Consumer Motivations & Cognitive Structures behind Quality Food Purchasing*

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Abstract: *The present chapter presents a two-stage study which aims to depict the motivations and cognitive structures of quality food consumers through the use of the Means–End Chain (MEC) approach and laddering technique. Quality food entails both organic and local protected/traditional products.*
The first stage of the research involved a meta-analysis of published journal articles regarding the purported motivations and cognitive structures of consumers when purchasing quality food. The results show that the values and motivations identified by the various studies varied greatly, thus a thematic categorization followed in order to produce a useful conceptual framework for the analysis of quality food cognitive structures. In the second stage we validated the proposed conceptual framework through 50 laddering interviews. A discussion, regarding the ability to organize the motivations and cognitive structures of various consumer groups in order to highlight and analyze shifts in consumer behaviour related to quality food, is provided. The results show that the various consumer groups do not differentiate in their basic motivation of purchasing quality foods but in the path they will follow in order to achieve the benefits of consumption.

Keywords: *MEC, laddering, quality food, cognitive structures, Greece*

1. INTRODUCTION

In recent years, consumers have attached increasing importance to food issues such as safety, health, naturalness, pleasure, convenience, information and ethical issues like sustainability and animal friendliness [1]. Moreover, the fact that their confidence in the quality of their food has declined drives them towards demanding higher quality foods [2]. According to Cardello (1995) [3], food quality refers to the "*acceptance of the perceived characteristics (not simply its sensory attributes but also the perception of its safety, convenience, cost, value, etc.) of a product by consumers who are the regular users of the product category or those who comprise the target market*". Moreover, Grunert (2005) [4], suggests that quality has an objective and a subjective dimension, where objective refers to the physical characteristics built into the product and subjective to the quality as perceived by consumers.

Consumers' increased knowledge about links between diet and health, awareness of quality characteristics, and access to information about new production and processing technologies have resulted in a constantly increasing demand for improved quality foods [5]. In particular, they seek quality through the purchasing of products such as organic foods where the use of natural raw materials, welfare-orientated animal husbandry, and environmentally-friendly land use and processing techniques are regarded highly by the purchaser [6, 7]. In addition, consumers are paying growing attention to linking the quality of food products and its territorial origin through the increasing demand of products with the quality signs of Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) [8]. Functional foods are also another example of popular quality products that don't intend to only satisfy hunger but also to link nutrition with health benefits [9-11].

Food choices are among the most frequent human behaviours. Consumers encounter numerous food choices on a daily basis. Although seemingly simple, food choices are by their nature dynamic phenomena determined by many factors and their interactions [12-13]. If we want to understand how consumers infer subjective quality

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from their food choices and their objective product characteristics, we have to understand how they link these product characteristics to self-relevant consequences of this nature [14]. The literature highlights the importance of examining the underlying psycho graphic factors, including beliefs and values, related to this increased consumer demand for quality foods such as organic foods, PDO/ PGI foods and functional foods [10, 15-16].

Means-End chain approach has been widely applied in food related research for uncovering the motives behind consumers' food choices [5, 17-21]. Consumers do not demand or avoid product attributes for their own sake, but do so to the extent that they expect the attribute to lead to one or more desirable or undesirable consequences. These consequences contribute to the attainment of personal values or desired end states [17]. A Means-End chain is a model that seeks to explain how a product or service selection facilitates the achievement of consumers' designed end-states and represents consumer's motivational structures for performing a specific behaviour [5]. Means-End chains are obtained through a qualitative research method called Laddering, referring to an in-depth, one-on-one interviewing technique used to develop an understanding of how consumers translate the attributes of products into meaningful associations by using probing questions based on alternating versions of the "why is it important to you?" question[22]. Laddering determine sets of linkages between key perceptual elements across the range of attributes, consequences and values [1].

The literature reveals a number of research attempts that implement Means-End chain analysis in examining consumer perceptions about quality foods. Krystallis and Ness (2003)[23] attempted to identify the psychologically-based, personal values-related motives of high-quality food purchasing in Greece by using Means End-chain analysis and concluded that "high quality," "healthiness/safety," "tastiness," "convenience" and "ethical consciousness" were the main motivational areas of high income and educational level consumers behind the selection of quality foods. Consumers' purchasing decisions regarding quality foods, is rather complex and their motives may vary between product categories [24]. Makatouni (2002) [25] indicates that factors regarding the health of a subject or its family are the most important motives in choosing organic food. Values regarding environment and animal welfare are of secondary importance. According to Baker et al. (2004) [26], the values concerned with health, well-being and the enjoyment of life dominate consumers' motivation for the purchasing of organic products. However, the product attributes sought in order to achieve these values differ between different cultures. In addition, Zanoli and Naspetti (2002) support that all consumers associate organic products with health at different levels of abstraction and want good, tasty and nourishing products, because pleasure and well-being are their most important values[19]. Fotopoulos et al. (2003) [5] give insights to consumer behaviour regarding wine from organic grapes. Healthiness, quality, information, attractiveness and good taste seem to be the five main motivational benefits of wine purchase. Moreover, organic buyers and non-buyers evaluate differently these motives in consumers' cognitive structures and associate wine's organic character with different motives. The Means-End chain method was also used by Jonas and Beckman (1998) [27] in order to highlight the basic motives in the purchasing and consumption of functional foods. Health was the basic motive but was derived from different product attributes between different cultures. Revealing motivation behind functional food purchasing was the main objective of Urala and Lahteenmaki (2003) [28]. They found that familiarity with the product, price, packaging and quality of organoleptic characteristics were perceived as the most important attributes for functional foods. The most important consequences were taste, control of one's health and digestion improvement while health preservation, economy balance, easy life, become a better person and long life were the most important values. According to Morris et al. (2004) [29], functional foods should be pure, branded, tasty and inexpensive in order to achieve quality, body healthiness, trust and pleasure. These are connected with the values of balanced life, long life, family security and self-respect. Health enhancement and health risk prevention accompanied with eating enjoyment and trust were the basic motives for functional food choices in the research of Krystallis et al. (2008)[30]. In addition, differences between cognitive structures of different consumer age groups regarding functional foods were revealed.

1.1. Objectives of the study

From the above it is clear that a variety of motivations and cognitive structures were identified related to the consumption of high quality food. Thus the first objective of this study was:

1. To meta-analyse all the different articles presenting motivations and cognitive structures through the use of Means-End chains regarding the consumption of high quality foods, and identify the possibility of creating a useful categorisation system.

The second aim of the study complimentarily with the first is:

2. To validate the categorisation stemming from the meta-analytic study through the actual conduct of primary research regarding high quality foods.

The third and final aim of the study was:

3. To explore possible differences in the cognitive structures of different homogenous consumer clusters regarding quality foods.

In order to accomplish the first objective as will be described in the relevant section the researchers undertook a detailed analysis of the relevant literature. In order to achieve the second and third aim a Means-End chain research was designed and implemented in two stages. The first stage aims to provide the Means-End chain study with the needed homogenous consumer clusters.

2. META-ANALYSIS

Franke (2001: 186) [31] defines meta-analysis as a "quantitative synthesis of research findings". He elaborates the following definition:

> *"A meta-analytic review combines the findings of studies to assess the magnitude and significance of various measures of effect sizes, such as correlation coefficients, standardized mean differences, measures of variance accounted for, odds ratios, or simply means or proportions."*

He later discusses how meta–analysis can be used as a tool from the researchers in an effort to probe deeper into the relative status of the current and ongoing research in a specific area, in order to indicate the level of the undertaken research, its quality and its quantity, and thus suggest directions for future research and if possible create new theoretical propositions for the furthering of the scientific domain [30].

Indeed usually when one undertakes a meta-analytical task, one goes through tones of literature and tomes of dusted journals in order to gather the needed material for the analysis.

In this study however and opposite to the precautionary words of Franke[31] that a "meta-analytic mindset emphasizes empirically supported generalizations based on as much of the available credible evidence as possible, rather than qualitative interpretations of prior research or haphazard summaries of selected studies" (2001: 196), what we tried to do was to group together the total of Attributes, Consequences, and Values that have been found through the literature in various studies concerning quality food choice. Our purpose in doing that was in order to establish whether the different sets of A-C-Vs can be categorized together, thus providing future researchers with the ability to base their research efforts on a concrete frame of previously elicited attributes, consequences and values.

In this spirit such a meta-analytical effort does not claim to be exhaustive or all inclusive (Arnould and Thompson, 2005) [32]. It is merely a thematic review of laddering studies that in most cases are involved with researching consumer motivation and cognitive schemata around quality foods such as organic[5, 19, 23] , local[33] and functional foods[30] or other types of food products such as biotechnologically produced foods[34], genetically modified foods[35] or culturally bound types of food[36].

The results of the aforementioned effort were the two tables that can be found in the Appendix of this article. Table 1 in the Appendix includes a list of the articles[5, 17, 19-21, 23-30, 33-36, 37-43] we used to draw out the A-C-V elements used in the various means–end chains, while Table 2 contains the categorization that we used for the present study.

Observing Table 1 which contains the various articles we used one can make interesting discoveries as to the journals that are preferred outlets for publication, the subjects that Laddering and Means-End chain analysis

have been used for to analyse food-related research etc. The purpose of such an analysis however escapes the aims of the present study.

In the present study and in this particular section the methodology and rationale of the meta-analysis will be explained and described.

Means-End chain analysis through its operationalisation with the Laddering interviews is supposedly a method to probe into consumer "end-states" (values) and their relevant way of achieving them. Thus one is able to "map" the process (the means) that leads from the initial product choice and the specific product attributes to the desired end, that of eventually satisfying one's values.

Revising all the different Laddering studies one can easily grasp the variability that is observed between the different respondents and their personal and cultural backgrounds and even between the different methods of analysis of the different researchers. The purpose of this meta-analysis was to examine whether it is possible to analyse the basic conceptual categories that underlie the different MEC studies.

After carefully reviewing all the articles chosen for the study separate lists of Attributes, Consequences and Values were transcribed. Initially this led to a total of approximately 1500 statements for Attributes, consequences and values combined. As soon as all the statements were collected a content analysis methodology was applied. In order to analyse the different statements given the possible existing thematic categories, the researchers agreed upon the fact that each separate statement would be defined as the primary unit of analysis [44]. In this fashion the units were analysed for the existence of common themes. Each theme that was identified was set aside and if needed, more units were added under the same theme. Themes that were identified early on were consecutively collapsed into smaller and smaller numbers of more abstract themes [44]. Going through continuous back and forth movements through the different statements and continuously checking and comparing the different themes with the statements, all the redundancies and repetitions were dropped and thus higher order relationships between the themes appeared [44]. For purposes of validity the categorization process was initially undertaken by two separate researchers and in the final stage the researchers combined their results through negotiation.

In the present study we avoided separating between concrete and abstract attributes, functional and psychosocial consequences and instrumental and terminal values. This was done because actually very few Means–End studies actually make an effort to depict either in their Hierarchical value maps or in their attribute-consequences-values lists these different categories.

One of the most important problems faced during the meta-analysis phase was the fact that, on several occasions, elements that were considered a consequence in one study were found as a value in the next study and similarly usually abstract product attributes were intertwined with consequences. During the formulation of the different themes a conscious effort was made in order for the researchers to clear these confusions. Yet in spite of all the possible efforts it is still possible that certain categories that belong in either Attributes, consequences or values would seem pertinent to be moved from one position to another.

Having completed the final categorization (Table 2: Appendix) we undertook an empirical study to test whether having the Attributes, Consequences and Values organized in such a thematic way would actually help or hinder the research process.

3. DATA AND METHODS

In order to empirically validate the categorisation of the A-C-V elements that was created through the meta-analysis described above a study was designed.

The empirical study was developed as a "two step" process. Essentially there was an initial "recruitment phase" and a later "MEC implementation phase" through the use of the in-depth Laddering interviewing technique.

