybe it is not correct to compare the sample with the entire population when it comes to education. Nonetheless, since it is impossible to attain the relationship between age and education (despite the majority of elementary and prep school students being of a young age – under 19), no comparison with population data is possible.

Dependent workers represent the biggest part of the population (62.5%). The low frequency of students (12.5%) is probably related to the small amount of responders under 25 (13.9%).

The most relevant discrepancies towards the general population are related with the percentage of dependent workers and pensioners. The low percentage of pensioners in the respondent's universe is linked to the low numbers of persons over 65. As for dependent workers the survey methodology and sample convenience could be responsible for the observed discrepancies.

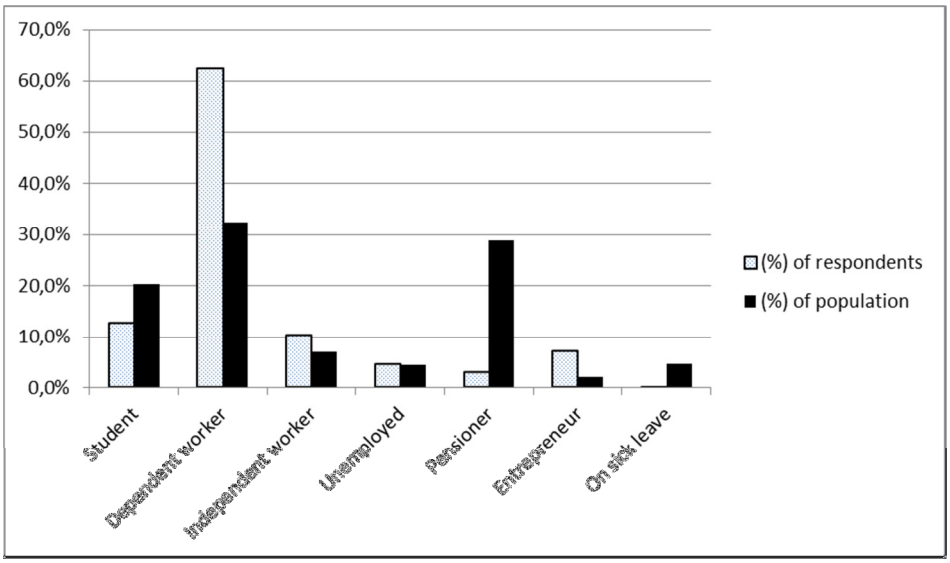

Figure 3.4: Comparison between the sample and the Portuguese population Source: (PORDATA 2012) 2010 data

The average household is composed of 2.94 persons of which 0.8 are under 16. Nevertheless, the majority of households (27.5%) are made up of 3 persons. As for children, 53.6% of the households are childless making it the biggest group.

Most recent data from (PORDATA 2012) from 2001 reveals that the average size of the Portuguese household is 2.8 persons.

Regarding household composition, same data shows that single individual households account for 17.7% of the total amount of households (13.9% in the sample).

On the subject of location of the household, the majority of responders come from urban surroundings (65%). The convenience of sampling procedures also plays an important role in this outcome.

Sample characterisation – Other personal data:

There are a low percentage of respondents without cooking skills (3.1%) probably related to the low percentage of younger individuals who tend to lack cooking skills. The considerable amount of individuals with advanced cooking skills could be related to the sample's age distribution.

Exercising, recycling local farming and sustainable development seem to be the most important issues. On the other hand, Vegetarianism appears to be the less important issue to the respondents.

Table 3.1: Personal values

	Irrelevant	Slightly important	Important	Very important	Essential	Total
Genetically modified foods	6.15%	19.0%	37.8%	28.9%	8.15%	100%
Animal testing	5.25%	16.1%	37.0%	29.5%	12.1%	100%
Exercise	0.20%	3.10%	21.6%	36.0%	39.1%	100%
Vegetarianism	22.8%	43.8%	24.8%	7.10%	1.45%	100%
Recycling	0.40%	2.90%	23.0%	33.3%	40.4%	100%
Local farming	0.90%	7.43%	24.8%	41.7%	25.2%	100%
Sustainable development	0.36%	2.00%	18.5%	40.4%	38.8%	100%

Sample composition and discrepancies towards the general population represent a limitation to the study and its implications will be further address in the final stage of this paper.

3.2 Consumers vs. non-consumers

Having characterized the entire population, further descriptive analysis was conducted to better describe the user's group (N=382). This population is compared to the non-users in order to point out relevant differences in responder's profiles.

The results of the several chi-square tests performed are shown on table 3.2.
According to the test, the following variables differ statistically (p-value<α = 0.05) between users and non-users:

- Education (0.000);
- Main activity (0,040);
- Social class (0,015);
- Vegetarianism (0,052);
- Local farming (0,026);
- Age (0,010).

There are no relevant differences between groups when it comes to gender distribution as it is very similar amongst each other (32.9% Non-user males vs. 31.4% users).
As for age, there is higher percentage of non-users for participants over 50 years old (21.8% vs. 7.85%). Inversely, when it comes to the younger participants (younger than 30 years old) there are a lower percentage of non-users when compared with users (16.5% vs. 28.0%). As seen before, these differences are considered statistically relevant. Modern restaurant concepts normally found inside SC

typically attract younger people. This could be the reason why age distribution differs between users and non-users.

Table 3.2: Chi square results

Independent variable	Chi square	P value	Comments
Gender	0.126	0.722	No significant differences
Education	**28.456**	**0.000**	**Difference amongst groups**
Main activity	**10.054**	**0.040**	**Difference amongst groups**
Place of residence	0.624	0.732	No significant differences
Social class	**14.091**	**0.015**	**Difference amongst groups**
Cooking skills	5.86	0.119	No significant differences
Genetically modified foods	7.209	0.125	No significant differences
Animal testing	0.961	0.916	No significant differences
Exercise	3.376	0.497	No significant differences
Vegetarianism	**9.396**	**0.052**	**Difference amongst groups**
Recycling	2.667	0.446	No significant differences
Local farming	**11.040**	**0.026**	**Difference amongst groups**
Sustainable development	0.771	0.856	No significant differences
Age	**28.550**	**0.01**	**Difference amongst groups**
Size of household	4.242	0.515	No significant differences
Number of children under 16	0.790	0.852	No significant differences

With education, the biggest difference relates to participants with the lowest education degree. Non-users with lower than preparatory degree studies represent 0.09% of the non-users group whilst users represent 0.008%. As for higher degrees, there are a higher percentage of graduate users (48.7% vs. 39.4% for non-users). Education is also considered relevantly different amongst groups. The already observed concentration of graduates on the sample could be responsible for this finding.

Students account for 14.7% of all users and only 7.65% of all non-users. People on welfare (Unemployed retired and on sick leave) stand for 11.1% of non-users and 6.02% of all users.

As mentioned before, young people are believed to be the one of the biggest users of SC and restaurants located in SC. The low percentage of young people in the sample may be hindering further differences between users and non-users.

Household size does not show relevant differences between groups. In fact, response distribution is similar for almost every house hold size.

The same occurs with number of children under 16 years old where distribution of responses is similar for both groups despite the existence of children would probably make people visit SC more often.

Place of residence also indicates there is no relevant differences between users and non-users. The high percentage of urban consumers (65.0%) could be influencing this result as the majority of SC is located in urban areas

As for social class, there is evidence of a difference between groups. As expected the lower incomers (social classes D and E) represent 41.8% of all non-users and only 31.2% of the user's population. Lower income consumers tend to use in a lesser extent restaurants making their meals at home or within supermarket ready meal offers.

Apparently cooking skills are not influencing consumer's profile since there is no relevant evidence of differences amongst the two groups. Nonetheless, the low percentage of young people in the sample could be influencing this result. If the sample was composed of a higher percentage of young people, cooking skills could be influential in consumer profile.

When it comes to values and attitudes towards current issues related to food, significant differences where only found in participant's opinion on vegetarianism and local farming.

Regarding vegetarianism, 28.2% of non-users find it important or more whereas 35.6% of users have the same opinion.

With local farming 95.9% of non-users found it to be important, very important and even essential whilst 89.9% of users share the same point of view.

It is not easy to explain the statistical relevance of these results. Besides vegetarianism, all matters where considered quite important in the participant's consumer profile. The slight differences between users and non-users when it comes to local farming may indicate that increasing importance reduces restaurant use in SC, indicating that these sort of restaurants antagonise local farming. As for vegetarianism, the least important of all food related issues, users tend to care more about it making this some contradictory with the behaviour of local farming.

3.3 Consumer profile (time and money spent) vs. meal time (lunch or dinner)

Results for time and money spent in the 30 days prior to the inquiry can be seen in table 3.3.

Table 3.3: Time and money spent

Meal time	Nº visits (average)	Time spent per visit - minutes (average)	Money spent per visit - € (Average)	Total time spent (n.ºVisits*time) – minutes	Total money spent (n.ºVisits*money) – minutes - €
Lunch	5.34	36.4	8.24	193.1	42.7
Dinner	3.17	43.1	10.98	143.37	34.39

As expected the average consumer uses the SC more often at lunch time (5.34 vs. 3.17 for dinner) but tends to spend less money at lunch time (8.24€ vs. 10.98€ for dinner). The average duration of each visit is longer for dinner (43.1 minutes vs. 36.4 minutes for lunch). Despite the longer duration of each visit at dinner time, total time spent is higher for lunch time (193.1 minutes vs. 143.37 minutes for dinner) due to the higher number of visits. The same happens with money were higher spending per visit is not enough to compensate the lower number of visits.

As mentioned earlier, a factorial analysis was performed to identify common factors amongst the set of independent variables. All the details regarding SPSS outputs are shown in appendix 4.

Sample adequacy was measured using KMO. Values of 0.749 for lunch and 0.752 for dinner were obtained. According to (Maroco 2010) this represents average quality correlations therefore the factorial analysis was considered valid and used in subsequent analysis. To further validate the results, Bartlett's test of sphericity was performed. In both cases a p-value of 0.000 was obtained which reinforces the significant correlation between variables ($\leq\alpha = 0.05$).

In accordance with the eigenvalue criteria (>1), the relationship between the variables resulted in 13 common factors for lunch time and 14 for dinner time.

Detailed information can be seen in tables 3.4 and 3.5 where variables with relevant coefficients (coefficient>0,5) are presented. Each factor was associated with a potential explanatory dimension.

There seems to be a similarity between lunch and dinner time when it comes to some of the dimensions extracted. Overall quality, information seeking, socialization needs and price sensitiveness are very much alike in both meal times. Nevertheless, some differences require further analysis.

