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Means-End Chain Theory Applied to Irish Convenience Food Consumers

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Abstract. This study focuses on two food-related lifestyle consumer segments that were identified as high frequency purchasers of convenience foods on the Irish market; the hedonistic and the adventurous consumer segments. The objective of this study was to get an understanding of how these consumers relate a distinctive attribute of convenience food, i.e. prepared, to obtaining higher order values in life. Twenty individual interviews, applying the laddering technique, were conducted in summer 2002. Means-end chains were explored for both segments. Results revealed that the values attained by the consumption of prepared food were very similar for both segments. However, some differences occurred in the motivational cognitive networks leading from the attribute 'prepared' to the end values. Both segments associated prepared food positively with feeling good about themselves & relaxing and family happiness, and negatively with family's health, wellbeing and security. For the hedonistic consumer, consequences preceding the positive values were saving time, convenience, flexibility, having a treat, and limiting waste of food. For the adventurous consumer prepared foods were viewed as saving time, convenience, flexibility, and variety in the daily meal pattern. With respect to family's health, wellbeing and security, the hedonistic consumer had concerns about prepared foods being bad for the family's weight control, while the adventurous consumer had doubts about the quality of ingredients in prepared food.

Keywords: Food-Related Lifestyle, Convenience Food, Means-End Chains, Laddering Technique.

1. Introduction

The prepared consumer foods (convenience foods) sector in Ireland is a significant part of the Irish economy. In 2001, just under half of the sector's total output was exported for a value of €841 million, representing a 12% annual increase [1]. The sector's strong growth both in exports and in total sales has made it one of the fastest growing sectors of the food industry in Ireland. For the purpose of gaining an understanding of why Irish consumers buy convenience food, consumer attitudes and beliefs towards convenience food were explored in 2001, using the Food-Related Lifestyle instrument [2, 3].

The Food-Related Lifestyle instrument was originally developed by the Centre for Research on Customer Relations in the food sector (MAPP Institute in Denmark) with the aim to segment consumers by how they employ food and eating to obtain life values [4]. The instrument was cross-culturally validated within Europe [5, 6, 7, 8]. The FRL instrument was applied in the Irish market in 2001 and six food-related lifestyle segments were identified: the hedonistic consumer (28%), the conservative consumer (21%), the extremely uninvolved consumer (16%), the enthusiastic consumer (14%), the moderate consumer (13%) and the adventurous consumer (8%)[2]. These six segments were described based on their attitudes towards food in general and convenience food, specifically. The Irish study also examined perceived purchase behaviour for twenty-two types of convenience food products. The hedonistic, extremely uninvolved, and the adventurous consumer segments were identified as the segments with the highest perceived purchase behaviour for these convenience food products. Table 1 gives a short description of two of these three segments; the hedonistic and the adventurous segment.

The descriptions are based on their food-related lifestyles and their attitudes towards convenience food.

Table 1. Descriptions of the hedonistic and adventurous consumer segments based on convenience related issues

Segment	Segment description
THE HEDONISTIC CONSUMER	Convenience is important to the hedonistic consumer. Product information is not overly important to them. Snacking is important to them; they often prefer to snack instead of eating a meal. They enjoy eating out and having dinner parties with friends at home. They feel they are time pressured and they believe that convenience food is good value for money and that it saves time. Importance of health and freshness was relatively low compared to other segments. Although they do not have a great interest in cooking and do not get much self-fulfillment from cooking, they enjoy trying new foods and being innovative in the kitchen. Their sense of security with food was slightly under average. The hedonistic consumer was ranked the number one purchaser in several of the convenience food products and services, such as frozen pizzas, prepared dinners, sauces and vegetables.
THE ADVENTUROUS CONSUMER	These consumers are very involved with food. Food represented novelty and a way to socialise and develop relationships to these consumers. This segment is interested in product information. They are not influenced by advertisements, do not make shopping lists and price is not important to them. Health and freshness are important qualities. They are very interested in trying new foods as well as organic food. This group really enjoys cooking and looking for new ways of cooking. These consumers snack less than the average and eating out is very much a social event. This segment is less stressed than average. People belonging to this group are less likely to experience family breakdown at mealtime. They do not believe that convenience foods are healthy. The adventurous consumers were not substantial purchasers of many of the store bought convenience foods, such as frozen chips, frozen vegetables and prepared sauces. However, they were ranked joined number one for prepared dinners. They tended to prefer meals that were prepared outside the home, such as home delivery, takeaways, eating in restaurants.