The initial recruitment phase aimed at ensuring that homogeneous groups of interviewees would respond to the Laddering interviews, thus securing maximum variety of A-C-V chains related with the quality foods under question and not with possible individual differences. According to Zanoli and Naspetti (2002:647) [19]

"consumers are not particularly involved in food choice" but when one researches special categories of food such as organic, or in our case high quality foods, one should take into consideration that consumer involvement may be relatively higher though the level of expertise could depend on situational factors such as the availability of the product and the information about it [19]. The recruitment phase aimed at avoiding such pitfalls by ensuring that all participants in the laddering interviews had at least bought high quality products once in the past month (or were frequent users of these), and thus hopefully, since they had lately been in contact with the product, there wouldn't be any "lack of previous thinking of the reasons underlying" product choice [45-46].

The data of the initial phase were analysed and consumers were clustered based on those data in certain homogeneous groups. (5 clusters were identified – see Analysis section) Based on the description and characteristics of these clusters as we will see further on, a series of Laddering interviews were conducted in order to elicit the corresponding Means-End chains of the consumers, always with the effort to test and validate the categorisation of the A-C-V elements from the meta-analysis.

3.1. Recruitment data collection

A short questionnaire was used as an instrument for this initial phase. During the summer of 2007, a random sample of 305 Greek consumers completed the recruitment questionnaires. Data collection was accomplished with the help of a professional research agency. The questionnaire was self-administered, handed out and collected by the research agency upon completion by a person aged 18 and above in each household, in charge of grocery shopping and / or cooking. The sample mean age was 37.7 years. The sample was gathered from various cities around Greece in order to ensure the inclusion of people also living outside the capital of Athens and thus adding to the representability of the sample.

The consumers were briefed regarding the double nature of the research and the researcher completed the questionnaire only if the respondent(s) indicated willingness to participate in the latter phase of the in-depth interviewing. Furthermore, the researcher always used as a screening question whether the research candidate(s) use(s) or had used during the past month high quality foods such as organic foods, PDO/PGI foods, functional foods, other traditional foods, etc. If the respondent answered positively to both questions the questionnaire was completed. In the opposite case, the researcher thanked the participant for his time and moved on to the next suitable candidate. The questionnaire comprised of three parts: the first part measured the participants' values through the use of the PVQ questionnaire [47] and for relevant studies in Greece [5, 23, 48]; the second part measured a set of purchase-related variables such as Willingness to Pay (WTP) for organic and PDO foods, self-reported knowledge of the organic and PDO foods category, and monthly expenditure for in-home preparation foods; and the third section contained the socio–demographic questions.

Take in Table (No. 1)

After the completion of the 305 questionnaires the screening data were analysed, by means of multivariate statistical analysis, as will be described in the Analysis section.

3.2. Means-End data collection

As noted before, the Laddering method was used in order to elicit the participants' Means-End Chains. From the aforementioned sample 50 participants were chosen for the Laddering interviews to be carried out. All of the interviewees were responsible for their household food purchases and belonged to specific homogeneous clusters, based on the PVQ typology (see section 4.1). All of the interviews lasted between one and two hours with an average duration of sixty-five minutes. The mean age of the interviewees was 43 years old and 60% of the sample were women. The purpose of our study didn't include the measurement of the participants' involvement in the care-taking roles in the house. However, it was evident from our research that women respondents were not only more involved generally with the care-taking roles but were also more involved in thinking and discussing about food-related issues and especially those pertaining to high quality foods. Furthermore, they were also more willing to complete the laddering procedure to the end no matter how repetitive or "pressing" the interview was at times and no matter how long it took to be completed.

The Laddering interview process began with a small introduction: The interviewee was informed about the purpose of the interview, whilst in order to ensure common understanding of the term "quality foods", definitions and examples regarding organic, PDO/ PGI, functional and other traditional products. Next, some general questions about quality foods introduced the consumer to the interview in a smooth way before the consequence and values elicitation phase began. In the first step of the elicitation phase the respondents were asked to consider the event of buying a quality food. The example of a product mentioned in the introduction phase was used to facilitate the participant's cognition retrieval process. Then, the interviewee was asked to use specific product attributes in order to distinguish the quality version of the example from the conventional one. These attributes were used as Laddering starting points. Based on these attributes and after the question "*Why is this important to you?*" being repeatedly asked by the interviewer, each interviewee was called to subconsciously connect product attributes with consequences and/or his/her personal values.

All interviews were tape-recorded, given the consent of the interviewee, and latter on transcribed on paper by the researchers. In the few cases where the interviewee was not willing to be recorded, the researchers while doing the interview kept extensive notes which were used afterwards in comparison in order to code the specific interviews.

Take in Table (No. 2)

4. ANALYSIS AND RESULTS

4.1. Analysis and Results of the recruitment phase

In order to create homogeneous subsets of consumers from the sample of the recruitment phase we followed the described path of analysis. The data were initially screened regarding issues of multivariate normality and other preliminary checks such as checking for linearity – co-linearity and homoscedasticity. After the initial checks and having confirmed that the data could be used in multivariate analysis techniques (no statistically significant deviations), first we confirmed the a-priori theoretical factorial structure underlying the Values Theory, as operationalized through the PVQ questionnaire; and secondly, using the factors generated from the confirmatory procedure as clustering variables, we classified the respondents into certain homogenous clusters. This was done under the assumption that homogeneous clusters of consumers represented by similar orientation as regards their values would provide a more stable ground to build the Means-End chain interviews on and validate the available categorisation of A-C-V elements. In essence it is assumed that people belonging to the same value clusters would help to create more coherent hierarchical value maps and avoid any noise that might come from differences in personal beliefs. Since Laddering is a method with the end purpose of discovering people's motivations and values behind a product choice, it would seem logical to assume that people with the same or similar value structures would ease the process of uncovering these through questioning. According to the literature, the values theory is an important instrument for better understanding consumers' choice for quality foods such as organic food [49].

Confirmatory Factor Analysis (CFA) was employed to confirm and validate the factorial pattern suggested by the Value Theory [47]. The observed variables were slightly non-normal, with kurtosis and skewness quite close to |1|, with some indices fluctuating from higher than |1| to around |2| (results available upon request), since severe non-normality associates with kurtosis higher than |7| and skewness higher than |2|[50], even if the assumption of multi-normality is rejected. Consequently, the method of estimation was Maximum Likelihood (LISREL 8.80). Unfortunately due to the small size of the sample ($N < 400$) it was not possible to use the robust correction of the Maximum likelihood method which asserts for non-normality (Robust Maximum Likelihood – RML [51]). That was of no hindrance to the aims of the research, however, since the a–priori proposed model was confirmed accordingly.

The CFA model (LISREL 8.80) has an acceptable fit, while the independence model (Normal Theory Chi-Square [741] = 11598.79, $p<0.001$) is clearly rejected. With CFI= 0.95, NNFI= 0.94 and RMSEA= 0.052, indices all pointing to the acceptance of the model (cut-off values greater than 0.90 for CFI and NNFI and lower than or equal to 0.08 for RMSEA are considered adequate for model fit [52-53].

Take in Figure (No. 1)

All loadings are satisfactory to assess convergent validity, ranging from 0.50 to 0.74 (cut-off levels from 0.50 to 0.95 are adequate for convergent validity [54] Kline, 2005). The estimated correlations at the factor level (results available upon request) are under 0.85, also satisfying discriminant validity [54] (Kline, 2005).

Having confirmed the proposed factorial model we could now proceed to the next stage of the analysis, i.e. the classification of the consumers in homogeneous clusters according to their values. It is worth noting here that one would expect that essentially people who are motivated by the same ends (Values) would probably follow, if not the same, similar to a large degree paths to fulfil these goals, thus using similar means and thus exhibiting similar behaviours which can be captured through such a clustering operation and mapped out from a Laddering interview process.

Thus a segmentation task was implemented based on the 10 PVQ value domain scores (variables) for each respondent, as these were saved from the Lisrel program during the confirmatory factor analysis. Initially a hierarchical cluster analysis was implemented (through SPSS 15.0) with the option of identifying a variety of clusters from 2 to 7. Afterwards the K-Means clustering procedure was used starting from the saved Hierarchical cluster centroids. After examining and screening the various solutions, the 5-cluster approach was selected since it was the one exhibiting the highest possible correlation between the two procedures (Hierarchical and K-Means) (Pearson correlation index between the two-cluster membership variables = 0.700, $p<0.01$). In order to examine for statistically significant differences among the five clusters Chi-square tests and one-way ANOVA were used. Through a Cross-Tabulation of the cluster membership variable and the statistically significant variables, the profiles of each cluster were created.

Take in Table (No. 3 and 4)

The five clusters differ both in terms of mean similarity with the 10 PVQ domains and their socio-demographic profile and quality food purchase-related variables (as mentioned above, WTP for organic and PDO/PGI products, Self-reported knowledge of what the organic and PDO/PGI foods are, and Monthly expenditure for in-home preparation foods). The profiles of the clusters can be described as follows:

Cluster 1 members exhibit the strongest similarity of all clusters with the values of universalism, security and tradition and the second highest similarity with the values of benevolence, conformity, stimulation, hedonism and self–direction, thus leaning towards the Self-tracendence and Openness to change dimensions [47]. Regarding the socio-demographics, cluster 1 consists of consumers with the oldest age in the sample, the highest percentage of consumers with higher education and high income, and the highest number of people living in Athens. Furthermore, it includes consumers with the highest monthly expenditure for in-home food preparation, the second highest WTP for organic and the highest WTP for PDO products, the highest self-reported knowledge about organic products and the second highest self-reported knowledge about PDO products.

Consumers comprising Cluster 2 do not exhibit particular similarity with any value domain. As far as the socio-demographic profile is concerned, neither does Cluster 2 depict any specific type of individuals either. Nevertheless, the characteristics of Cluster 2 resemble the general characteristics of the sample with a few exceptions such as the lower mean age, the lower percentage of people with higher education and a relatively low monthly expenditure for food. However Cluster 2 has the largest self-reported knowledge about PDO foods and the second largest self-reported knowledge regarding organic products. It also has the third largest WTP for PDO and organic products.

Cluster 3 members hold the strongest similarity of all clusters with most of the value domains, with the exception of Universalism, Security and Tradition. Regarding the socio-demographic profile now, Cluster 3 consists of the highest percentage of consumers who reside outside Athens, and has the third highest percentage of high income individuals and the second largest percentage of employees, the first percentage of technicians, workers, farmers and Freelance individuals. Cluster 3 also comes fourth in WTP and Knowledge regarding PDO and organic products.

Cluster 4 members demonstrate the second strongest similarity with Self-Direction, Achievement and Power values, while exhibiting the third strongest similarity in almost all other cases. Thus Cluster 4 leans towards the Openess to Change and Self-Enhancement dimensions. Cluster 4's socio-demographic profile

approximates to a large degree with the profile of Cluster 3. Main exceptions are Cluster 4's larger percentage of male respondents, the second highest percentage of high income individuals, and the highest percentage of employees and unemployed individuals. Cluster 4 displays the highest WTP for organic and the second highest WTP for PDO products, while its members possess the third highest knowledge around organic and PDO foods.

Lastly, Cluster 5 shows weak similarity with all value domains. Similarly Cluster 5's socio-demographic profile indicates the lowest percentages in most characteristics compared with the rest of the clusters. Thus, it has the lowest percentage of males, the lowest percentage of individuals with high education, the highest percentage of low income consumers, the lowest percentage of employees and the highest number of students. Furthermore, Cluster 5 exhibits the lowest monthly expenditure for food, the lowest WTP for both organic and PDO foods, but it comes in fourth place regarding the self-reported knowledge about organic and PDO foods.

From the above described clusters, it was decided that the most interest for the Laddering interviews and the second part of the study was presented by the consumers of Cluster 1, Cluster 2, and Cluster 4. This was decided after an evaluation of all the related cluster characteristics, placing special emphasis on the fact that these clusters seem to exhibit the highest WTP and the highest self–reported knowledge about organic and PDO foods, which essentially fall under the greater category of High Quality Foods.