All the quality related variables appear combined in one factor at lunch time whilst at dinner time friendliness of staff and comfort are connected to décor and crowded restaurant in a different factor. Probably consumers see them as overall quality criteria at lunch time and differentiate the variables associated with ambience of the restaurant at dinner time. Other quality driven variables such as variety of choice and nutritional value are only associated with dinner time. This could be related to consumer's motivations at each meal time. Perhaps at dinner time meals are seen as treats where indulgence plays an important role whereas lunch time is seem as a routine act.

Information seeking is identical at both meal times. Coefficient value analysis indicates that more elaborate sources of information such as specialized magazines could be more important at dinner timer. Nonetheless, at dinner times consumers also value their previous personal experiences – repetition dimension. This could reinforce the routineness of lunch time where memory of past meals is not as relevant.

Dinner does not seem to be an occasion for family meals with children. The scope of this study only comprises meals during week days which could be responsible for this result. Socializing with family with or without children during lunch time is probably integrated into consumer's daily habits. Socialization with friends and/or co-workers is also present at both meal times. The need to be alone as the contrary of socialization is considered a separate factor only at dinner time. Coefficient values show that during lunch time wanting to be alone is the opposite of wanting to socialize – Negative value coefficient. Maybe socialization needs takes precedence over the decision to eat alone at lunch time but not at dinner time where consumers actually choose to have dinner alone.

Price sensitiveness is a constant amongst meal times. Price, promotions available and promotions result in changing plans are present at both meal times. Portion size and information at selling point are related to price sensitiveness only at dinner time. Additionally, at lunch time, information at selling point is related to type of food and portion size is absent. Probably at lunch time information at selling point is associated with variety seeking while at dinner time is associated with value for money seeking, which could also explain the importance given to portion size. Maybe at lunch time cost control resides mainly on other factors such as promotions and type of food eaten. Perhaps

consumers feel that they do not control money spending during dinner time as they do during lunch time so they resort to other strategies like information and value for money search.

There are clear dichotomies between the type of meal and between the places where meals occur. This happens at both meal periods. Variables are inversely related (negative value of the respective coefficients). At lunch time, type of meal (full vs. light meal) and place (food-court vs. own restaurant facilities) are distinct factors. During dinner time all the variables where extracted together. This could mean that at lunch time the type of meal and subsequent eating place are independent despite the previous described dualities. At dinner the observed correlation between variables could mean that consumers still adopt exclusive behaviours (one or the other) but not independently. It is common practice to offer set menus during lunch time as a way to reduce the meal cost and increase turnover. Generally those offers do not apply at dinner time. This could be responsible for this finding because it allows consumers to have cheaper meals regardless of the type of place (food-court vs. own restaurants facilities) thus resulting in two distinct factors for lunch. Since those offers do not apply during dinner time a cheaper meal will always have be found at the food-court.

Cooking habits as in the absence of time or will to cook is also a common factor amongst meal times. The high level of existing cooking skills amongst the sample could mean that the existence of cooking skills is overruled by the absence of time or will to cook.

How people behave inside the SC in terms of restaurant choosing was considered as SC dynamics. The location of the SC is associated with running some errands in the SC during lunch time which could indicate a convenience driven factor exploring the other services available inside the SC, an important component of SC dynamics.

Again, there is a clear dichotomy between going straight to the pre chosen restaurant and strolling around the SC to help in the choosing process. It seems that consumers adopt an exclusive behaviour regardless of the situation. At dinner time running some errands appears associated with SC dynamics maybe because convenience is not the driving factor.

The presence of children in the group is responsible for a specific factor at both meal times. The direct consequence of children's presence is the importance given to products suited for children. At dinner time the need to have meals with children is also present whilst at lunch time the actual meals taken in the company of children are present instead.

Type of food was supposed relevant only during lunch time. The importance of the type of food could be linked to the already mentioned variety seeking. At dinner time type of food is correlated with eating with family without children and was interpreted just as a direct consequence of having the meals with family without friends.

Group dynamics expressed by means of other members of group influence decision is once more common to both meal periods. At dinner time it is associated with the location of the SC which could indicate that group influence begins before arriving at the SC. This is a natural outcome especially when socialization is a relevant factor in the process. Even though SC allow each consumer to choose his/her own meal and later join the other members of the group in the food-court, choosing the restaurant and ordering together seems to be already part of the socialization process.

Table 3.4: Factorial analysis – Component analysis for lunch time

Factor	Variables with coefficient >0.5	Coefficient value	Dimension
1	Friendliness of staff	0,565	Overall quality
	Flavour	0,720	
	Cleanliness and hygiene	0,834	
	Speed and efficiency	0,696	
	Consistent quality	0,807	
	Comfort	0,503	
2	Blogs	0,801	Information seeking
	Specialized magazines	0,823	
	Food and restaurant internet portals	0,837	
	Adds	0,635	
3	Socialize with friends	0,789	Socialization needs
	Socialize with co-workers	0,742	
	(Eat) Alone	-0,574	
	(Eat) with friends	0,663	
	(Eat) with co-workers	0,584	
4	Price	0,659	Price sensitiveness
	Promotions available	0,815	
	Promotions result in changing plans	0,827	
5	Décor	0,520	Meal characteristics - Type of place
	Own restaurant facilities	0,732	
	Food court	-0,776	
6	Does not want to cook	0,791	Cooking habits
	Does not have time to cook	0,774	
	Experiment new flavours	0,504	
7	Full meal	0,843	Meal characteristics - Type of meal
	Light meal	-0,815	
8	Socialize with family	0,585	Socialization needs
	(Eat) with co-workers	-0,512	
	(Eat) with family without children	0,754	
9	Run some errands in the SC	0,564	SC dynamics
	Location of the SC	0,673	
10	Straight to the pre chosen restaurant	0,773	SC dynamics
	A stroll around the food court	-0,628	
11	Products for children	0,730	Presence of children
	(Eat) with family with children	0,576	
12	Information at selling point	0,523	Type of food
	Type of food	0,552	
13	Other members of group influence decision	0,647	Group dynamics

Table 3.5: Factorial analysis – Component analysis for dinner time

Factor	Variables with coefficient >0.5	Coefficient value	Dimension
1	Cleanliness and hygiene	0,796	Overall quality
	Flavour	0,769	
	Speed and efficiency	0,696	
	Consistent quality	0,811	
2	Blogs	0,821	Information seeking
	Specialized magazines	0,861	
	Food and restaurant internet portals	0,852	
	Adds	0,542	
3	Socialize with friends	0,764	Socialization needs
	Socialize with co-workers	0,790	
	Change from every day environment	0,554	
	Experiment new flavours	0,548	
	(Eat) with friends	0,521	
	(Eat) with co-workers	0,655	
4	Information at selling point	0,624	Price sensitiveness
	Price	0,545	
	Promotions available	0,784	
	Portion size	0,533	
	Promotions result in changing plans	0,790	
5	Full meal	-0,638	Meal characteristics
	Light meal	0,731	– Meal and place
	Own restaurant facilities	-0,748	
	Food court	0,745	
6	Physiological needs	0,583	Cooking habits
	Does not want to cook	0,776	
	Does not have time to cook	0,792	
7	Décor	0,568	Ambience
	Crowded restaurant	0,643	
	Friendliness of staff	0,618	
	Comfort	0,536	
8	Nutritional value	0,735	Overall quality
	Variety of choice	0,727	
9	Products for children	0,739	Presence of children
	Family with children	0,830	
10	Run some errands in the SC	0,616	SC dynamics
	Straight to the pre chosen restaurant	-0,591	
	A stroll around the food court	0,659	

Table 3.5 (cont.): Factorial analysis – Component analysis for dinner time

Factor	Variables with coefficient >0.5	Coefficient value	Dimension
11	Previous personal experiences	0,791	Information seeking
12	Type of food (Eat) with family without children	0,543 0,682	Socialization needs
13	Location of the SC Other members of group influence decision	0,590 0,747	Group dynamics
14	(Eat alone)	0,771	Individualism

Linear regression using the extracted factors:

As stated before, the independent variables with the highest absolute coefficient value for each of the extracted factors were chosen to be used in linear regression to better understand the behaviour of the dependent variables time and money spent.
The independent variables where used in four different linear regression analyses to better comprehend how they affect the total amount of time and money spent in the 30 days prior to the survey.

Table 3.6: Linear regressions

Regression	Time of consumption	Dependent variable
1	Lunch	Time
2	Lunch	Money
3	Dinner	Time
4	Dinner	Money

Due to the qualitative nature of some variables, dummy variables were created to allow the variables in the linear regression models (table 3.7). According to (Maroco 2010), for a variable with k classes k-1 dummy variables need to be created. Details of each dummy variable can be seen in appendix 2

Table 3.7: Dummy variables

Variable	Classes	Dummy variables
Gender	2	1 – Gender dummy 1
Place of residence	3	2 – Place of residence dummy 1,2
Social class	6	5 – Social class dummy 1,2,3,4,5

Besides each set of independent variables extracted with factorial analysis, demographic and personal values were also introduced in the linear regression models. Table 3.8 refers to the variables used in each set of linear regressions performed.

Table 3.8: Variables used in linear regression

Lunch	Dinner
Cleanliness and food safety	Nutritional value
Food and restaurant internet portals	Alone
Socialize with friends	Socialize with co-workers
With family (without children)	With family (without children)
Products for children	With family (with children)
Other members of group influence decision	Other members of group influence decision
Promotions result in changing plans	Crowded restaurant
Location of the SC	Promotions result in changing plans
Goes straight to the pre chosen restaurant	Own restaurant facilities
In the food court	Does not have time to cook
Full meal	Consistent quality
Does not want to cook	Specialized magazines
Type of food	Previous personal experiences
-	A stroll around the food court
Age	
Gender Dummy 1	
Social class Dummy 1	
Social class Dummy 2	
Social class Dummy 3	
Social class Dummy 4	
Social class Dummy 5	
Size of household	
Number of children under 16	
Place of residence Dummy 1	
Place of residence Dummy 2	
Cooking skills	
Genetically modified foods	
Animal testing	
Exercise	
Vegetarianism	
Recycling	
Local production	
Sustainable development	

Summarized information of the regressions can be seen in tables 3.9 to 3.12. For detailed information regarding the different SPSS outputs, information is available in appendix 5.

Table 3.9: Linear regression – Time spent at lunch

Independent variables	Coefficient	Beta Coefficient	p value
Constant	128,22	-	0,213
Social class dummy1 (SCD1)	**85,13**	**0,175**	**0,007(*)**
Social class dummy2	50,56	0,106	0,104
Cooking skills	-20,55	-0,076	0,221
Genetically modified foods (GMF)	**-32,28**	**-0,147**	**0,038(*)**
Animal testing (AT)	**26,68**	**0,127**	**0,083(*)**
Exercise	-19,45	-0,075	0,243
Vegetarianism (VEG)	**-41,78**	**-0,188**	**0,004(*)**
Sustainable development (SDEV)	**32,43**	**0,125**	**0,054(*)**
Socialize with friends (SOCF)	**28,38**	**0,151**	**0,016(*)**
Does not want to cook (DWC)	**16,68**	**0,103**	**0,098(*)**
Food and restaurant internet portals	-23,56	-0,087	0,168
Family without children	-14,23	-0,080	0,194
Full meal (FM)	**30,18**	**0,164**	**0,007(*)**

(*) – Significant (p<0.10) – Between parenthesis – Coding used in the equations

Table 3.10: Linear regression – Money spent at lunch

Independent variables	Coefficient	Beta Coefficient	p value
Constant	12,36	-	0,668
Age (AGE)	**0,60**	**0,107**	**0,097(*)**
Social class dummy2 (SCD2)	**-14,02**	**-0,112**	**0,082(*)**
Social class dummy4 (SCD4)	**-15,94**	**-0,120**	**0,068(*)**
Genetically modified foods	-5,87	-0,101	0,155
Animal testing	5,52	0,099	0,168
Vegetarianism (VEG)	**-14,44**	**-0,247**	**0,000(*)**
Local farming	4,96	0,083	0,204
N.º of children <16	-3,24	-0,062	0,301
Socialize with friends (SOCF)	**6,69**	**0,135**	**0,041(*)**
Doesn´t want to cook (DWC)	**5,92**	**0,139**	**0,026(*)**
Promotions result in changing plans	-5,48	-0,085	0,162
Family without children	-3,57	-0,076	0,217
Full meal (FM)	**7,56**	**0,156**	**0,010(*)**

(*) – Significant (p<0.10) – Between parenthesis – Coding used in the equations

Table 3.11: Linear regression – Time spent at dinner

Independent variables	Coefficient	Beta Coefficient	p value
Constant	-59,58	-	0,530
Gender dummy1	-32,38	-0,086	0,232
Social class dummy4	-34,84	-0,089	0,190
Social class dummy5	-51,62	-0,076	0,265
Animal testing	-18,02	-0,100	0,152
Recycling (REC)	**-30,37**	**-0,151**	**0,050(*)**
Local farming (LFAR)	**39,62**	**0,207**	**0,008(*)**
Socialize with co-workers	13,48	0,074	0,273
Does not have time to cook (DTC)	**22,44**	**0,151**	**0,026(*)**
Previous personal experiences (PPE)	**19,57**	**0,122**	**0,075(*)**
Nutritional value (NV)	**-27,03**	**-0,155**	**0,028(*)**
Other members of groups influence… (OMI)	**27,50**	**0,127**	**0,059(*)**
Alone	-12,55	-0,072	0,268
Family without children (FWC)	**-23,43**	**-0,188**	**0,006(*)**
Own restaurant facilities (ORF)	**38,00**	**0,261**	**0,000(*)**
N.º children <16	-16,45	-0,087	0,201

(*) – Significant (p<0.10) – Between parenthesis – Coding used in the equations

Values of VIF are all lower than 5 making independent variables not correlated. This would be expected since the independent variables used in the linear egressions were obtained via factorial analysis.

The Durbin-Watson test results indicate that residues are independent. According to (Maroco 2010) d values between [1.8;2.2] guarantee residue independence. Normal distribution plots can be seen in appendix 5 confirming that all the necessary prerequisites for linear regressions validity were met.

Variance analysis indicates that all regressions have p values for ANOVA testing of 0,000 which indicates that in all regressions at least one independent variable influences each of the dependent variables.

Adjusted determination coefficients (R_a^2) are low (0.124-time/lunch; 0.108-money/lunch; 0.151-time/dinner; 0.263-money/dinner). According to (Anon nd) R_a^2 values of 0.2 are good and some authors have presented values as low as 0.07. So, results were deemed adequate for this type of study hence making linear regressions valid and statistically relevant.

Linear regression for money spent at dinner time resulted in the best fit of all followed by time spent at dinner time resulting in an overall best fit for dinner time.

Coefficient value (absolute and exact) analysis allows weighing each variable's importance and contribution to the obtained models. Standard coefficients are used to allow comparisons between variables with different magnitudes. The level of significance of each coefficient (p value) also plays a major role in model definition. If p value ≤α (0.10) the coefficient is considered significantly relevant for the model.

Table 3.12: Linear regression – Money spent at dinner

Independent variables	Coefficient	Beta Coefficient	p value
Constant	-92,78	-	0,002
Age (AGE)	**0,60**	**0,133**	**0,076(*)**
Social class dummy1	-7,70	-0,074	0,268
Social class dummy4 (SCD4)	**-12,24**	**-0,127**	**0,081(*)**
Social class dummy5	-17,12	-0,102	0,113
Genetically modified foods (GMF)	**5,60**	**0,121**	**0,091 (*)**
Animal testing (AT)	**-9,49**	**-0,214**	**0,004(*)**
Vegetarianism	4,30	0,086	0,196
Local farming	4,04	0,086	0,292
Sustainable development	5,33	0,096	0,232
Socialize with co-worker (SOCCW)	**8,18**	**0,182**	**0,005(*)**
Does not have time to cook (DTC)	**4,14**	**0,113**	**0,078(*)**
Nutritional value (NV)	**-9,56**	**-0,222**	**0,002(*)**
Consistent quality (CQ)	**7,40**	**0,116**	**0,094(*)**
A stroll around the food court	2,97	0,074	0,254
Other members influence the decision… (OMI)	**7,12**	**0,134**	**0,038(*)**
Family with children	3,03	0,109	0,154
Own restaurant facilities(ORF)	**12,42**	**0,346**	**0.000(*)**
Size of household	-2,90	-0,079	0,262
N.º children<16 (NC)	**-7,79**	**-0,167**	**0,026(*)**

(*) – Significant (p<0.10) – Between parenthesis – Coding used in the equations

The chosen independent variables represent the possible dimensions identified earlier being interpreted individually according to the dimension their represent. Table 3.13 shows what dimensions are considered in each linear regression

There seems to be a high influence of values and attitudes towards food issues on time and money spent both at lunch and dinner time. Indeed, linear regression methodology reveals several values/attitude variables to be statistically significant in each or the calculated regressions thus contributing to predict the time and money spent on each meal period.

According to the models, time spent tends to diminish when importance of genetically modified foods and vegetarianism is high whilst the opposite occurs with animal testing and sustainable development. Apparently, these two sets of results contradict each other.

Total money spent seems to be highly influence by opinions on vegetarianism were strong beliefs about the issue make people spend less money in the restaurants. Combining the effects of vegetarianism is fair to say that people with stronger beliefs about vegetarianism tend to use restaurants located in SC at lunch time during workdays in a lesser extent. This could be explained by

the small amount of vegetarian dishes offered in the restaurants. Vegetarianism does not seem to influence time and money spent during dinner time.

Table 3.13: Dimensions used in linear regressions

Lunch	Dinner
Overall quality	Overall quality
Information seeking	Information seeking
Socialization needs	Socialization needs
Price sensitiveness	Price sensitiveness
Meal characteristics – Type and place	Meal characteristics – Type and place
Cooking habits	Cooking habits
-	Ambience
SC dynamics	SC dynamics
Presence of children	Presence of children
Type of food	-
Group dynamics	Group dynamics
-	Individualism

At dinner time recycling detracts people from spending time in restaurants and local farming potentiates time spent. Once again these two results look as if they contradict each other.

When it comes to money spent, animal testing reduces the amount of money spent and genetically modified foods potentiate money spent.

Generally, common knowledge points out a negative association between attitudes on traditional foods and health and convenience fast-food restaurants mainly found In SC. Some authors like (Pieniak, Verbeke et al. 2009) found that the importance of convenience was negatively connected to attitudes on traditional foods and traditional food consumption.

As expected, income also plays an important role in consumption patterns. Social class dummy1 was considered statistically significant explaining total time spent at lunch time. As seen in appendix 3, social class dummy one is coded 1 for ESOMAR B class. Apparently people in this social class influence directly time spent. Moneywise, social class dummy2 (coded 1 for C1 class) and dummy4 (coded 1 for D class) influence inversely total money spent. As expected, lower income results in less expenditure.

Social class dummy4 also influences dinner inversely. Despite being an expectable result, social class dummy5 (ESOMAR class E) would be expected to influence total time spent. Probably the small amount of responders (42; 7.6%) could explain the absence in the model.

Demographically speaking, age also seems to influence consumer's patterns specifically total amount of money spent. According to both linear regression models (lunch and dinner), age potentiates money spending in the restaurants. Occupation of respondents and size and composition of the household could be responsible for this finding.

Regarding the EKB model, consumer's behaviour at lunch time is simultaneously explained by three dimensions – Socialization needs; cooking habits and meal characteristics. The need to socialize with friends results in increased time and money spent. The work of (Wakefield and Inman 2003) found that price sensitiveness lowers when consumers are in a social situation. The absence of motivation to cook also increases time and money spent in the restaurant. Probably this is due to repeated usage rather than extended meal periods and/or high value meals. Data is not entirely enlightening but points to an increase in average time and money spending with frequency of absence of will to cook, both at lunch and dinner time. The type of meal (full meal vs. light meal) also contributes to explaining consumer's behaviour. As expected high frequency of full meals translate into more time and money spent. Data shows for lunch time an average of 6.79±2.40€ spent for consumer who almost always/always chose a light meal against 10.32±7.10€ for those who elect a full meal. Same behaviour can be seen at dinner time – 9.17±6.43€ and 12.13±10.37€ for light and full meals respectively.

Other dimensions explain time and money spent at dinner time. Overall quality, cooking habits, group dynamics, and meal characteristics seem to influence both time and money spent. Nutritional value awareness makes consumers spend less time and money which could be a direct response to lower nutritional value perception of meals inside SC's. Absence of time to cook, other members influence decisions and own restaurant facilities potentiate time and money spending. Influence by other members of group suggests that eating in a social context could lead to bigger spending as the work of (Wakefield and Inman 2003) also suggest. Eating inside restaurant's own facility also explains the increase in time and money spending, particularly the place of consumption which has the highest absolute coefficient (0.346). These results are coherent with common knowledge of market segments where restaurants offer faster and cheaper products at the food court.

Additionally, time spent at dinner time is also explained by information seeking and socialization needs while money spent is influenced by socialization needs, overall quality and the presence of children.

Having dinner without children shortens the eating period which would be expected since children are known to linger meal times. The importance given to previous personal experiences tends to increase meal time. Hypothetically importance of previous personal experiences indicates leisure occasions were time is not of the essence.