After the above decision with the help of the same professional research agency we contacted once again the consumers belonging to the different clusters asking to move on to the interview part of the research as they had been informed previously. The interviews took place in the houses of the respondents or any other place they felt secure. In every case there was an effort made to avoid open spaces due to reasons of loud noise and other problems.

Initially as part of the study the consumers were classified according to their personal characteristics in a prioritized manner and the company had specific instructions on whom to call and book the proper appointments for the interviews. Unfortunately a lot of consumers opted out of this second approach and thus a lot of interviews were lost due to the unwillingness of the consumers to participate further. In order to combat this negative attitude, together with the need to proceed with the research, it was decided to incentivise the consumers to take part in the research. In this manner an official letter was sent out from the University explaining the need for the consumers to participate and affirming that all the data that would be collected would only be used for the purposes of the interview. Together with these actions the company accepted to offer a 10 euro gift certificate that the consumer could use at his/her disposal. These steps seemed to make the contact with the consumer's easier although in the end from a total of 175 consumers from Clusters 1, 2 and 4, only 50 consumers accepted (28,5%) in the end and went through with the Laddering interview.

4.2. Analysis and results of the Means-End Chains

As explained above, the consumers of the three clusters examined were asked to distinguish the quality foods (such as organic, functional foods, PDO/PGI products) from the conventional ones by using product attributes perceived as the most important for them. These attributes were then used as a starting point for the Laddering interview. A record of 50 interviews was created in order to have all the necessary information in hand for the coding phase. The answers given during the interviews by the 50 consumers of the three clusters were then coded: answers of the same meaning were categorized into common categories of attributes, consequences and values (A-C-Vs). In this way, a group of codes was created per abstraction level A-C-V that embodied all the information elicited from the participants for each of the three clusters

Overall, 42 attribute codes, 40 consequence codes and 26 value codes were elicited from the whole sample. In particular, in the 1st cluster (N=21) 36 attributes were used to distinguish quality foods from conventional ones. These attributes were linked with 36 consequences and 23 value codes. From the 2nd cluster (N= 16), 31 attributes were elicited and they were linked with 31 consequences and 22 values. Finally, the consumers of the 4th cluster (N=13) used 32 attribute codes, 31 consequence codes and 22 value codes. The coding process was based on the meta-analysis of the literature regarding quality foods and was previously described. In total, the average number of ladders and the average number of codes elicited per consumer for the whole

sample was 10.34 ladders and 41.9 codes respectively (10.34 Attribute codes, 21.14 Consequence codes and 10.42 Value codes on average). The 1st cluster presented on average 12 ladders and 48.8 codes per consumer (11.6 Attribute codes, 25.1 Consequence codes and 12.1 Value codes on average). Regarding the 2nd cluster the number of ladders and codes elicited per consumer was 8.9 ladders and 36.1 codes (9.4 Attribute codes, 17.1 Consequence codes and 9.6 Value codes). Finally, regarding the 4th cluster, the number of ladders elicited per consumer was 9.5 ladders and the number of codes 37.8 (9.5 Attribute codes, 19.7 Consequence codes and 8.6 Value codes).

After coding, the analysis continued with the use of the MEC Analyst software, which provides an interactive system of data importation where multiple A-C-V ladders per participant are inserted in the form of relevant codes. After every ladder is input and the classification of codes is completed, data analysis is conducted for the creation of a tree diagram (Hierarchical Value Map, HVM) where the cognitive structures referring to the high quality foods are illustrated for each cluster and for the whole sample. Initially, MEC Analyst constructed an aggregate Implication Matrix. The Implication Matrix represents all the links between the A-C-V constructs which emerged from the interviews by demonstrating how many times they were brought about in the laddering interviews. The number of relations which emerged between two elements shows the strength of the particular connection. For the creation of the HVM the links from the Implication Matrix that are to be mapped should be defined. For this reason, every relation is compared to a cut-off level.

In order to compare the HVMs between every cluster and the whole sample as well, we tried to keep equal amounts of information on every map, taking into account the different sample size (21 consumers were included in the 1st cluster, 16 in the 2nd and 13 in the 4th, while the whole sample comprised 50 respondents). A cut-off level[1] of 5 for the 1st cluster, 4 for the 2nd, 3 for the 4th and 9 for the whole sample were deemed most appropriate in the current study. The last stage of the analysis was the drawing of the HVM for every cluster and for the whole sample (Figures 1-4). The strength of association between the A-C-Vs is indicated by the thickness of the lines linking the elements (the thicker the line, the stronger the cognitive association between the elements [17]) while the thickness of each element indicates the frequency the code was mentioned in every sample. Every one of the 4 HVMs presents approximately 60-65% of the direct links reported by the consumers regarding the cut-off level. The specification of the above cut-off levels gave the clearest results and revealed better the differences of the cognitive structures between the clusters.

Take in Figure (No. 2, 3, 4, 5)

5. DISCUSSION

The most important outcome of the laddering technique is the creation of the HVMs from where we can obtain insights in relation to the quality food-related buying motives and the way that quality food consumption relevant knowledge is stored and organized in the consumer's cognition. Eleven attributes are revealed in the HVM of the 1st cluster (attributes deemed important by at least 5 respondents) and in the HVM of the 4th cluster as well (attributes deemed important by at least 3 respondents) while in the HVM of the 2nd cluster 10 attributes are present (attributes deemed important by at least 4 respondents) and 11 in the whole sample's HVM (attributes deemed important by at least 9 respondents).

Based on the number of links presented, the most important cognitive structure of the HVM of the 1st cluster consists of elements regarding the consumer's health (45 direct links in total or 34% of the links appearing in the HVM above cut-off level; see Fig. 1). This area is built around a number of health promotion related benefits from the consumption of quality foods, such as "Health promotion", "Healthy body and physical well being", "Eating healthy" and "Naturalness". The fact indicates that consumers in the 1st cluster are focused on the consequences the quality food consumption has on their health. This is something that is confirmed by its value profile, since the third value domain with which cluster 1 members have identified themselves closely is that of security in which the health aspect is entailed in the PVQ questionnaire. However, in the HVM very few product attributes are linked with the specific structure ("Keeps me healthy" and "No additives"). The

[1] As Zanoli and Naspetti (2002) note there are no theoretical or other statistical criteria to guide the choice of the cut-off level. Choosing a proper cut-off level is always a trade-off between the amount of information that can be regained without loosing interpretability and clarity.

second most important cognitive area in the HVM is related with pleasure (at least 30 links in total or 22% of the links appearing in the HVM above the cut-off level). The structure regarding pleasure appears in a higher abstract level and is the result of "Health promotion" and "Eating enjoyment". With "Pleasure", the consumers feel able to socialize and finally achieve "Inner harmony". Another important structure that we can find in the HVM of the 1st cluster are cognitions regarding taking care of family (14 direct links in total or 10% of the links appearing in the HVM above cut-off level): a product that is considered safe for the family creates the notion of taking care of the family which is linked with the value of "Family". Based on the number of links, the next important structure is related with economic efficiency (13 direct links in total or 10% of the links appearing in the HVM above cut-off level). By acquiring quality food products that are considered "Inexpensive" or having "Value for money", the consumers of the 1st cluster believe that they perform well economically. The cognitive areas in the HVM of the 1st cluster are completed with the areas regarding environment (8 direct links in total or 6% of the links appearing in the HVM above cut-off level): by purchasing quality foods with "Environmentally friendly packaging" they contribute to the sustainability of the environment, and regarding the higher abstraction area of performance (at least 12 links in total or 9% of the links appearing in the HVM above cut-off level): consumers that achieve health promotion and time saving are able to improve their everyday performance.

Regarding the HVM of the 2nd cluster the cognitive area of consumer health is dominating (42 direct links in total or 46% of the links appearing in the HVM above cut-off level; see Fig. 2). The specific area is built around the "Health promotion" related benefit which is achieved through the consumption of quality foods with "High fibre content", "High vitamin and mineral content", "No additives" that "Keep them healthy" and help them in "Eating healthy". The overall cognitive structure is driven by the pursuit of the "Health" value and links "Health promotion" with "Performance improvement" and "Pleasure". Performance is the only other important area (at least 17 links in total or 19% of the links appearing in the HVM above cut-off level) in the map behind health structure. The 2nd cluster's consumers are trying to increase their convenience by purchasing quality foods that are "Easy to find in stores and supermarkets" and their consumption will result in saving time. More time, promoted health and more energy are the prerequisites for improving their performance. Other areas in the HVM of the 2nd cluster are the structures regarding family (through the link of the product attribute "Considered safe for my family" and the benefit "Care for family"), economic efficiency (through the link of the product attribute "Inexpensive" and the benefit "Monetary considerations") and environment (through the link of the product attribute "Environmentally friendly packaging" and the benefit "Sustain/protect the environment"). It is worth mentioning the appearance of the area that links the attribute "Greek product" with the consequence "Supporting local economy" (4 direct links in total or 4% of the links appearing in the HVM above cut-off level).

The HVM of the 4th cluster is the only map where the most important area is not built around the benefits of consumers' health. According to the number of links presented in the map, the most important area is the structure that deals with the pleasure of the consumer (at least 24 links in total or 28% of the links appearing in the HVM above cut-off level, see Fig. 3) which is derived from the "Care of family" and is driven from the values of "Hedonism and Enjoyment" and "Feel good about oneself". The health-related cognitive structure is the second most important area in the map (22 direct links in total or 25% of the links appearing in the HVM above cut-off level). There is only one attribute that directly promotes health according to the consumers of the 2nd cluster ("Low fat content") although they also seek the benefits of "Eating healthy" and "Control what they eat" which are linked with the basic health element ("Promotes health"). Another important area is the structure that is built around the benefit of "Improved performance" (at least 20 links in total or 23% of the links appearing in the HVM above cut-off level). Three are the key elements for improving consumers' performance: "Health promotion", convenience elements ("I can buy them in stores near my job/house", "Easy to buy/use" and "Time") and "Provides more energy". Once more, economic efficiency is an important cognitive area (10 direct links in total or 11% of the links appearing in the HVM above cut-off level), also in the HVM of the specific Cluster. Once again food quality products that are "Inexpensive" and have "Value for money" are linked with "Monetary considerations". However, the structure is not clearly driven by a higher abstraction level benefit. A structure that hadn't appeared in the two previous clusters and differentiates the 4th cluster is the area built around the benefit of "Nostalgia-Tradition" (6 direct links in total or 7% of the links appearing in the HVM above cut-off level). Consumers are motivated to purchase quality

foods that "Reminds them of what they ate as a child" because they feel that these products are "Pure and Authentic" and because they contribute to the benefit of "Nostalgia-Tradition".

The HVM of the whole sample is less complicated and more easily understood. Four areas are the most important ones: τhe areas regarding health (primarily), performance, pleasure and economic efficiency. Quality foods that keep the consumer healthy, improve "Naturalness", have "High vitamin and mineral content", have "Low fat content" in order to "Control their weight" and maintain a "Healthy body and physical well being", contribute to the consumer's "Healthy eating", and their consumption contributes to the protection of the environment, are the important elements for the most valuable benefit of "Health promotion" (136 direct links in total or 43% of the links appearing in the HVM above cut-off level; see Fig. 4). The higher abstraction level benefits of Performance (at least 58 direct links in total or 18% of the links appearing in the HVM above cut-off level) and Pleasure (at least 47 direct links in total or 15% of the links appearing in the HVM above cut-off level) and the areas built around them are the next most important structures. The benefit of economic efficiency through the consequence of "Monetary considerations" is another structure worth mentioning (33 direct links in total or 10% of the links appearing in the HVM above cut-off level); in accordance to the three clusters' HVMs, it isn't linked with any value.