As mentioned before, socialization tends to increase money spending which is corroborated by the variable socialize with co-workers where the frequency of socialization results in bigger expenditure.

Quality consistence concerns also result in bigger expenditure revealing a tendency to validate classical heuristics that quality comes at a price.

Finally, the number of children under the age of 16 lowers money spending. It would be expected that the overall meal cost would be higher when the number of kids increased. This result could be explained by the economic impact on the overall meal cost of kid's menus and even portion sharing in some early ages.

In summary, time and money spent in restaurants located inside a SC during weekdays can be predicted by the following equations:

Time spent at lunch time:

TLT = 0.175 * SCD1 [1] - 0.147 * GMF + 0.127 * AT - 0.188 * VEG + 0.125 * SDEV [2]

+ 0.151 * SOCF [3] + DWC * 0.103 [4] + 0.164 * FM [5] (3.1)

(1- Demographics; 2- Values/attitudes; 3- Socialization needs; 4- Cooking habits; 5- Meal characteristics)

Money spent at lunch time

MLT = 0.107 * AGE – 0.112 * SCD2 – 0.120 * SCD4 [1] – 0.247 * VEG [2]

+ 0.135 * SOCF [3] + 0.139 * DWC [4] + 0.156 * FM [5] (3.2)

(1- Demographics; 2- Values/attitudes; 3- Socialization needs; 4- Cooking habits; 5- Meal characteristics)

Time spent at dinner time:

TDT = 0.207 * LFAR – 0.151 * REC [1] + 0.151 * DTC [2] + 0.122 * PPE [3]

– 0.155 NV [4] + 0.127 * OMI [5] - 0.188 * FWC [6] + 0.261 * ORF [7] (3.3)

(1- Values/attitudes; 2- Cooking habits; 3- Information seeking; 4- Overall quality; 5- Group dynamics; 6- Socialization needs; 7- Meal characteristics)

Money spent at dinner time

MDT = 0.133 * AGE – 0.127 * SCD4 -0.167 * NC [1] + 0.121 * GMF -0.214 * AT [2] + 0.182 * SOCCW [3]

+ 0.113 * DTC [4] - 0.222 * NV + 0.116 * CQ [5] + 0.134 * OMI [6] + 0.346 * ORF [7] (3.4)

(1- Demographics; 2- Values/attitudes; 3- Socialization needs; 4- Cooking habits; 5- Overall quality; 6- Group dynamics; 7- Meal characteristics)

4. Conclusions

4.1 General conclusions

The survey turned out to be an excellent tool for collecting information, generating high response rates and a very high valid response rate (93.7%) with very little time consumption and supervision of the response process. Regardless of no official feed-back these numbers confirm the actual efficacy of the developed survey.

Despite the interesting number of responses (N=552) sample composition turned out to be under represented for some important consumer groups. Due to the convenience nature of the sampling procedures, young people [15-20] were considerably left out of the survey. Indeed, the youngest responder was 19. Since young people are to date one of the biggest consumer groups of restaurants located inside a SC, one thinks that had they been widely represented the outcome could have been substantially different. As discussed later, age was one of the few demographic and personal characteristics found statistically relevant between users and non-users.

Generalization of results becomes more difficult but not impossible. With the high number of user's responses (N=382) some conclusions can be drawn on the consumer groups well represented in the sample.

There are not many differences between users and non-users when it comes to using restaurants located inside a SC during weekdays. As mentioned before, age is one of the significant characteristics. Once again sample composition could be influencing results.

Some authors have reported that cooking skills are negatively related to convenience consumption (Brunner, van der Horst et al. 2010). Nevertheless, there are no significant differences between users and non-users. Cooking skills are high in the sample group (68,8% have intermediate or advanced skills) which could be contributing to the observed results.

Some values and attitudes towards food-related issues are surprisingly relevant (vegetarianism and local farming). The sample population is "over-educated" what could be influencing these results.

Economics play a transversal role in all the aspects of the EKB. There are significant differences in social class between users and non-users. As will be discussed later, social class is essential in quantifying time and money spent in the restaurants.

The highest factors for each variable of the extracted factors during factorial analysis allowed identifying some common dimensions – Overall quality, information seeking, socialization needs, price sensitiveness, meal characteristics (type and place), cooking habits, SC dynamics, presence of children and group dynamics. However, some differences were also encountered. Type of food is exclusive to lunch time as ambience and individualism are exclusive to dinner time.

Linear regressions produced different sets of estimators for each meal time. Lunch time is influenced by demographics (social class), some values/attitudes towards food-related items, socialization needs, coking habits and type of meal. Dinner time is influences by demographics (only money spent), values/attitudes, cooking habits, information search, overall quality, socialization needs and type of meal making it a more complex process.

As expected, consumers spend less money at lunch time than at dinner time. Also in agreement with common knowledge, frequency of consumption is lower at dinner time. Results on time spent also corroborate what is known about consumption in restaurants located inside SC since it became clear that meals at dinner time are longer.

Contrary to what would be expected, price sensitiveness was not relevant in predicting the total amount of money spent at both meal periods since attributes like price, promotions available and behaviours such as promotions result in changing plans are not statistically significant in all the linear regressions produced despite being considered highly correlated and extracted as individual factors in factorial analysis for lunch and dinner time.

As mentioned before, values and attitudes towards food-related issues were deemed very relevant. Indeed, at least one value or attitude is present in all the linear regressions produced with high absolute values which indicates considerable influence on the dependent variables. As an example, importance given on vegetarianism results in less time and money spent in the restaurant.

Cooking habits also play an important role in predicting time and money spent. The lack of time and will to cook are becoming decisive in the process of using restaurants even for a sample population that has high cooking skills. It is expected that the lack of cooking skills will further potentiate this effect. Socialization is also a good predictor increasing money spent.

There is a clear dichotomy in several pairings of behaviours. Food-court appears as the place where people have their meals at lunch time while own restaurant facilities is associated with dinner time. Simultaneously full meal is related to longer meal periods and light meal to shorter meal periods. Full meals are also seen as decisive in increasing expenditure. Most of all, consumers tend to adopt exclusive behaviours regarding the previous choices.

Some of the contradictions regarding values and attitudes towards food-related issues and their influence on time and money spent could indicate personal conflicts between attitudes/values and actual behaviour. Similar contradictions were found by (Hauser, Jonas et al. 2011) in their work.

The impact of children in the EKB model was not properly assessed. Only the number of children under the age of 16 seems to reduce money spent at dinner time.

4.2 Policy implications

As mentioned before, some of the knowledge acquired with this study should be integrated into businesses strategies and operations. Regardless of sample composition limitations where some important age groups are underrepresented or missing (ages from 15-19), results give some clues on how businesses should place themselves to maximize revenues and profit. The work provided some hierarchy on the relevant independent variables which influence time and money spent. This information can now be used to prioritize sales efforts. For instance, nutritional value concerns makes consumers spend less money at dinner time. Consumers are more health conscientious in leisure situations because convenience overlays health concerns at lunch time. These findings should also be incorporated in future business models.

Values and attitudes towards foods are increasingly important on people's lives, influencing their behaviour. Companies should make an effort to incorporate and communicate some of those values in their brand DNA. In other countries like the USA some big companies have already introduced themes like sustainable development, local farming, recycling in their way of doing business. Chipotle (Mexican fast food chain with around one thousand restaurants) as recently announced that all the milk used in their dairy products comes from pasture-raised cattle (Arnold 2012). Also in the USA, a recent survey with chefs – "What's hot for 2012" showed that locally sourced meats and sea food were the number one trend (Anon 2012).

Even though it is not clear in this work how price sensitiveness influences time and money spent, it became clear that price and promotions importance are highly related. The expected outcome – Promotions result in changing plans, is also highly related. In a SC consumption situation, consumers find it very easy to change from one restaurant to the other even if they had previously made up their minds. Creating and highlighting promotions is decisive when consumers are choosing a restaurant inside a SC as consumers seem to be highly responsive to these kinds of propositions. Businesses should constantly offer consumers value-added proposals to achieve brand awareness and change consumer's behaviours. Communication should be effective and swift because consumers decide in a split second especially at lunch time where convenience is one of the most important factors in the decision.

As stated earlier lunch there are clear dichotomies between type of meal (full vs. light meal) and pace of consumption (food-court vs. own restaurant facilities). Business should keep on incorporating these facts in different areas of their businesses. Products, prices places and operational procedures should transmit to the consumer an idea of coherence with their specific needs. This will definitely improve brand awareness, sales and most important, profit.

The need to socialize which generally translates into more time and money spent is also a very important conclusion to restaurateurs. Restaurants operating on their own facilities hamper the socialization process mainly when a group has an individual meal choice dynamics as groups of friends and co-workers often have. Furthermore, this study shows that even in food-court choosing a restaurant and ordering is already part of the socialization process. Food-courts are the ideal place to socialize regardless of everyone's meal choices and recent trends suggest that the actual food-court configuration is becoming out-of-date and that the future will encompass a smaller area dedicated to own restaurant facilities. However, business should keep in mind the consequences of socialization. Designing products destined to be shared amongst consumers could be a good strategy to guarantee loyalty and repeat patronage and simultaneously reduce meal costs for the consumer.

This study also showed that during dinner time consumers either choose the food-court when they want a light meal or a restaurant facility when they want a full meal. Extending some set menu offers to dinner time could potentiate sales in own restaurant's facilities as it occurs during lunch time.

As said before, the studied sample had high cooking skills but still chose to have their meals in a restaurant because the lack of time or will to cook. As generations evolve, there is an empirical indication that cooking skills are fading away. This will definitely traduce in out-of-home consumption. However, possible substitutes like take-away and ready-meals are progressively taking their share of

the market. The need to buy ready to eat food will increase and restaurants should develop products that can compete with possible substitutes.

Lastly, brand does not seem to be relevant in the choosing process. Food-courts are filled with well-known brands so it would be expected that brand should play an important role in the process. This could have two distinct interpretations, both relevant for food business. Either brand is taken for granted and choices are automatic or brands could really be irrelevant. If brand is taken for granted, business should work to maintain this status or achieve it. On the other hand, if brands are indeed irrelevant, strategy should shift towards more relevant attributes like quality consistency and nutritional value (as shown in the linear regression models).

Regardless of the result business should investigate how important brand awareness is for them.

5. Future research

There was some excess ambition in the survey design. The opportunity to gather as much information as possible on the EKB model applied to choosing a restaurant located inside a SC during weekdays was overwhelming which resulted in massive amounts of data to analyse. Time constrains demanded focus. It was decide to look at the big picture as a preliminary study hoping to unveil numerous research opportunities. I believe now that this is the biggest asset of this work!

Regarding the model itself and the different linear regressions produced, further work should be done on explaining how the relevant variables interact with each other as the actual results only allow understanding of how each independent variable influences the dependent variables. For that it is recommended to explore path analysis as a natural outcome of the work done with linear regression.

To achieve better robustness of results, younger people should be further studied to guarantee results extrapolation. Simultaneously other concerns should be taken into account to assure the best sample composition for all demographic variables.

Price sensitiveness was not significant as a predictor of money spent. This finding contradicts what is known about the effect of promotions and price policies in the restaurant food business. A detailed analysis should be performed to better understand this result.

Values and attitudes on food-related items were surprisingly relevant explaining consumption. Further exploratory work needs to be undertaken to improve knowledge of this phenomena. Future trends indicate that these issues will be increasingly important in the near future.

The decision to study only restaurants located inside SC's was determined by methodological issues. It was thought that the EKB model would be simpler and easier to study as is thought that the process of choosing restaurants outside SC's is more complex. Hence the scope of studies should be amplified. The process of choosing a restaurant located outside SC ought to be studied since the majority of restaurants in Portugal are located outside SC.

Week-ends should also be studied because consumer process is allegedly different. At the present time week-ends represent one of the biggest loosing meal periods when comparing sales with previous occasions.

Social class cluster analysis should be performed to determine if it is possible to group costumers and detect common behaviours that could be used to sharpen business strategies.

As a final remark, additional research should be conducted to evaluate the effects of the present economic situation on the EKB model of choosing a restaurant. Two main dimensions should be looked at: Comparison with past periods of abundance and forecasting on what type of actual behaviours will prevail when economics improve.

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7. Appendixes

7.1 Appendix 1 - Survey

Survey – Consumer process – Restaurant usage inside a shopping centre

Please fill in this survey developed for my Master degree in Food Innovation by *Universidade Católica Portuguesa* which intends to study the process by which a consumer chooses a restaurant inside a shopping centre for different moments throughout the day.

All answers are anonymous and data will only be used for academic purposes.

Thank you very much for your collaboration.

Daniel Azevedo

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*Mandatory

Consumer habits – Have you used any restaurant (own room or counter) located inside a shopping centre in the past 30 days?

- ◉ No
- ○ Yes (Lunch and dinner)
- ○ Yes (Just lunch)
- ○ Yes (Just dinner)

Lunch - weekdays

Please answer the following questions as if having lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre. Please consider all types of shops where you normally have your main meals – Lunch and dinner regardless the type of restaurant – own facilities or food counter on the food court.

AS1* Feel the need to have lunch during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre because:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Has the need to fulfil a physiological need (hunger)	○	○	○	○	○
Wants to socialize with friends	○	○	○	○	○
Wants to socialize with co-workers	○	○	○	○	○

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Wants to socialize with family	☐	☐	☐	☐	☐
Wants a change in scenery	☐	☐	☐	☐	☐
Does not want to cook	☐	☐	☐	☐	☐
Does not have time to cook	☐	☐	☐	☐	☐
Wants to try new flavours	☐	☐	☐	☐	☐
Wants to see and be seen	☐	☐	☐	☐	☐
Wants to run some errands in the shopping	☐	☐	☐	☐	☐

AS2*How often do you use the following sources of information while choosing a restaurant to have lunch during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Previous personal experiences?	☐	☐	☐	☐	☐
Advice form family/friends	☐	☐	☐	☐	☐
Blogs (written by consumers, not professionals)?	☐	☐	☐	☐	☐
Specialized magazines?	☐	☐	☐	☐	☐
Specialized internet portals?	☐	☐	☐	☐	☐
Adds (TV, radio, media, out-door,...)?	☐	☐	☐	☐	☐
Information available at the	☐	☐	☐	☐	☐

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
restaurant (New products, promotions, menus, prices,…)?					

AS3*Do the following characteristics influence you when choosing a restaurant to have lunch during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Name/band	☐	☐	☐	☐	☐
Price	☐	☐	☐	☐	☐
Shopping centre location	☐	☐	☐	☐	☐
Nutritional value	☐	☐	☐	☐	☐
Variety	☐	☐	☐	☐	☐
Decor	☐	☐	☐	☐	☐
Products for children (kid's menu, playground,…)	☐	☐	☐	☐	☐
Type of food (Pizza, sandwiches, Indian,…)	☐	☐	☐	☐	☐
Promotions inside the restaurant	☐	☐	☐	☐	☐

AS4*How much do the following characteristics positively influence you when choosing a restaurant to have lunch during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Crowded restaurant	☐	☐	☐	☐	☐
Friendly staff	☐	☐	☐	☐	☐

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Flavour	☐	☐	☐	☐	☐
Cleanliness and hygiene	☐	☐	☐	☐	☐
Speed and efficiency	☐	☐	☐	☐	☐
Quality consistence	☐	☐	☐	☐	☐
Comfort	☐	☐	☐	☐	☐
Portion size	☐	☐	☐	☐	☐

AS5*In your week day lunch (Monday to Friday except holidays) in a restaurant located inside a shopping centre how often do you:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Go straight to the pre-chosen restaurant?	☐	☐	☐	☐	☐
Go for a stroll to help chose the restaurant?	☐	☐	☐	☐	☐
Change your mind due to promotions?	☐	☐	☐	☐	☐
Change your mind due to someone in your group?	☐	☐	☐	☐	☐

AS6* In your week day lunch (Monday to Friday except holidays) in a restaurant located inside a shopping centre how many different restaurants (brands) have you had your meals in the past 30 days. (Please give a number)

AS7* In the past 30 days how many times did you have lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre? (Please give a number)

AS8* Normally you have lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre with?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Nobody (alone)	☐	☐	☐	☐	☐
With friends	☐	☐	☐	☐	☐
With co-workers	☐	☐	☐	☐	☐
With family (with children)	☐	☐	☐	☐	☐
With family (without children)	☐	☐	☐	☐	☐

AS9* Your lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre is:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
A complete meal	☐	☐	☐	☐	☐
A light meal (can include soup or salad)	☐	☐	☐	☐	☐

AS10* Your lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre happens in:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Own restaurant facilities	☐	☐	☐	☐	☐
On the food court	☐	☐	☐	☐	☐

AS11*On average how long does your lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre take: (in minutes) ☐

AS12*On average how much money do you spend on your lunch on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre: (please give a number) ☐

Consumer habits (cont.)*Did you also use a restaurant (own facilities or food court) during dinner time?

☐ Yes

☐ No

Dinner – Week days

Please answer the following questions as if having dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre. Please consider all types of shops where you normally have your main meals – Lunch and dinner regardless the type of restaurant – own facilities or food counter on the food court.

JS1* Feel the need to have lunch during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre because::

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Has the need to fulfil a physiological need (hunger)	☐	☐	☐	☐	☐
Wants to socialize with friends	☐	☐	☐	☐	☐
Wants to socialize with co-workers	☐	☐	☐	☐	☐
Wants to socialize with family	☐	☐	☐	☐	☐
Wants a change in scenery	☐	☐	☐	☐	☐
Does not want to cook	☐	☐	☐	☐	☐
Does not have time to cook	☐	☐	☐	☐	☐
Wants to try new flavours	☐	☐	☐	☐	☐
Wants to see and be seen	☐	☐	☐	☐	☐
Wants to run some errands in the shopping	☐	☐	☐	☐	☐

JS2* How often do you use the following sources of information while choosing a restaurant to have dinner during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Previous personal experiences?	☐	☐	☐	☐	☐
Advice form family/friends	☐	☐	☐	☐	☐
Blogs (written by consumers, not professionals)?	☐	☐	☐	☐	☐
Specialized magazines?	☐	☐	☐	☐	☐
Specialized internet portals?	☐	☐	☐	☐	☐
Adds (TV, radio, media, out-door,...)?	☐	☐	☐	☐	☐
Information available at the restaurant (New products, promotions, menus, prices,…)?	☐	☐	☐	☐	☐

JS3* Do the following characteristics influence you when choosing a restaurant to have dinner during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Name/band	☐	☐	☐	☐	☐
Price	☐	☐	☐	☐	☐
Shopping centre location	☐	☐	☐	☐	☐
Nutritional value	☐	☐	☐	☐	☐
Variety	☐	☐	☐	☐	☐

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Decor	☐	☐	☐	☐	☐
Products for children (kid's menu, playground,…)	☐	☐	☐	☐	☐
Type of food (Pizza, sandwiches, Indian,…)	☐	☐	☐	☐	☐
Promotions inside the restaurant	☐	☐	☐	☐	☐

JS4* How much do the following characteristics positively influence you when choosing a restaurant to have dinner during the week (Monday to Friday except holidays) in a restaurant located inside a shopping centre?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Crowded restaurant	☐	☐	☐	☐	☐
Friendly staff	☐	☐	☐	☐	☐
Flavour	☐	☐	☐	☐	☐
Cleanliness and hygiene	☐	☐	☐	☐	☐
Speed and efficiency	☐	☐	☐	☐	☐
Quality consistence	☐	☐	☐	☐	☐
Comfort	☐	☐	☐	☐	☐
Portion size	☐	☐	☐	☐	☐

JS5* In your week day dinner (Monday to Friday except holidays) in a restaurant located inside a shopping centre how often do you:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Go straight to the pre-chosen restaurant?	☐	☐	☐	☐	☐
Go for a stroll to help chose the restaurant?	☐	☐	☐	☐	☐
Change your mind due to promotions?	☐	☐	☐	☐	☐
Change your mind due to someone in your group?	☐	☐	☐	☐	☐

JS6*In your week day dinner (Monday to Friday except holidays) in a restaurant located inside a shopping centre how many different restaurants (brands) have you had your meals in the past 30 days. (Please give a number)

JS7* In the past 30 days how many times did you have dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre? (Please give a number)

JS8* Normally you have dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre with?

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Nobody (alone)	☐	☐	☐	☐	☐
With friends	☐	☐	☐	☐	☐
With co-workers	☐	☐	☐	☐	☐
With family (with children)	☐	☐	☐	☐	☐
With family (without children)	☐	☐	☐	☐	☐

JS9* Your dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre is:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
A complete meal	☐	☐	☐	☐	☐
A light meal (can include soup or salad)	☐	☐	☐	☐	☐

JS10* Your dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre happens in:

	Never/hardly ever	Rarely	Sometimes	Often	Very often/always
Own restaurant facilities	☐	☐	☐	☐	☐
On the food court	☐	☐	☐	☐	☐

JS11* On average how long does your dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre take: (in minutes) _____

JS12* On average how much money do you spend on your dinner on a week day (Monday to Friday except holidays) in a restaurant located inside a shopping centre: (please give a number) _____

Personal data

Please give us some personal information to help interpret all the answers given. All answers are anonymous and confidential and will only be uses for academic purposes. In no circumstances will the information be divulged to a third party for commercial purposes.