From the above it is clear that through quality food purchasing and consumption, consumers are trying to satisfy mainly three basic needs: the improvement of their health status, the improvement of their productivity and everyday performance, and the need for pleasure and unstressful moments. The consumers in all the three clusters seek to improve their healthiness through quality foods but only the 2nd cluster's consumers seem to know which product attributes will lead them to the specific benefit. In general all the three clusters present very few product attributes linked with the benefit of "Health promotion" and with not particularly strong linkages even though the element itself is the most important in every HVM and is mentioned by nearly every participant. Moreover, the consumers of each cluster are trying to improve their healthiness though different paths. The 1st cluster seek quality foods with no additives, by trying to maintain a healthy body and physical well being, while consumers in the 2nd cluster apart from additive-free quality foods, desire enhanced food with nourishing ingredients and natural products. In contrast, the 4th cluster seeks the "eating healthy" benefit and low fat quality foods. Healthiness is the only structure that is clearly driven by a value ("Health") in all three cases.

The consumers in all three clusters also agree that performance improvement is a very important benefit that quality foods could provide them, especially for the 2nd and 4th cluster. Even though the element of performance is very popular in all clusters, only the 2nd and 4th cluster linked it with a benefit different than health (convenience). By purchasing quality easy-to-find foods they manage to save time and do more things in their everyday life. Pleasure is the benefit where the three clusters present the most different structures. For the 1st cluster pleasure is achieved through the enjoyment derived from the consumption of a tasty quality food but also from the promotion of a consumer's health status while the consumers of the 2nd cluster agree only with the second linkage. In contrast, pleasure is a much stronger structure for the 4th cluster and is linked primarily with the family well being.

It is worth mentioning that economic efficiency and the protection of the environment is also a very important benefit for the whole sample of our research but none of them appears to be driven by a value or a consequence of higher abstraction. Moreover, only the 2nd cluster is motivated by quality food consumption through the benefit of supporting the local economy and especially from the consumption of Greek PDO/ PGI and other traditional products. In addition another differentiation element for the three clusters was the structure of Nostalgia-Tradition, which only the 4th cluster presented in the HVM, as well as the appearance of the benefit "Weight control" through the "Low fat content" attribute only in the HVM of the 4th cluster.

Finally, opposing previous studies (Naspetti and Zanoli, 2006; Zanoli and Naspetti, 2002) in our research "Health" was depicted clearly as a terminal value by most participants, something that was contended upon by such statements as: "Health is all you need in life" or "Being healthy is the most important of all things" or "Health is an end in itself". This is also obvious when observing the HVMs where only in one case (that of the "Rural Class II") does health lead to "hierarchically higher values/goals" (Naspetti and Zanoli, 2006) such as "Quality of life".

6. CONCLUSION

The present study employs Means-End chain analysis methodology in order to obtain insights into the quality-food related buying motives of consumers and how they differentiate between three different consumer clusters. The objective of the study is to design a Means-End chain hierarchy of consumption-relevant cognitive structures and explain quality food-related purchasing behaviour by specifying how parts of the cognitive structure will be retrieved and used to guide behaviour. Consumers in the examined clusters do not differentiate in their basic motivation of purchasing quality foods but rather in the path they will follow in order to achieve the benefits of consumption. This is why the basic cognitive areas of healthiness, performance and pleasure that appear in every HVM are constructed in a different way from the consumers of each cluster.

The results of the MEC analysis should promote strategic thinking by providing creative solutions to problems of product positioning [55] (Reynolds, Dethloff, & Westberg, 2001). Each of the HVMs' orientation could be seen as a potential product positioning strategy [56]. More specifically, HVM presents many alternative choices for the development of a strategic placement like the increase/decrease in the importance of an element on the map, the creation/deletion of a connection among the elements, the strengthening/weakening in a connection between a brand and an element, or the creation of a new element in the map [57].

As previously discussed, the HVM of every cluster and the whole sample as well present a lack of specific quality food attributes linked with the most important consequence of health or other healthy benefits. On the other hand some of the attributes (e.g. "high mineral and vitamin content" in the whole sample map, "High fibre content" in the 2nd cluster's map and "Low fat content" in the 4th cluster's map) are weakly connected to "Health promotion". This is an occasion where a positioning option would be the appearance of more product attributes in the HVMs that will lead to stronger connections to the cognitive area related to the consumer's healthiness. Regarding the 1st cluster it is obvious that health benefits should be supported by more product attributes that will be connected with them. For example a communication strategy that would inform the cluster's consumers that quality foods enhanced with vitamins and minerals promote a healthy body and the physical well being could be quite successful. The appearance of the structure of local economy support is another positioning option for the quality foods in the 2nd cluster with a strategy that could make the consumers aware of the benefits for the local or national economy of specific quality products consumption (e.g. Greek PDO/ PGI). A stronger image of quality foods towards the specific direction through more product attributes and stronger linkages could provide an advantage to targeting the consumer group with the characteristics of the 2nd cluster. Accordingly, the benefit of "weight control" and the cognitive structure regarding nostalgia and tradition are elements that only the 4th cluster presents in the map and with very weak linkages, giving a hint to the food industry that these points should be further strengthened particularly compared with the conventional products.

As mentioned before the interview with the study participants began with a product example that the respondent kept in mind in order to distinguish quality foods from conventional ones. The example reference in the beginning of the Laddering interviews was made by the interviewee in order to facilitate the flow of speech during the interview. However, it is possible that it stimulated the retrieval of unintended constructs from consumers' sub-consciousness. Nevertheless, future research must overcome this limitation by comparing the HVMs derived for various quality products by each cluster. Furthermore, the fact that the consumers were asked to derive the attributes on their own could limit their choices. Finally, as with any MEC study, the outcomes presented here should not be unquestionably generalised; a wider-scale quantitative research is needed to validate the results of the MEC research presented here.

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Tables

Table 1. Recruitment sample of participants' socio-demographic profile, % N=305

1.Gender				
Male	Female			
25.9	**74.1**			
2.Age				
<25	26-35	36-45	46-55	> 56
22.6	20.7	**27.9**	20.0	8.9
3.Marital Status				
Married	Single	Divorced / Widowed	Living with a partner	
55.7	35.1	8.2	1.0	
4.Place of residence				
Athens	**Rest of Greece**			
27.9	**72.1**			
5.Educational level				
Primary education (Completed or less)	Secondary education (All types)	Tertiary education (All types)	Postgraduate degree or more	
5.6	43.9	**49.5**	1.0	
6.Employment Type				
Employee (all types private and government)	Freelancer	Student	Housewife	Other[(3)]
39.3	15.4	15.4	9.2	20.7
7.Monthly household income, €				
< 1,500	1,500-2,000	>2000	Don't Know / No Answer	
22.6	20.3	**35.4**	21.6	

[(3)] Entrepreneur / CEO (7.9%), Technician, worker, farmer (2.3%), Unemployed (6.6%), Pensioner (3.9%)

Table 2. Interview of participants' socio-demographic profile, % N=50

1. Gender:	
Male	40
Female	60
2. Mean Age:	
	43 years old
3. Place of residence:	
Athens	34
Rest of Greece	66
4. Educational level:	
Primary education (completed or less)	8
Secondary education (all types)	52
Tertiary education (all types)	36
Postgraduate Degree (Or more)	4
5. Employment Type	
Entrepreneur / CEO	12
Employee (all types private & government)	34
Technician, worker, farmer	2
Freelancer	14
Student	12
Housewife	12
Unemployed	4
6. Monthly household income, €:	
< 1,500	24
1,500 – 2,000	20
> 2,000	30
Don't Know / No Answer	26

Table 3. Cluster Profiles, Statistically Significant Differences in Value Domains, N=305, %

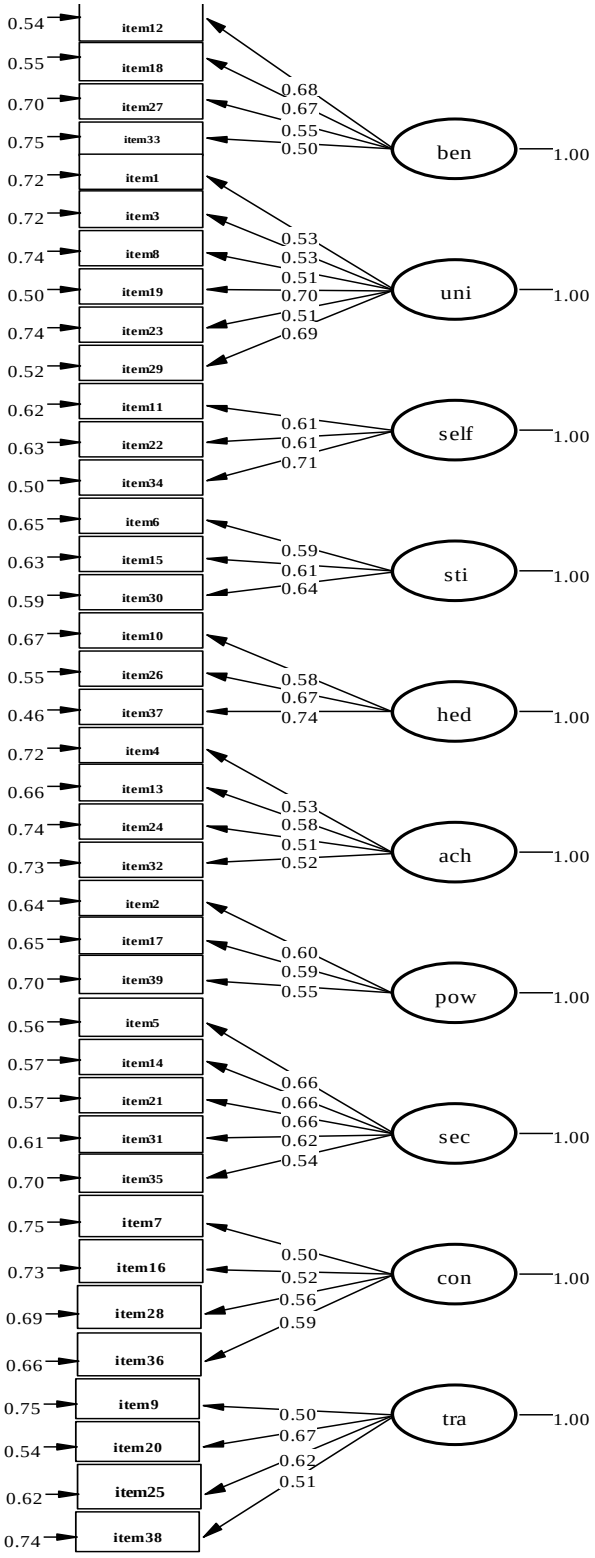
	Sample Profile	**Sig.**	**Cluster 1: 17.7 %** (n_1=54)	**Cluster 2: 26.2 %** (n_2=80)	**Cluster 3: 19.3 %** (n_3=59)	**Cluster 4: 13.4 %** (n_4=41)	**Cluster 5: 23.3 %** (n_5=71)
Clustering Factors[(1)]		*					
1. Benevolence	2.32	*	1.88	2.64	**1.72**	2.21	2.87
2. Universalism	2.12	*	**1.61**	2.41	1.63	1.98	2.66
3. Self - Direction	3.13	*	3.35$^{(ns)}$	3.05	**2.41**	2.82	3.85
4. Stimulation	2.36	*	2.09$^{(ns)}$	2.50$^{(ns)}$	**1.64**	2.27	3.07
5. Hedonism	2.62	*	2.40$^{(ns)}$	2.63	**1.90**	2.41$^{(ns)}$	3.48
6. Achievement	3.16	*	3.19$^{(ns)}$	3.18$^{(ns)}$	**2.47**	2.81	3.89
7. Power	3.80	*	4.13$^{(ns)}$	3.61	**3.18**	3.41	4.51
8. Security	2.27	*	**1.51**	2.62	1.77	1.96	3.05
9. Conformity	2.76	*	2.32	3.08	**2.28**	2.61	3.21
10. Tradition	2.79	*	**2.31**	3.05	2.39	2.82	3.15
Mean score / Cluster	2.69	*	2.43$^{(ns)}$	2.84	**2.07**	2.47$^{(ns)}$	3.35