DP1*Age (31st December 2011) – Please give a number _____

DP2*Gender:

☐ Male

☐ Female

DP3*Education – Highest degree in the 31st of December 2011

☐ Elementary school

☐ Prep school

☐ Junior year

- ☐ Secondary school
- ☐ Bachelor's degree
- ☐ College degree
- ☐ Post grad / master's degree
- ◉ PhD

DP4*Main activity – 31st of December 2011

- ☐ Student
- ☐ Dependent worker
- ☐ Independent worker
- ☐ Unemployed
- ☐ Pensioner
- ☐ Entrepreneur
- ☐ On sick leave

DP5*With you, what is the size of your household? -31st of December 2011 – Please give a number ☐

DP6*From everyone in your household, how many are children under the age of sixteen? - 31st of December 2011 – Please give a number ☐

DP7*How would you describe your main place of residence?

- ☐ Urban
- ☐ Rural
- ☐ Mixed – Mixture between urban and rural surroundings

DP8*How would you describe your cooking skills?

- ☐ Does not know how to cook
- ☐ Very basic skills
- ☐ Intermediate skills
- ☐ Advanced skills

DP9*How important are for you the following issues?

	Irrelevant	Slightly important	Important	Very important	Essential
Genetically modified foods	☐	☐	☐	☐	☐
Animal testing	☐	☐	☐	☐	☐
Exercise	☐	☐	☐	☐	☐
Vegetarianism	☐	☐	☐	☐	☐
Recycling	☐	☐	☐	☐	☐
Local farming	☐	☐	☐	☐	☐
Sustainable development	☐	☐	☐	☐	☐

DP10*Do you have the biggest income of the household?

- ☐ Yes
- ☐ No

If you do not have the biggest income of the household, please answer the following questions having in mind the person with the biggest income of the household.

DP11*Education – Highest degree in the 31st of December 2011

- ☐ Elementary school
- ☐ Prep school
- ☐ Junior year
- ☐ Secondary school
- ☐ Bachelor's degree
- ☐ College degree
- ☐ Post-grad / master's degree
- ☐ PhD

DP12* Main activity – 31st of December 2011

- ☐ Student
- ☐ Dependent worker
- ☐ Independent worker
- ☐ Unemployed
- ☐ Pensioner
- ☐ Entrepreneur
- ☐ On sick leave

7.2 Appendix 2 - Variable transformation

Table 7.1: Variable transformation for chi square testing

Variable	Transformation
Age – Continuous	Aggregation in age ranges
Gender	No transformation
Size of the house hold – Continuous	Aggregation in size ranges
Amount of children – Continuous	Aggregation in size ranges
Location of the household	No transformation
Cooking skills	No transformation
Genetically modified foods	No transformation
Animal testing	No transformation
Exercise	No transformation
Vegetarianism	No transformation
Recycling	Aggregation in ranges
Local production	No transformation
Sustainable development	Aggregation in ranges
Social classes	No transformation

Table 7.2: Dummy variables - Gender

Class	Dummy1
Male	1
Female	0

Table 7.3: Dummy variables – Place of residence

Class	Dummy1	Dummy2
Urban	0	0
Country side	1	0
Mixed surroundings	0	1

Table 7.4: Dummy variables – Social class

Class	Dummy1	Dummy2	Dummy3	Dummy4	Dummy5
A	0	0	0	0	0
B	1	0	0	0	0
C1	0	1	0	0	0
C2	0	0	1	0	0
D	0	0	0	1	0
E	0	0	0	0	1

7.3 Appendix 3 - Results

Table 7.5: Consumer patters for meals in shopping centres

	Frequency	(%)	Cumulative (%)
No shopping experience in the last 30 days	170	30,8	30,8
Lunch experience in the last 30 days	167	30,3	61,1
Dinner experience in the last 30 days	115	20,8	81,9
Lunch and dinner experience	100	18,1	100,0
Total	552	100,0	

Table 7.6: Gender

	Frequency	(%)	Cumulative (%)
Male	176	31,9	31,9
Female	376	68,1	100,0
Total	552	100,0	

Table 7.7: Age

	Minimum	Maximum	Mean	Std. Deviation
Age	19	70	36,84	10,979

Table 7.8: Education

	Frequency	(%)	Cumulative (%)
Prep school	3	,5	,5
Junior year	15	2,7	3,3
Secondary school	80	14,5	17,8
Bachelor's degree	36	6,5	24,3
College degree	217	39,3	63,6
Post-grad / master's degree	168	30,4	94,0
PhD	33	6,0	100,0
Total	552	100,0	

Table 7.9: Main activity

	Frequency	(%)	Cumulative (%)
Student	69	12,5	12,5
Dependent worker	345	62,5	75,0
Independent worker	57	10,3	85,3
Unemployed	25	4,5	89,9
Pensioner	16	2,9	92,8
Entrepreneur	39	7,1	99,8
On sick leave	1	,2	100,0
Total	552	100,0	

Table 7.10: Household description

	Minimum	Maximum	Mean	Std. Deviation
Size of household	1	8	2,94	1,230
Number of children (under 16)	0	5	,80	1,012

Table 7.11: Social class

	Frequency	(%)	Cumulative (%)
A	49	8,9	9,0
B	126	22,8	32,2
C1	160	29,0	61,6
C2	21	3,8	65,4
D	146	26,4	92,3
E	42	7,6	100,0
Total	544	98,6	
Missing(*)	8	1,4	

(*) – Values do not meet ESOMAR criteria

Table 7.12: Household size

	Frequency	(%)	Cumulative (%)
1	77	13,9	13,9
2	131	23,7	37,7
3	152	27,5	65,2
4	141	25,5	90,8
5	44	8,0	98,7
6	6	1,1	99,8
8	1	,2	100,0

Table 7.13: Household location

	Frequency	(%)	Cumulative (%)
Urban	359	65,0	65,0
Country side	31	5,6	70,7
Mixed	162	29,3	100,0

Table 7.14: Children under 16

	Frequency	(%)	Cumulative (%)
0	296	53,6	53,6
1	115	20,8	74,5
2	105	19,0	93,5
3	29	5,3	98,7
4	6	1,1	99,8
5	1	,2	100,0

Table 7.15: Cooking Skills

	Frequency	(%)	Cumulative (%)
Does not know how to cook	17	3,1	3,1
Basic cooking skills	155	28,1	31,2
Intermediate cooking skills	254	46,0	77,2
Advanced cooking skills	126	22,8	100,0
Total	552	100,0	

Table 7.16: Users vs. non-users - Gender

		users v non users		Total
		Non-users	Users	
Gender	Male	56	120	176
	Female	114	262	376
Total		170	382	552

Table 7.17: Users vs. non-users - Age distribution

		users v non users		Total
		Non-users	Users	
Age Range	[15-25[	16	61	77
	[25-30[	12	46	58
	[30-35[	35	74	109
	[35-40[	30	89	119
	[40-45[	23	53	76
	[45-50[	17	29	46
	[50-55[	10	10	20
	[55-60[	9	8	17
	[60-65[	11	8	19
	[65-75[	7	4	11
Total		170	382	552

Table 7.18: Users vs. non-users - Education

		users v non users		Total
		Non-users	Users	
Education (*)	Until prep school	15	3	18
	Secondary school	31	49	80
	Graduate studies	67	186	253
	Post graduate studies	57	144	201
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

Table 7.19: Users vs. non-users - Main activity:

		users v non users		
		Non-users	Users	Total
Main activity (*)	Student	13	56	69
	Dependent worker	104	241	345
	Independent worker	19	38	57
	Entrepreneur	15	24	39
	On welfare	19	23	42
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

Table 7.20: Users vs. non-users - Household size

		users v non users		
		Non-users	Users	Total
Household size (*)	1,00	23	54	77
	2,00	39	92	131
	3,00	42	110	152
	4,00	47	94	141
	5,00	18	26	44
	>= 6	1	6	7
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

Table 7.21: Users vs. non-users - Children <16

		users v non users		
		Non-users	Users	Total
Children <16 range (*)	No children	90	206	296
	1,00	39	76	115
	2,00	30	75	105
	>=3	11	25	36
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

Table 7.22: Users vs. non-users - Place of residence

		users v non users		Total
		Non-users	Users	
Place of residence	Urban	114	245	359
	Country side	10	21	31
	Mixed	46	116	162
Total		170	382	552

Table 7.23: Users vs. non-users - Social classes

		users v non users		Total
		Non-users	Users	
Social classes(*)	A	15	34	49
	B	28	98	126
	C1	46	114	160
	C2	9	12	21
	D	50	96	146
	E	21	21	42
Total		169	375	544

(*)- According to ESOMAR standards (Higgs 2002)

Table 7.24: Users vs. non-users - Cooking skills

		users v non users		Total
		Non-users	Users	
Cooking skills	Does not know how to cook	8	9	17
	Basic cooking skills	47	108	155
	Intermediate cooking skills	85	169	254
	Advanced cooking skills	30	96	126
Total		170	382	552

Table 7.25: Users vs. non-users - Genetically modified foods

	users v non users		
	Non-users	Users	Total
Irrelevant	17	17	34
Slightly important	34	71	105
Important	57	151	208
Very important	49	111	160
Essential	13	32	45
Total	170	382	552

Table 7.26: Users vs. non-users - Animal testing

	users v non users		
	Non-users	Users	Total
Irrelevant	11	18	29
Slightly important	27	62	89
Important	64	140	204
Very important	49	114	163
Essential	19	48	67
Total	170	382	552

Table 7.27: Users vs. non-users - Exercise

	users v non users		
	Non-users	Users	Total
Irrelevant	0	1	1
Slightly important	6	11	17
Important	34	85	119
Very important	55	144	199
Essential	75	141	216
Total	170	382	552

Table 7.28: Users vs. non-users - Vegetarianism

	users v non users		
	Non-users	Users	Total
Irrelevant	45	81	126
Slightly important	77	165	242
Important	42	95	137
Very important	4	35	39
Essential	2	6	8
	170	382	552

Table 7.29: Users vs. non-users - Recycling

		users v non users		
		Non-users	Users	Total
Recycle(*)	Not important	8	10	18
	Important	36	91	127
	Very important	53	131	184
	Essential	73	150	223
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

Table 7.30: Users vs. non-users - Local farming

	users v non users		
	Non-users	Users	Total
Irrelevant	3	2	5
Slightly important	4	37	41
Important	45	92	137
Very important	74	156	230
Essential	44	95	139
Total	170	382	552

Table 7.31: Users vs. non-users - Sustainable development

		users v non users		
		Non-users	Users	Total
Sustainable development(*)	Not important	3	10	13
	Important	29	73	102
	Very important	71	152	223
	Essential	67	147	214
Total		170	382	552

(*) - Responses needed to be grouped to comply with the chi square standards

7.4 Appendix 4 - Factorial analysis – SPSS V.17 Outputs

Table 7.32: KMO Values - Lunch

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,749
Bartlett's Test of Sphericity	Approx. Chi-Square	4712,036
	df	1081
	Sig.	,000

Table 7.33: KMO Values - Dinner

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,752
Bartlett's Test of Sphericity	Approx. Chi-Square	4489,876
	df	1081
	Sig.	,000

Table 7.34: Rotated coefficient matrix – Lunch

	1	2	3	4	5	6	7	8	9	10	11	12	13
Physiological needs - Lunch													
Socialize with friends - Lunch			0,789										
Socialize with co-workers - Lunch			0,742										
Socialize with family - Lunch								0,585					
Change from every day environment - Lunch													
Does not want to cook - Lunch						0,791							
Does not have time to cook - Lunch						0,774							
Experiment new flavours - Lunch						0,504							
To see and be seen - Lunch													
Run some errands in the SC- Lunch									0,564				
Previous personal experiences - Lunch													
Advice from friends and/or relatives - Lunch													
Blogs (written by consumers not professionals) - Lunch		0,801											
Specialized magazines - Lunch		0,823											
Food and restaurant Internet portals - Lunch		0,837											
Adds (TV, radio, press, others) - Lunch		0,635											
Information at selling point (new items, promotions,...) - Lunch												0,523	
Name and/or brand - Lunch													
Price - Lunch				0,659									
Location of the SC - Lunch									0,673				
Nutritional value - Lunch													
Variety of choice - Lunch													
Decor - Lunch					0,52								
Products for children (menus, playground,...) - Lunch											0,73		
Type of food (Pizza, sandwiches, Indian food, hamburgers...) - Lunch												0,552	

Promotions available - Lunch				0,815									
Crowded restaurant - Lunch													
Friendliness of staff - Lunch	0,565												
Flavour - Lunch	0,72												
Cleanliness and hygiene - Lunch	0,834												
Speed and efficiency - Lunch	0,696												
Consistent quality - Lunch	0,807												
Comfort - Lunch	0,503												
Portion size - Lunch													
Straight to the pre chosen restaurant - Lunch										0,773			
A stroll around the food court - Lunch										-0,628			
Promotions result in changing plans - Lunch				0,827									
Other members of group influence decision - Lunch													0,647
Alone - Lunch			-0,574										
Friends - Lunch			0,663										
Co-workers - Lunch			0,584					-0,512					
Family with children - Lunch											0,576		
Family without children - Lunch								0,754					
Full meal - Lunch							0,843						
Light meal (including soup or salad) - Lunch							-0,815						
Own restaurant facilities - Lunch					0,732								
Food court - Lunch					-0,776								

Table 7.35: Rotated coefficient matrix – Dinner

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Physiological needs - Dinner							0,583							
Socialize with friends - Dinner		0,764												
Socialize with co-workers - Dinner		0,79												
Socialize with family - Dinner														
Change from every day environment - Dinner		0,554												
Does not want to cook - Dinner							0,776							
Does not have time to cook - Dinner							0,792							
Experiment new flavours – Dinner		0,548												
To see and be seen - Dinner														
Run some errands in the SC - Dinner										0,616				
Previous personal experiences - Dinner											0,791			
Advice from friends and/or relatives - Dinner														
Blogs (written by consumers) - Dinner			0,821											
Specialized magazines - Dinner			0,861											
Food and restaurant Internet portals - Dinner			0,852											
Adds (TV, radio, press, others) - Dinner			0,542											
Information at selling point (new items, promotions,...) - Dinner				0,624										
Name and/or brand - Dinner														
Price - Dinner				0,545										
Location of the SC - Dinner													0,59	
Nutritional value - Dinner								0,735						
Variety of choice - Dinner								0,727						
Decor - Dinner						0,568								
Products for children (menus, playground,...) - Dinner									0,739					
Type of food (Pizza, sandwiches, Indian food, hamburgers...) - Dinner												0,543		

Promotions available - Dinner				0,784										
Crowded restaurant - Dinner						0,643								
Friendliness of staff - Dinner						0,618								
Flavour - Dinner	0,769													
Cleanliness and hygiene - Dinner	0,796													
Speed and efficiency - Dinner	0,696													
Consistent quality - Dinner	0,811													
Comfort - Dinner						0,536								
Portion size - Dinner				0,533										
Straight to the pre chosen restaurant - Dinner										-0,591				
A stroll around the food court - Dinner										0,659				
Promotions result in changing plans - Dinner				0,79										
Other members of group influence decision - Dinner													0,747	
Alone - Dinner														0,771
Friends - Dinner		0,521												
Co-workers - Dinner		0,655												
Family with children - Dinner									0,83					
Family without children - Dinner												0,682		
Full meal - Dinner					-0,638									
Light meal (including soup or salad) - Dinner					0,731									
Own restaurant facilities - Dinner					-0,748									
Food court - Dinner					0,745									

7.5 Appendix 5 – Linear regressions – SPSS V.17 Outputs

Table 7.36: Model summary – Money spent at lunch time:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
19	,414[s]	,171	,124	202,77604	2.014

Table 7.37: ANOVA – Money spent at lunch time

Model		Sum of Squares	df	Mean Square	F	Sig.
19	Regression	2098142,114	14	149867,294	3,645	,000[s]
	Residual	1,016E7	247	41118,124		
	Total	1,225E7	261			

Table 7.38: Coefficients – Money spent at lunch time:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
19	(Constant)	79,933	113,780		,703	,483		
	Social class dummy 1	81,648	31,580	,168	2,585	,010	,797	1,255
	Social class dummy 2	48,883	31,030	,103	1,575	,116	,785	1,273
	Cooking skills	-19,602	16,765	-,072	-1,169	,243	,879	1,138
	Genetically modified foods	-33,159	15,521	-,151	-2,136	,034	,670	1,492
	Animal testing	27,871	15,367	,132	1,814	,071	,631	1,584
	Exercise	-19,937	16,631	-,077	-1,199	,232	,808	1,237
	Vegetarianism	-42,051	14,464	-,190	-2,907	,004	,788	1,269
	Sustainable development	33,452	16,789	,129	1,993	,047	,807	1,240
	Socialize with friends - Lunch	27,851	11,722	,148	2,376	,018	,864	1,157
	Doe s not want to cook - Lunch	17,387	10,061	,108	1,728	,085	,864	1,158
	Food and restaurant Internet portals - Lunch	-21,977	17,100	-,081	-1,285	,200	,850	1,177
	Straight to the pre chosen restaurant - Lunch	12,035	12,173	,058	,989	,324	,966	1,036
	Family without children - Lunch	-14,494	10,927	-,081	-1,326	,186	,896	1,117
	Full meal - Lunch	30,184	11,035	,164	2,735	,007	,936	1,069

Table 7.39: Model summary –Time spent at lunch time:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
20	,391[t]	,153	,108	53,99599	1.982

Table 7.40: ANOVA – Time spent at lunch time

Model		Sum of Squares	df	Mean Square	F	Sig.
20	Regression	130109,927	13	10008,456	3,433	,000[t]
	Residual	723060,657	248	2915,567		
	Total	853170,584	261			

Table 7.41: Coefficients – Time spent at lunch time:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
20	(Constant)	12,360	28,784		,429	,668		
	Age	,598	,359	,107	1,664	,097	,835	1,198
	Social class dummy 2	-14,023	8,039	-,112	-1,744	,082	,830	1,205
	Social class dummy 4	-15,943	8,685	-,120	-1,836	,068	,799	1,251
	Genetically modified foods	-5,868	4,116	-,101	-1,426	,155	,676	1,479
	Animal testing	5,521	3,995	,099	1,382	,168	,662	1,510
	Vegetarianism	-14,438	3,800	-,247	-3,800	,000	,810	1,235
	Local farming	4,957	3,895	,083	1,273	,204	,808	1,238
	Number of children (under 16)	-3,243	3,126	-,062	-1,037	,301	,943	1,060
	Socialize with friends - Lunch	6,688	3,263	,135	2,050	,041	,791	1,265
	Does not want to cook - Lunch	5,923	2,641	,139	2,243	,026	,889	1,125
	Promotions result in changing plans - Lunch	-5,476	3,903	-,085	-1,403	,162	,928	1,078
	Family without children - Lunch	-3,567	2,882	-,076	-1,238	,217	,913	1,095
	Full meal - Lunch	7,562	2,913	,156	2,596	,010	,952	1,050

Table 7.42: Model summary – Money spent at dinner time:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
15	,574[o]	,330	,263	36,96311	2,088

Table 7.43: ANOVA – Money spent at dinner time

Model		Sum of Squares	df	Mean Square	F	Sig.
15	Regression	128267,332	19	6750,912	4,941	,000[o]
	Residual	260957,796	191	1366,271		
	Total	389225,128	210			

Table 7.44: Coefficients – Money spent at dinner time:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
15	(Constant)	-92,780	28,984		-3,201	,002		
	Age	,599	,336	,133	1,782	,076	,634	1,577
	Social class dummy 1	-7,699	6,924	-,074	-1,112	,268	,792	1,262
	Social class dummy 4	-12,243	6,987	-,127	-1,752	,081	,665	1,503
	Social class dummy 5	-17,120	10,756	-,102	-1,592	,113	,848	1,180
	Genetically modified foods	5,600	3,296	,121	1,699	,091	,695	1,439
	Animal testing	-9,489	3,252	-,214	-2,918	,004	,653	1,530
	Vegetarianism	4,303	3,316	,086	1,297	,196	,791	1,264
	Local farming	4,036	3,824	,086	1,056	,292	,532	1,879
	Sustainable development	5,334	4,453	,096	1,198	,232	,548	1,826
	Socialize with co-workers - Dinner	8,177	2,896	,182	2,823	,005	,848	1,179
	Does not have time to cook - Dinner	4,141	2,340	,113	1,769	,078	,853	1,172
	Nutritional value - Dinner	-9,558	2,991	-,222	-3,196	,002	,725	1,380
	Consistent quality - Dinner	7,396	4,396	,116	1,682	,094	,736	1,358
	A stroll around the food court - Dinner	2,966	2,591	,074	1,145	,254	,849	1,177
	Other members (…) influence decision	7,118	3,409	,134	2,088	,038	,858	1,166
	Family with children - Dinner	3,031	2,118	,109	1,431	,154	,607	1,646
	Own restaurant facilities - Dinner	12,415	2,299	,346	5,399	,000	,853	1,172
	Size of household	-2,901	2,579	-,079	-1,125	,262	,704	1,420
	Number of children (under 16)	-7,790	3,476	-,167	-2,241	,026	,632	1,583