Table 4. Clusters' Socio-demographic Profile, Quality Food WTP and self-reported knowledge, N=305,%

	Sample Profile	**Sig.**	**Cluster 1: 17.7 %** (n_1=54)	**Cluster 2: 26.2 %** (n_2=80)	**Cluster 3: 19.3 %** (n_3=59)	**Cluster 4: 13.4 %** (n_4=41)	**Cluster 5: 23.3 %** (n_5=71)
Socio-demographic profile							
1. **Mean age**	37.7	*	**44.3**	35.6	37.6	37.2	35.5
2. **Sex:**							
Male	25.9	*	24.1	30.0	28.8	**34.2**	15.5
3. **Education level:**							
tertiary education or higher	50.5	*	**66.7**	38.8	62.7	63.4	33.8
4. **Income** (1):							
<1,500€	28.9		5.4	35.9	15.0	10.0	**55.7**
1,500-2,000€	25.9	*	**27.0**	26.6	25.5	30.0	23.0
>2,000€	45.2		**67.5**	37.5	59.6	60.0	21.3
6. **Place of Residence:**		*					
Athens	27.9		**37.0**	27.5	22.0	24.4	28.2
Rest of Greece	72.1		63.0	72.5	**78.0**	75.6	71.8
7. **Employment Type:**							
Employee (all types, private and government)	39.3		38.9	37.5	42.4	**51.2**	32.4
Freelancer	15.4		16.7	16.3	**20.3**	9.8	12.7
Student	15.4		7.4	*15.0*	11.3	12.2	**26.8**
Housewife	9.2	*	**22.2**	7.5	6.8	2.4	7.0
Entrepreneur / CEO	7.9		5.6	**11.1**	1.7	9.8	9.9
Technician, worker, farmer	2.3		1.9	1.3	**5.1**	0.0	2.8
Unemployed	6.6		0.0	*7.5*	8.5	**12.2**	5.6
Pensioner	3.9		**7.4**	*3.8*	3.4	2.4	2.8
Monthly expenditure for food. Willingness to Pay (WTP), and Self-reported knowledge.							
1. **Expenditure for in-home food preparation**							
> €300 / month	42.3	*	**57.4**	37.5	48.2	37.5	34.3
2. **Willingness to Pay (WTP) for organics**							
0%	25.2	*	11.1	18.8	35.6	12.2	**42.3**
10% or higher	70.2		**83.9**	76.3	61.0	85.4	52.1
3. **Willingness to Pay (WTP) for PDOs**							
0%	47.8	*	43.1	49.8	53.6	39.6	**61.8**
10% or higher	38.4		**41.6**	37.2	37.0	41.1	30.1
4. **Self-reported knowledge about organics**							
Yes (I know what an organic product is)	76.4	*	***98.1***	95.0	88.1	92.7	87.3
5. **Self-reported knowledge about PDOs**							
Yes (I know what a PDO product is)	52.1	*	55.6	**56.3**	37.3	53.7	52.1

(1): Family net income - the percentage of "don't know / no answer" has been removed
(cluster 1: 31.5%, cluster 2: 20.0%, cluster 3: 20.3%, cluster 4: 26.8%, cluster 5: 14.1%, overall sample: 21.6%)
*: χ^2 test, $p<0.05$

Figure 1. Confirmatory Factor Analysis Model of the 40-item PVQ (Standardised Solution), N=305



Chi-Square=1396.72, df=656, P-value=0.00000, RMSEA=0.052

Figure 2: Hierarchical Value Map of Cluster 1 (cut-off level: 5, N=21)

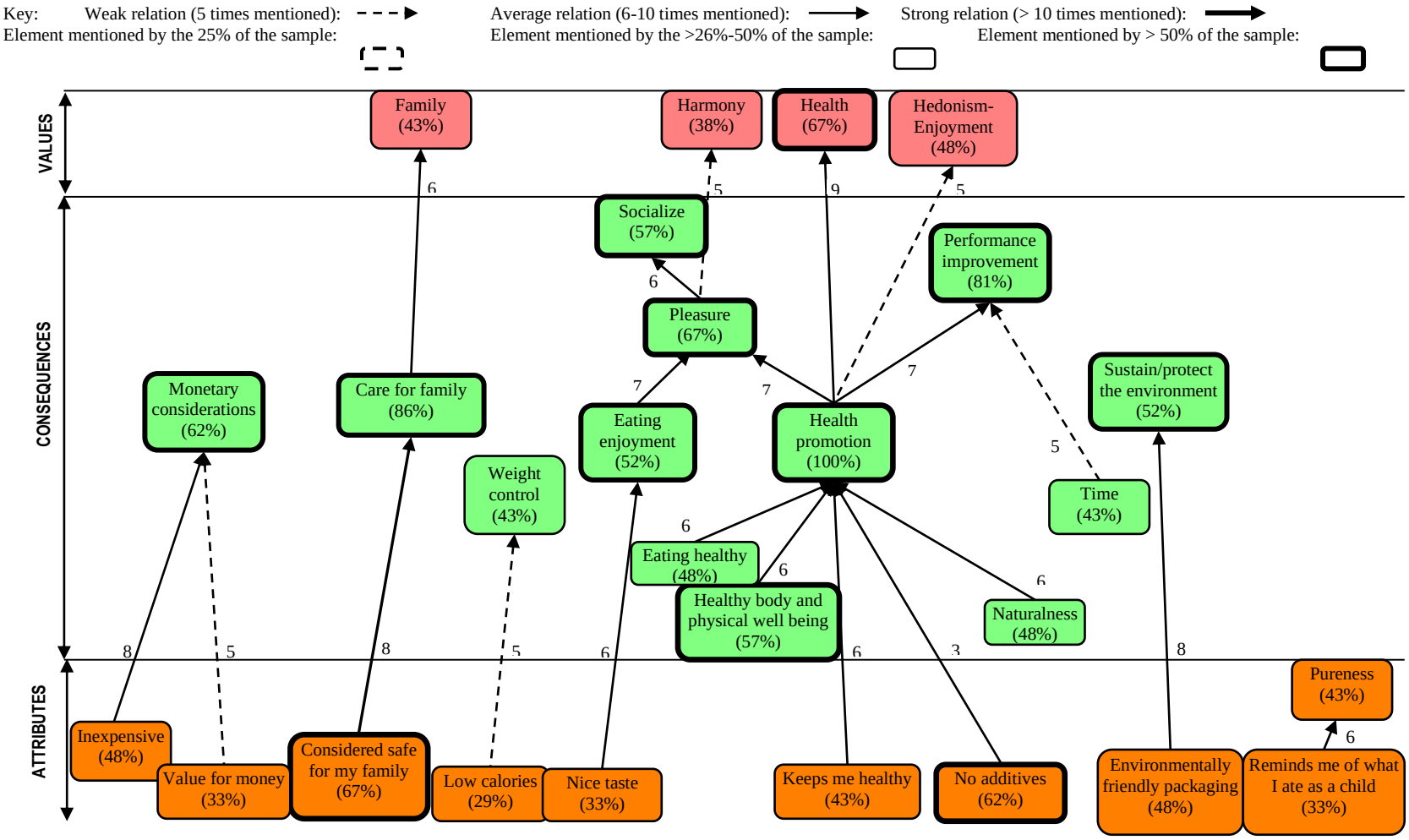


Figure 3: Hierarchical Value Map of Cluster 2 (cut-off level: 4, N=16)

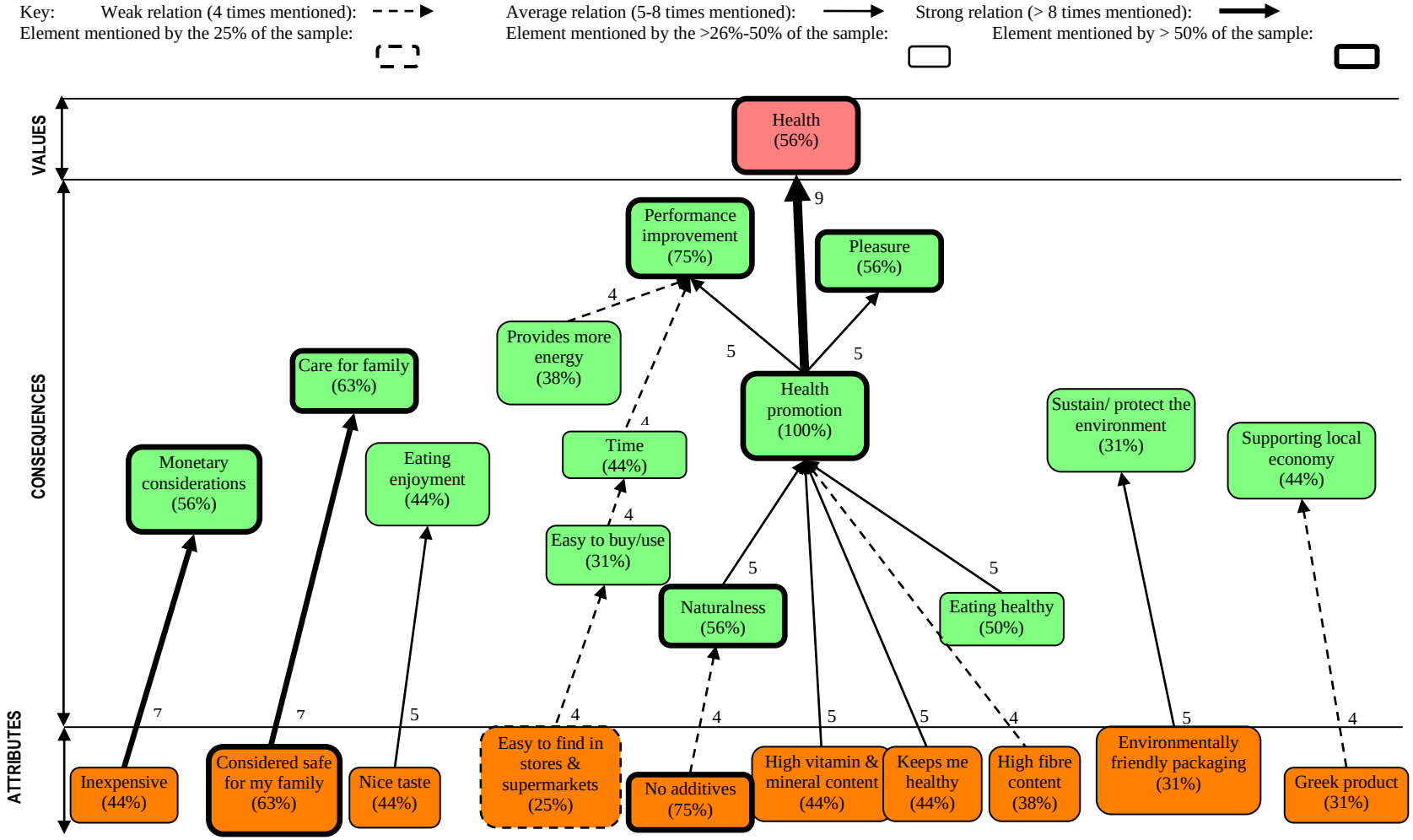


Figure 4: Hierarchical Value Map of Cluster 4 (cut-off level: 3, N=13)