Table 7.45: Model summary –Time spent at dinner time:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
19	,460[s]	,212	,151	161,03620	2,038

Table 7.46: ANOVA – Time spent at dinner time

Model		Sum of Squares	df	Mean Square	F	Sig.
19	Regression	1360641,569	15	90709,438	3,498	,000[s]
	Residual	5056868,100	195	25932,657		
	Total	6417509,668	210			

Table 7.47: Coefficients – Time spent at dinner time:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
19	(Constant)	59,575	94,721		,629	,530		
	Gender Dummy 1	-32,383	26,982	-,086	-1,200	,232	,785	1,273
	Social class dummy 4	-34,837	26,460	-,089	-1,317	,190	,881	1,135
	Social class dummy 5	-51,622	46,146	-,076	-1,119	,265	,874	1,144
	Animal testing	-18,019	12,545	-,100	-1,436	,152	,833	1,200
	Recycling	-30,374	15,393	-,151	-1,973	,050	,693	1,444
	Local farming	39,619	14,671	,207	2,700	,008	,686	1,458
	Socialize with co-workers - Dinner	13,477	12,263	,074	1,099	,273	,898	1,114
	Does not have time to cook - Dinner	22,439	10,017	,151	2,240	,026	,884	1,131
	Previous personal experiences - Dinner	19,570	10,951	,122	1,787	,075	,869	1,151
	Nutritional value - Dinner	-27,032	12,241	-,155	-2,208	,028	,821	1,218
	Other members of group influence decision - Dinner	27,495	14,451	,127	1,903	,059	,906	1,104
	Alone - Dinner	-12,554	11,296	-,077	-1,111	,268	,848	1,180
	Family without children - Dinner	-23,430	8,447	-,188	-2,774	,006	,878	1,139
	Own restaurant facilities - Dinner	38,002	10,145	,261	3,746	,000	,832	1,202
	Number of children (under 16)	-16,453	12,836	-,087	-1,282	,201	,879	1,137

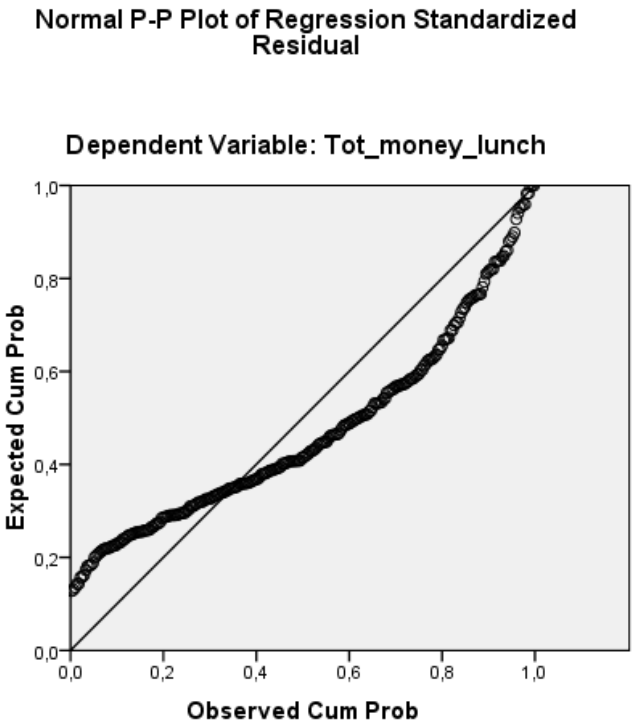

Figure 7.1: Normal probability plot – Total money spent at lunch time

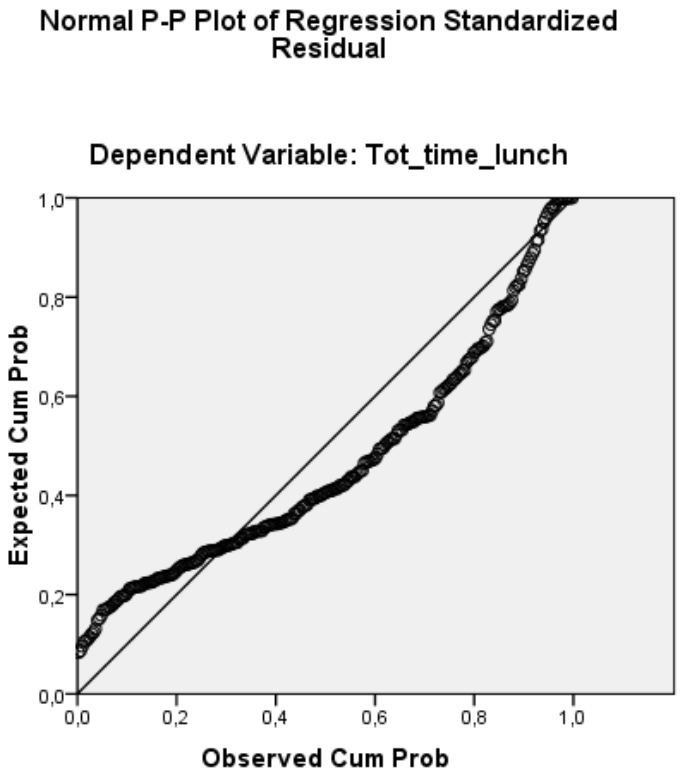

Figure 7.2: Normal probability plot – Total time spent at lunch time

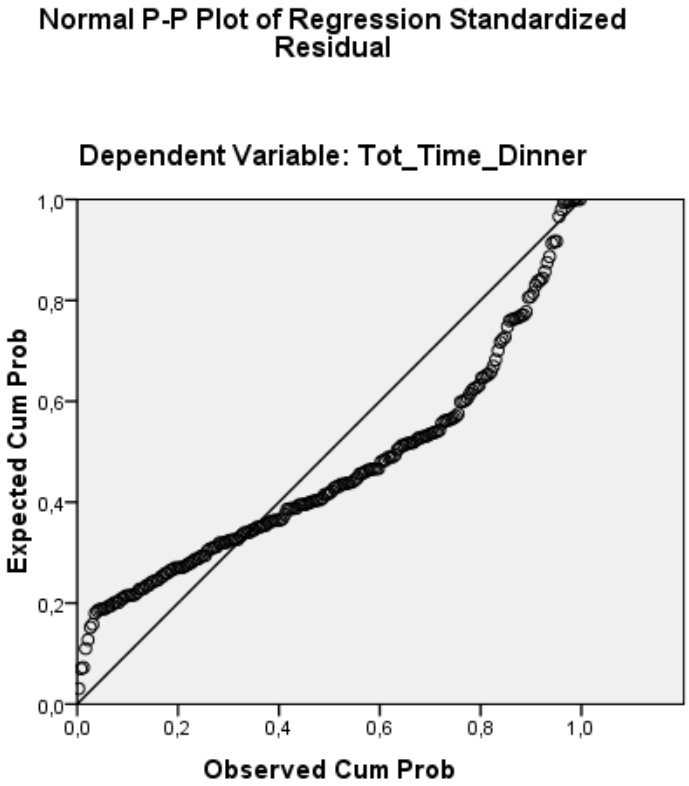

Figure 7.3: Normal probability plot – Total time spent at dinner time

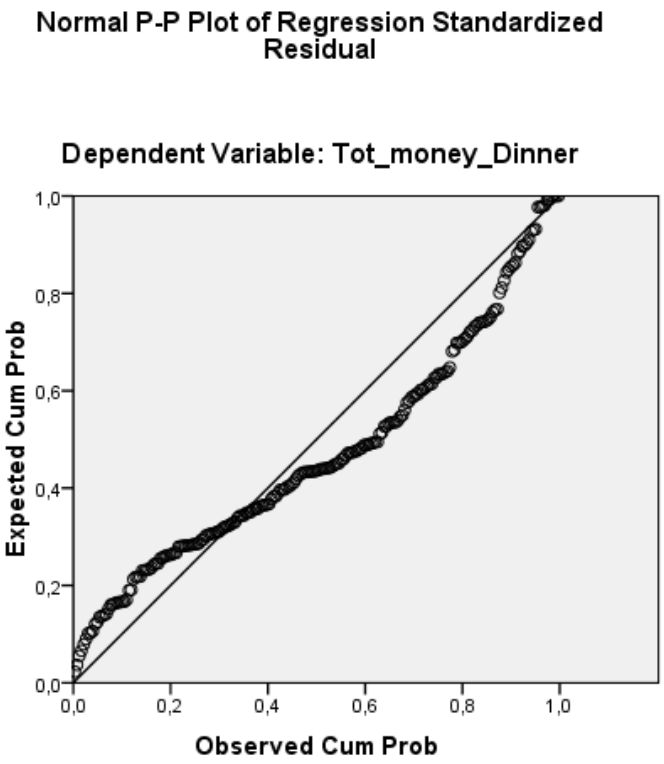

Figure 7.4: Normal probability plot – Total money spent at dinner time

8. Annexes

8.1 ESOMAR grid

Exhibit 1 - ESOMAR Social Class

M.I.E'S TERMINAL EDUCATION AGE	M.I.E OCCUPATION						
	E 1+2	E 3+5	E 4,6+7	E 12	E 8+9	E 11+14	E 15
21+	A	A	B	B	C1	C1	D
17-20	A	B	C1	C1	C2	C2	D
15-16	B	C1	C2	D	D	D	E1
14	C1	D	D	E1	E1	E1	E3
13	D	D	D	E3	E2	E2	E3

The definition of each of the M.I.E Occupation categories on which the matrix is based is as follows.
E1: General management, director or top management with responsibility for six employees or more;
E2: Self-employed professional,
E3: Employed professional,
E4: General management, director or top management with responsibility for five employees or less;
E5: General management, director or top management with responsibility for six employees or less;
E6: Middle management, other management with responsibility for five employees or less;
E7: Business proprietor, owner (full/partner) of company OR owner of a shop, craftsman, and other self employed
person with responsibility for six employees or more;
E8: Employed position, working mainly at desk;
E9: Business proprietor, owner of company or owner of a shop, craftsman, and other self employed person with responsibility for five employees or less;
E10: Student;
E11: Employed non-manual position, not at a desk but travelling or in a service job;
E12: Farmer & Fisherman;
E13: Responsible for ordinary shopping and looking after the home, housewife;
E14: Supervisor & skilled manual worker;
E15: Other (unskilled) manual worker, servant;
E16: Retired or unable to work through illness, unemployment or temporarily not working.

(As in (Higgs 2002))