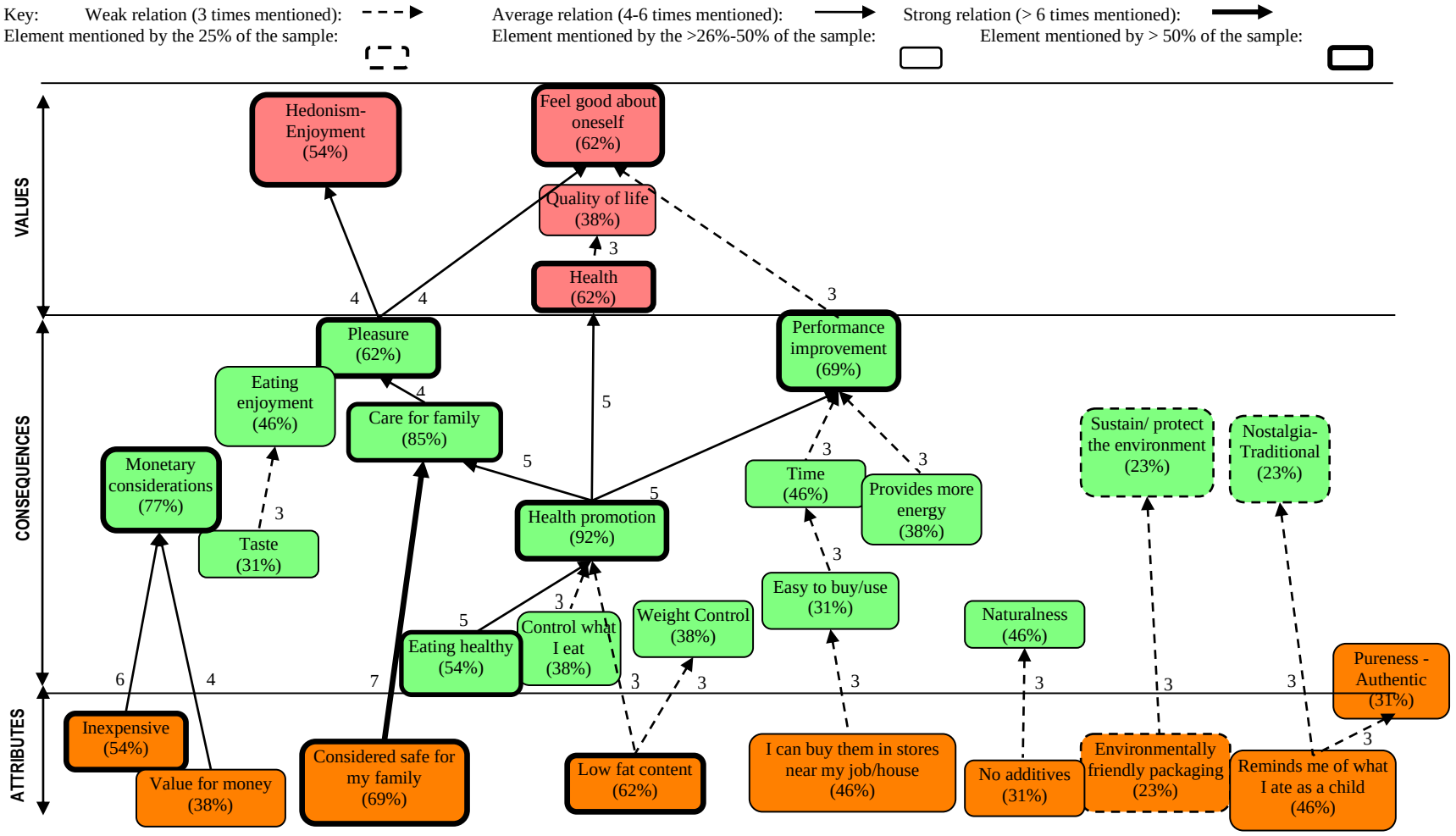
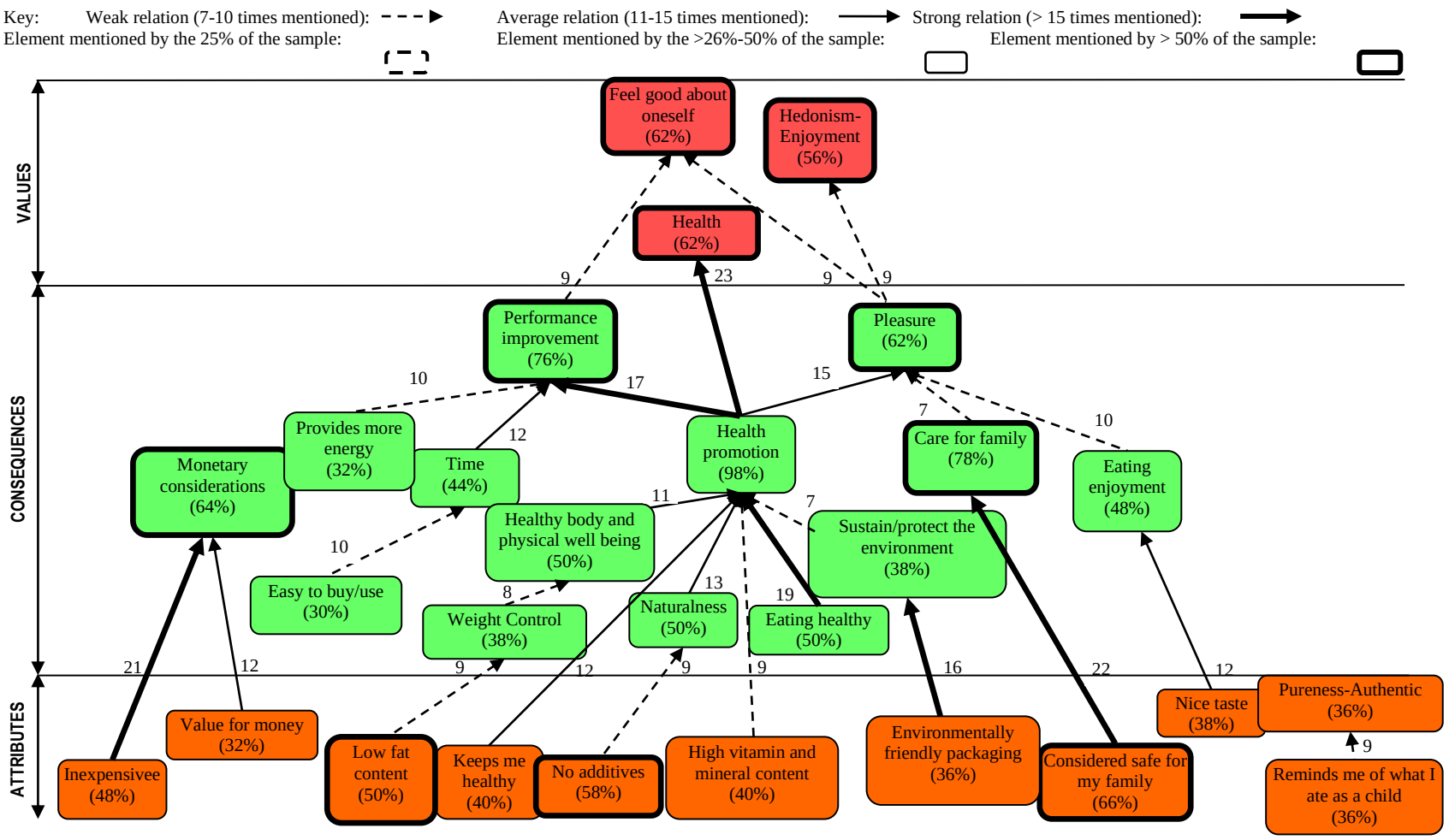


Figure 5: Hierarchical Value Map of the whole sample (cut-off level: 9, N=50)



Appendix

Table 1. Sources of the Meta-analysis Attributes-Consequences-Values initial list

Author (s)	Year	Journal	Summary of the study
Barrena and Sanchez	2009	British Food Journal	A study regarding the emotional benefits consumers might gain from the consumption of wine. 70 participants interviewed using the hard laddering technique.
Radder and Grunert	2009	Journal of Food Products Marketing	Examines the consequences and values associated with the consumption of African wildlife meat and its perceived attributes. 40 respondents were interviewed face to face.
Krystallis, Maglaras and Mamalis	2008	Food Quality and Preference	Functional foods choice linked to the motivations and cognitive structures of the consumers. 60 interviewees in a Pilot study and 40 interviewees in the main study separated in two different age groups. Uses attributes in part of a list with relevant attributes from the bibliography.
Grantham	2007	Journal of Public Affairs	Examines consumer – held values regarding the adoption of biotechnologically produced foods. 25 individual interviews as well as 5 focus groups were conducted.
Naspeti and Zanoli	2006	98th EAAE Seminar	Examines food quality and safety issues and perceptions across Europe. 792 face to face interviews conducted in 8 different European countries
Roininen, Arvola and Lahteenmaki	2006	Food Quality and Preference	An effort to establish the personal values, meanings, and specific benefits consumers associate with local food products. The study compares laddering to word association as a method of eliciting consumers' values. Attributes were elicited by the presentation of product cards as a stimulus. 30 participants were interviewed face to face.
Padel and Foster	2005	British Food Journal	Examines the value structures that underlie organic purchase behaviour. 181 regular and occasional organic food consumers were interviewed face to face.
Baker, Thompson, Engelken and Huntley	2004	British Food Journal	Examines the difference between UK and German consumers underlying values regarding the consumption of organic food. 32 regular consumers of organic food were recruited in both Germany and the UK. Interviews were carried face to face.
Brendahl, Thorgesen, Dean, Pemartin and Stiebel	2004	MAPP Aarhus School of Business, working paper, online	Research conducted as part of the CONDOR project, with the goal of understanding the processes that are involved in a consumer's choice to consume fresh or processed organic foods. The study aims at exploring consumer knowledge structures with regard to organic foods. 400 participants from England, Germany, Spain and Denmark were interviewed face to face. Attributes were elicited by the ranking of relevant product cards.
Morris, Mc Carthy, and O'Reilly	2004	University of Cork, Discussion paper, online	Investigates consumers' motivations for purchasing and consuming calcium enriched orange juice. 22 respondents were interviewed face to face.
White and Kokotsaki	2004	International Journal of Consumer Studies	Examines the consumption of Indian Food in the UK, among both English and Indian people living there. 24 respondents (12 from each group) were interviewed face to face.

Fotopoulos, Krystalis, and Ness	2003	Food Quality and Preference	Examines the relation of Greek consumers' value structures with regards to the choice of wine produced by organic grapes. 49 participants were interviewed face to face. Uses attributes in part of a list identified from the literature.
Krystallis and Ness	2003	Journal of International Consumer Marketing	Examines the personal values and motivations of Greek consumers of high quality foods. Focuses on the consumption of Olive Oil. 15 participants were interviewed during a pilot stage and 40 during the main research phase. A pre-specified list of attributes was used to elicit the attributes for the laddering process.
Urala and Lahteenmaki	2003	Nutrition and Food Science	Examines the reasons consumers give for either choosing or not choosing functional foods. 50 respondents were interviewed face to face. Attributes were elicited by the choice of respective product cards.
Makatouni	2002	British Food Journal	An effort to understand parents' behavioural processes with respect to organic food. 40 participants were interviewed face to face. Product attributes were elicited by the ranking of relevant cards depicting the products in question.
Naspeti and Zanoli	2002	Online – skymax-dg.com	Results from a European study on consumer motivations and perception of organic food. 104 respondents were interviewed with in-depth interviews.
Zanoli and Naspeti	2002	British Food Journal	An Italian study regarding consumer perception and knowledge of organic food and related behaviour. 60 respondents were interviewed through the "hard" laddering technique i.e. the administration of a written questionnaire which the participants fill in.
Grunert, Lahteenmaki, Nielsen, Poulsen, Ueland and Astrom	2001	Food Quality and Preference	Analysis of consumer perception regarding genetically modified foods. 288 respondents from 4 countries. Experts from the industry created example descriptions of possible products which were then tested in a pilot study and finally 3 products were chosen for the main study in order to elicit the MEC chains.
Brendahl	1999	Appetite	Insights into consumers' attitudes towards genetic modification in food production. 400 consumers were interviewed in 4 different European countries. Attributes were elicited by the ranking of the products presented to the consumers.
Gengler, Mulvey, Oglethorpe	1999	Journal of Public Policy and Marketing	Examines the choice of mothers to feed their infants through breast feeding and their motivations for initiating and stopping breastfeeding. 73 mothers were interviewed face to face.
Jonas and Beckman	1998	MAPP Aarhus School of Business, working paper, online	Examines consumer perceptions regarding Functional Foods. 40 face to face interviews with consumers were conducted in England and Denmark.
Nielsen, Bech Larsen, and Grunert	1998	Food Quality and Preference	Analyses cross-cultural differences in product preferences, product perceptions and purchase motives regarding vegetable oil. 190 respondents in three countries face to face. Attributes were elicited by the ranking of the different products that were presented to

			them.
Bech – Larsen, Nielsen, Grunert and Sorensen	1996	MAPP Aarhus School of Business working paper, online	A study regarding why Danish consumers buy different vegetable oils. 90 interviews were conducted with consumers in their place of residence. Attributes were elicited by the ranking of relevant product cards.
Gutman	1984	Psychology and Marketing	Examines consumers' cognitive structures in relation to the purchase of beverages. 80 respondents were interviewed face to face.

Table 2. Final Attributes-Consequences-Values categories list

		Attributes
1st Level	**2nd Level**	**Analysis**
Product Characteristics	Absence (presence (high - low)) of Pesticides, chemicals and additives	Absence of pesticides, chemical fertilisers, post-harvest chemicals and wax, Additives, Additives, preservatives added, chemicals, artificial colours, Xylitol etc.., Less additives/chemicals, Less drugs/hormones in animal production, Less pesticides/fertilisers, No chemicals, No antibiotics/hormones, No pesticides, No pesticides, no artificial fertilisers, No straw shortening chemicals, No use of additives, no preservatives, no artificial colours added, no chemicals, Pesticides,
	Functional Products	Added calcium, Added vitamins, fibre, calcium, Calcium, Calcium, Caffeine, Vitamin C, Live culture, Reliability of claim, Reliable claim, Unreliable claim
	Presence (High - Low) or absence of specific substances	Antioxidants, Cholesterol, Cholesterol free, cholesterol reducing, High fibre bran, Alcoholic, Content of unsaturated fat, Less Alcoholic, Low cholesterol content, No active enzymes, No Caffeine, Sugar, Sugar-Free, Vitamin C, Unsaturated fatty acids, Cholesterol-Free
	Fat and Calories	Light , Light , Lightness, energy content, Less calories, Low fat content, Low in fat, Less oil, Hi Calorie, Low Calorie , High fat content,
	Genetically Modified	Genetically modified, GM, GM candy/turnips, GM fodder/ soy beans, GM free, GM material not present , GM material not present in candy
	Organic Product	Organic label, Organic label, Organic, Organic animals, Organic animals, Organic/ not organic, Not
	Product that is "animal friendly"	Animal welfare, Animal-friendly, Cruelty to animals, Not animal friendly
	Frozen or Chilled (or not) Product	Chilled product, not frozen, Frozen product
	Cold or hot product	Cold, Cold, lukewarm, Hot/Warn, Hot, Mild heat, Temperature
	Taste	Bad taste, Bad taste, boring taste, artificial taste, industrial taste, Better taste, Full rich taste, Good taste, tastes better, delicious taste, better pizza taste, Good taste, Mild taste, Home grown taste, Neutral taste, Different taste, ethnic taste, Soft-sweet Taste, Taste, Taste, Taste, Strong taste, Strong-bitter Taste, Sweet, Velvet taste, Spicy, Strength of taste, Pleasant taste, Heavy, Not Too Sweet , Taste, Tastes Good, No Aftertaste , Real/Genuine taste, Fruit and berries
	Colour	Clear colour, Clear Colour, Cloudy Colour, Deep red colour, Dull oil colour, Attractiveness of oil colour, Green Colour, Nice colour, Yellow Colour, Pink colour
	Texture	Texture of the flesh, Texture of the peel, Texture, fatness, Smooth, Smooth-thin Texture, Better texture, Carbonated, Oily-thick Texture, Pulp

	Looks - Odour	Looks delicious, looks/smells appetizing, Looks disgusting, does not look/smell delicious, Odour, Neutral odour, Strong odour, Appearance of the produce, Product appearance, Not clean, Ripeness
	Aroma	Light Aroma, Heavy Aroma
	Natural Product	Natural, Natural product, Natural product, pure raw material, Natural raw material, Naturally produced, Pure and natural product, Pure and natural raw material, Unnatural artificial product, Non-industrial product, good workmanship, natural, Industrial product, unnatural, Produced naturally, Wholesome, Wholesome product, nutritious, Unwholesome product, Degree of processing, Rate at which the produce is grown, Unnatural product, Grown/fed with natural ingredients,
	Branded Product	Brand, Brand name, Well-known brand, comes from a large/well-known enterprise, No-name/unbranded product, comes from a small/unknown enterprise, Large production unit, Size of producer, Branding, Branded Foodstuff
	Traditionality	Traditional, Traditional normal product/ production process, Traditional product/taste, Traditional image/text, Traditional farming methods, How it used to be, traditional product
	Freshness	Not fresh, stale/putrid ingredients, not made here and now , Short transport, Fresh, Fresh, Fresh, Fresh, fresh ingredients, fresh from the pizzeria, Freshness
	Nourishing	Nourishing, Nutritious, Nutritious
	Pureness	Pure
	Seasonal	Seasonal
	Vegetarian	Vegetarian
Packaging	Appearance of the Package	Appearance of bottle, Glass bottle transparent, Glass bottle Transparent, Nice bottle/label, pleasant packaging, transparent packaging,
	Size of the package	Package size, practicality, selection, Size >1 L, Size of 1 L, Size<1L, Right size, Too big, big size
	Shape of the Package	Bottle cylindrical, Glass bottle Coloured, Glass bottle Cylindrical, Glass bottle Squared, Different bottle
	Material of Package	Packaging material, Plastic, Glass, Can,
	Label	Attractive label, Keep until instructions, Poor information on label, Info method, Information on label, Informative packaging, Informative packaging, Label with good overall appearance, Label with text or design which brings in mind an image of Greek tradition, Non-informative packaging, boring packaging,
	Expiration Dates	Dates written Best before, Dates written Harvest, Dates written Bottling, Harvest date, Best before
	Environmental Packaging	Bottle recycling, Environmentally sound bottle/label, Glass bottle recycling
	Innovative Packaging	Olive oil bottle with different than the usual "wine bottle" shape, Olive oil bottle with herbs inside, Olive oil bottle with un- usual label in appearance and information written, Olive oil carton boxed bottle with a layer of straw inside, Olive oil wooden boxed bottle with a layer of straw inside
	Protective Packaging	Protective packaging, Protective packaging, little packaging, Non-protective packaging, much packaging

Convenience Dimension	Food Location	Easy to get, independence from opening hours, high availability, Good availability, Inconvenient location of point of sale, Difficult to get, low availability, Not easily available, Convenient/ Available
	Food Preparation - Cooking	Easy solution, takes little time, convenient, no planning needed, Convenient , Cooking process, Ease of solution, Difficult solution, not easy, time-consuming, needs planning, Ready prepared, ready to eat
Ethical Considerations	Animal Welfare	Space of animals, Stress when slaughtering
	Workers Welfare	Working conditions of the agricultural workers, Safety of the agricultural workers
Health Dimension	General Health	Healthier oil, Healthy, Healthy oil, Healthy products, Approved by health authorities, Not so healthy/dangerous, Hygienic
Familiar Product		Familiar, Familiar product, Familiar product, Familiar with brand, Exotic, Know what it is, know how to deal with it, Know product, familiar with oil, Unclear what it is, do not know what it is, do not know how to cook, Reminds of sun, summer, south, Varieties (traditional)
Origin	Origin of production (Area /Country, Grower)	Area of production, Area of production- origin, Country of origin, Country of origin, Country of origin, Country of origin Greece, Country of origin Other Mediterranean country, Danish product, Italian style, Italian style, Finish, Home/UK grown, Regional, Local, Local/regional products, PDO / PGI label, Known origin/producer, Trust in the grower and producer, Producing firm, Made for English, Made for Indians
Price	Expensive or Cheap, High - Low Price, Balanced Price	Price, Price, Price Low, Price Value for money, Price High, Price not expensive, Price, economic efficiency, High price, expensive, High prices, Inexpensive, Inexpensive, Low price, inexpensive, Good value for money, Value for money, Expensive, Expensive, Expensive/luxury oil
Quality	General "feel"	Good quality, Good quality, Good quality, Good quality, good quality ingredients, proper meal, Poor quality, Preservation instructions, Bad quality, poor quality ingredients, not a proper meal, No difference in taste or quality, High quality, Poor quality, Quality, Professionally made/ valuable info,
	Assurances - Certifications	Quality, Quality, Quality assurances, Extra virgin label, Quality assurances ISO / HACCP certif , Quality assurances Organic label, Quality assurances PDO / PGI label, Quality control, Quality control, quality is controlled, regulated, tested, No quality control, Quality assurances "Keep until" instructions. ISO / HACCP assurance, ISO HACCP, Natural-pure product assurance, Certified, Extra virgin category indication , AOC sign,
Sustainability - Environment	Energy Consumption	High consumption of energy/electricity , Low consumption of energy/electricity, Economical in use
	Environmental	Lessens environmental damage
	Perishability	Cannot be stored, perishable, short shelf-life, Long-term storable, to buy ahead , Long-term storable, to buy ahead, Perishable, Storable
Variety – Excitement		Authentic, Boring, Everyday meal, not a treat , Exciting, Freedom of choice, variety, Variety, Something different, variation, not usual, a treat

Product Specific Attributes	Pizza	Home-baked, to be baked from scratch, Delicious toppings, Disgusting, unappetizing toppings , Stone-baked, Thin crust, Too thick, thick crust, Unpleasant, non-crispy crust, hard crust, pasty crust, Sufficient toppings, Sparse toppings, Nice and crispy crust, generous crust
	Oil	Versatile oil, Versatility of oil, Not versatile oil, Olive variety , Fodder, residual product
	Wine	No bottle per year, No. of bottle per harvest year, Variety grapes

		Consequences
1st Level	**2nd Level**	**Analysis**
Abundant		Ability to feed and sustain the population, Abundant ,
Care for family		Affects health of family, Caring for family, Children / partner, Children must grow, Family budget and constraints, Family preference, Good for the children, Good for the children, healthy / better for children / partner, Look after health of family, My family and I like it, Others/other members of the family like it, children will eat it, meets family's requests, Responsibility for family and self-well being and health, Spend time with the family, The family does not like, The family does not like it, children will not eat it, Bad for the children, Enjoyment in the family, cosy time at the dinner table with the family, having a good time with the children, more time for the kids , Enjoyment in the family, Reduces time spent with family, Family budget and constraints, Neonatal Care
Cooking		Cook from scratch, Cooking results, Good cooking results, Good for frying or salad, Makes Other Food Taste Good, Poor cooking results, Children assist in cooking
Cover your needs		Cover your needs , Filling , Refreshing /Thirst Quenching
Easy to buy/use	Convenience	Convenience, Convenience, ease, Difficult to buy/use, Ease of use of produce, Easy, Easier life, Easy to buy/use, Inconvenient location of point-of sale, Not easy to use, Practical/functional easier/simple life, Related to convenience , Space considerations, Easy to get information and identify the product, Does not spoil, Only one product necessary, Convenience, ease, Easier life,
	Less waste	Clean and tidy kitchen, no washing up, Messy kitchen, Lots of waste,
Eating Enjoyment	Taste	Good quality taste, Taste and other sensory quality, Taste deteriorates, Tastes good, Tasty , Tasty food, Tasty/enjoy
	Texture	Soft texture
	Enjoyment	Enjoy eating it, Enjoyable, Enjoyment, Enjoyment in the family, Enjoyment of food, Enjoyment of meal, Enjoyment, good experience, Enjoys, Exciting, Less enjoyment in the family, tensions at the dinner table, quarrels with the children, less time for the kids , Less enjoyment, bad experience, Tasty/enjoy eating , Eating enjoyment,
Pleasure[2]		Feel Better, Feel good, Feel pleasure, Feels Good/Satisfying, Give others good experiences, Gives enjoyment, pleasure, Have a good time, no stress, relax, does not have to watch the time, Joyful , like eating, My family and I like it, Others/other members of the family like it, children will eat it, meets family's requests, Pleasure, Pleasure/enjoyment/contentedness, Keeps Interest Up/Not Bored , Warms You Up , Relaxing/Calming , Reduce Inhibitions , Nice meal

[2] "Pleasure" is defined here as "sensual gratification" (dictionary.com) as opposed to "Satisfaction – getting satisfied" which is not a synonym but rather refers to a person-relevant reaction of gratification and contentment that comes from the product choice of the individual. Thus, "Pleasure" is more an index of the hedonic aspects of the product which would cause the individual to experience such a sensual gratification and that is also why in most cases chains which contain "Pleasure" in them are usually linked to the value of "Enjoyment / Hedonism"

Brand loyalty and habit		Brand name value , Familiar with brand, habit,
Fresh		Stays fresh
Get satisfied		Can indulge myself, Can indulge myself, give myself what I deserve, feeling of luxury, Does not get satisfied, is still hungry, Get satisfied, get enough to eat, Happy and satisfied, Good end result ,
Healthiness	Avoid allergy	Allergy risk, Avoid allergy, Become allergic
	Eating healthy	Eating healthy, Eating/staying healthy, Fortified vitamins, fibre, calcium
	Good for bones' healthiness	Avoid osteoporosis, Good For Bones , Healthy and strong teeth, Strong bones and teeth, Strong bones: bones don't break,
	Good for diabetics	Diabetics can eat
	Good for guts' healthiness - Better digestion*	Better digestion, Help digestion, Positive effect on gut and intestines, Easy to digest, Stomach friendliness
	Good for heart healthiness*	Avoid heart attack and blood diseases, Keep cholesterol level down,
	Good for stomach healthiness	Affects other micro-organisms in stomach, unbalanced gut flora, Good for stomach medicine, Risk of harmful effect in stomach
	Healthy body and physical well-being	Artificialness, Care for my body , Effects on the body, body needs, Good physical condition, Healthy body, Healthy body and physical well-being, Keeps you in shape , Physical health, Wholesomeness & physical well-being,
	Lower cancer risk	Lower cancer risk
	Promotes health	Avoid diseases, Bad for health, Control over state of health, Don't Get Sick , Fear of disease, prevention of disease, Good for health, Good For You/Healthy , Health-related, Healthy, Healthy, avoid illness, Less healthy, diseases, abnormities, Looks unhealthy/wholesome, Minimize the health risks, Avoid health problems, Get healthier, avoid allergy, avoid illness, not throw up, not get fat , Get less healthy, fall ill, become allergic, throw up, gain too much weight, Healthiness, Healthiness, advantage, Healthiness, superiority, Promotes health, health effects,
	Provides more energy	Energy content, Energy in daily life, Hypes You Up/Energizes , Less energy, Less energy, fatigue, feel unwell, Lightness, energy content, More energy,
	Reproduction issues	Disturbance of reproduction
High nutritional value		Nourishing, Nutritional value, Poor nutrition/illness,
Monetary considerations	Value for money	Get something for my money, quality for my money, value for money, does not feel cheated, Knows what to get (Price-quality), Poor value for money, no value for money, feel cheated, no relation between quality and price, wasted, economic efficiency,

	Monetary considerations	Subsistence wages, Can afford, Economical, Economy stays balanced, Monetary considerations, Negative impact on family budget, Save money , Save money, avoid waste, Save money, better economy, buy something else, Saves financial resources, Tight budget – avoid waste, Satisfactory income , Profit seeking
Moral concerns		Ethical production, Moral concerns, Morally right, right thing to do, Morally wrong, Responsible/moral behaviour, Avoid bad conscience , Avoid worries/soothes my conscience, Bad conscience, Being a better person, Fits the ideals,
Naturalness		Avoidance of unnatural things, Chemicals cumulates, Chemicals do not cumulate, Closer to real oranges, GM free, Natural/authentic , Naturalness, Nature as the basis for human life, No food additives, Pesticides are absorbed, Pure-no additives , Purity/no chemicals, Spreading of GM organisms in nature, Naturalness and wholesomeness,
Nostalgia - Traditional - Religious		Nostalgia, Reminds past experience , Cultural, Traditional/self identity , Value for tradition, Related to religion ,
Performance improvement		Can cope with the challenges of the day, can attend to my work, Cannot cope with/meet the challenges of the day, cannot attend to my work, Productivity – duties and hobbies, Perform well at work, education, Stimulant
Product Aesthetics		Aesthetics, Attractive, Elitarian , Look nice and attractive, Valuable/prestigious guaranteed
Quality		Deteriorates quality, Improves quality, Improves quality
Socialize		Can give others/ friends good experiences, Cannot give others/ friends good experiences , Family eating together - social occasion, Meet other people, Relationships and co-operation with others, Socialize ,
Supporting		Affects viability of countryside, Creates employment, Creates no waste, Educational , Ethical production, Help local farmer/ producer (c40) , Like to support, Safety of workers, Support Danish production, Support for farmers, Support for organic movement, Support local economy, Support national production, Support organic farming, Support your country, Better conditions for education & career, Cultural
Sustain/protect the environment	Support animal welfare	Animal welfare, Animals are stressed, Awareness of animal treatment, Better animal welfare, Happier animals, Healthier animals, Poor animal welfare - harms animals, Protection of wild animals/wildlife, Slaughtering affects quality of foods, Support animal welfare, Cruelty to animals
	Preservation of nature	Destruction of environmental, Ecology, harmony with the universe and sustainable future , Environment stays clean, Environmentally friendly , Good for environment/nature, natural balance maintained, Harms nature , Harms nature, environment/ plants animals disappear, Harms nature, undesirable environmental effect, Lower environmental impact, Preservation of nature, Preservation of the physical environment, Preserves nature, good for nature, good for the environment, Sustain/protect the environment, Avoid waste, Respect and protect the environment, Recreational value of environmental remain, Respect for nature, Ability to live in tune with the seasons, Harms future generations
Time		Lack of time, Less time for other things, cannot do something else I want, cannot do more important things, Reduces time spent with family, Save time for other activities, can do something which is more important, can do something else I want to do, Saves time, Spend time with the family, Time consuming, Time saving, time for the family,

		Timesaving, time-consuming,
Trust	Trust	Avoids fear/risks of unknown, Cannot trust the product, does not know what it contains, does not know what has been added, does not understand the declaration of contents, Trust, Trust in the production process, know how the pizza has been made, know how the pizza has been stored, hygienic pizzeria, Trust the product, know what it contains, know what is added, Uncertainty, Uncertainty/ don't know what it is, Cannot try something new and exciting, cannot experiment, Creates suspicion, Does not trust the production process, does not know how the pizza was made and stored, unhygienic pizzeria, Know what to get , Certainty that the produce is truly organic, Fair/honest , Convincing Suspicion, uncertainty, robbery
	Comfortable with the product	Comfortable with product, Comfortable/Familiar/Habit , Familiar, Familiar with brand, secure, Uncomfortable with product, Immediate preference, Usual/out of habit , Family eats a lot
	Control what I eat	Control what I eat, know what I eat, control when to eat, can be prepared for spontaneous guests, flexible solution, Does not know what I eat, no control over what I eat, no control of when to eat, inflexible solution, Control the ingredients, Control of consumption
	Food safety	Food safety, Safe , Safety feeling secure, Safety, know what you get, Creates security, Concerned about food intake, Develop diseases, Reliable, Safe
Useful		Children can assist in meal preparation, involves other members of the family, requests some activity from others, children can do it themselves, Children do not learn anything, children do not learn the right thing, Children learn something, Children learn something, Useful , Educational , Valuable info, Resources for other things
Variety - Freedom of choice		Can decide on the ingredients, can select/add extra toppings, large choice, Can do alternative activities, Cannot decide on the ingredients, cannot select/add extra toppings, small choice, Variety , Freedom of choice, variety, Can try something new and exciting, can experiment, Can do alternative activities, Try something new, Decide on the ingredients, Not limited and dependent on others, Can do alternative activities
Weight		Avoid overweight/loose weight, Avoid weight gain, acne, Care for my body , Weight Control , Keeps you in shape , Stay/ become slim, Gain too much weight, Curbs Appetite

Values
Instrumental
ACHIEVEMENT, ACCOMPLISHMENT, ambition, accomplishment, ambition fulfilment, Personal achievement, Feel useful, Distinctiveness, Professional success , Reward for an effort , Personal progress
APPEARANCE, Physical appearance,
AVOIDANCE, Avoid Rejection, Disappointments, Dissonance
BELONGING, Part of a team, social approval, Friendship, Avoid Rejection, Affiliation
BENEVOLENCE & ALTRUISM, Benevolent to others, make others feel good, altruism, do something good for the children/ partner, Care for future generations, care for others / family, Taking care of family, Being a good mother, Care for others/family, Love for family
DIVINATION, Approach god, God/creation
ETHNOCENTRISM, ETHNICISM, Support country, National reputation/history, National sentiment, Patriotism, National pride
FAMILY, welfare, well - being, well-being and security
FEEL GOOD ABOUT ONESELF, Feel good about self, pleasure, happiness, Feel relaxed and satisfaction, Being a better person, Fits the ideals, Organised life, Being a "normal" human being , Personal progress
FREEDOM & INDIVIDUALITY , independence, personal development, self reliance, individuality, For oneself, individuality
HAPPINESS, Make dreams
HARMONY, inner harmony, harmonious and happy life, Harmony, balance and sensuality, Internal calm/peace of mind/ emotional equilibrium, Peace of mind, a balanced life, Psychological satisfaction, inner balance, inner harmony, relaxation
HEALTH, A healthy and long life, good health and a long life, good life, preserve a good health, live longer, Live a long life, Long and healthy life, Own health, Weight control, Fear of disease, prevention of disease, Effects on the body, body needs, Healthiness/long life, Healthy olive oil/long life , Long and healthy life, Long life , Longevity
HEDONISM, ENJOYMENT, pleasure, enjoy life, food as an enjoyment, Pleasure, Food as a sensory experience, Enjoying life, Contentment ,
HONESTY
INSTINCT OF CREATION
INSTINCT OF SURVIVAL
INTELLECTUALITY, Open-minded
POWER, Control over life and health, in control, Powerful
QUALITY OF LIFE
RELIGIOSITY, Religion
RESPONSIBILITY, for future generations, evolution, for nature and environment, treating animals decently, unity with nature, protecting the environment, for oneself, for the health and future of children/ family/ partner
SECURITY, feeling of safety, certainty, Savings, Safety excellence

SELF - DIRECTION, Improved performance, activeness, wisdom, learning things,
SELF - FULFILMENT, Fulfilment, Accomplishment
SELF-DIRECTION, self-respect, Self-esteem, feel successful, Self Confidence, self efficacy, Fight in life , Self-knowledge , Positive/optimistic
SOCIAL LIFE, Social togetherness, not lonely, a good social life, family togetherness, Social relationships
SOCIAL STATUS, Social recognition, liked by others
STIMULATION, EXCITEMENT, get the most of life, Variety/refreshing, an exciting life, an eventful life, a varied life, fun, Adventure ,Development, activity, Motives for more
TRADITION, Respect for traditions, the way I was brought up, Sense of continuity, Protect identity, culture, food tradition,
UNIVERSALISM, Respect , Egalitarian, Animal welfare, Balance of nature, Belief in nature, Common good, Environmental protection, Social welfare/make the world a better place, good social relations, Economy stays balanced, Altruism and relationship with others, Respect for nature environment/following generations, Respect for other creatures, Respect for other people, Respect and responsibility for the animals and their rights, Respect of nature, Social justice, avoid inequality, Unity with nature, better environment, Solidarity with nature & inner harmony, Warm relationships with others, Socialisation of children, transfer good values to children, Love for others, Understand/learn the world ,Price, economic efficiency, Sustainability
WELL - BEING, General well being