Source: Ryan (2002) [2]

In 2002, focus groups were conducted with the hedonistic and adventurous segments, for which respondents were recruited using a reduced version of the original FRL questionnaire [9]. The main aim of the focus groups was to gain a deeper understanding of high frequency convenience food purchasers' attitudes towards convenience food and, at the same time, test for the reliability of the reduced questionnaire. To address the latter, focus group results were compared to hedonistic and adventurous segment descriptions obtained with the original FRL questionnaire and results showed that the focus group descriptions reflected reasonably well the main characteristics of the original segment descriptions [9]. The focus group interviews supplied the current study with a list of convenience food products that were identified as 'most convenient' by the hedonistic and adventurous consumer in the focus groups.

1.2 Current study

The focus of the current study is on exploring hedonistic and adventurous consumers' deeper motivations for buying convenience foods. It was felt that an individual approach would be a logical continuation from the focus groups, as it would allow for deeper probing into

consumers' motivational cognitive structures. The Means-End Chain Theory (MEC), using the laddering technique, was considered most appropriate for this purpose, as it would aid in revealing consumers' cognitive structures related to convenience food purchase and consumption. These cognitive structures represent how consumers relate product attributes associated with convenience food to obtain certain values in life. In this study we will focus on the ladders originating from the attribute *prepared*. *Prepared* may be considered as the most distinctive attribute for convenience foods as it is highlighted to be a key characteristic in a number of definitions of convenience food. According to Capps, Tedford and Havlicek [10], convenience foods are defined as 'fully prepared or partially prepared food items where some or all of the preparation time, culinary skills, or energy inputs are provided by the food processor-distributor rather than in the home-maker's kitchen'. Forbairt [11] defines them as 'all products which have undergone secondary processing including ready meals, processed meats, pizzas, pies, savoury products, ice-cream and confectionery products, dairy desserts, soups and other prepared consumer ready products. In a study of Consumer Watch [12], convenience was associated with reducing the input required from consumers in either food shopping, preparation, cooking or cleaning after the meal. According to IGD [13], convenience foods are increasingly based around 'meal solutions' with "the aim to make consumers' lives easier when choosing and preparing meals". Focusing on attributes other than *prepared* would generalise the research to characteristics that could be present in any type of product (not necessarily convenience foods). The objective of the current study is to investigate whether or not both the hedonistic and adventurous segment have similar motivational cognitive networks originating from the attribute *prepared*.

2. Methods

2.1. Means-End Chain (MEC) theory

Gutman [14] introduced the Means-End Chain (MEC) theory to marketing and consumer research. His theory was inspired by research from Rokeach [15] and Yankelovich [16] who showed that values direct people's behaviour in all aspects of their lives. Gutman positioned the means-end chain theory as a way to understand consumers' cognitive networks related to consumption behaviour. Three important constructs in these networks are attributes (A), consequences (C), and values (V). Attributes are concrete (e.g. colour) or abstract (e.g. taste) product characteristics. Consequences are any result (functional or psycho-social) the product is perceived to deliver to the consumer. Values can be instrumental or terminal values; terminal values are preferred end-states of existence, while instrumental values are the cognitive representations of preferred modes of behaviour [17]. Walker and Olson [18] suggested that the three lower levels in the means-end chain (concrete attributes, abstract attributes, and functional consequences) represent the product-knowledge of consumers while the three higher levels (psycho-social consequence, instrumental value, terminal value) represent the self-knowledge of consumers. The basic structure of the means-end chain model is shown in Figure 1.

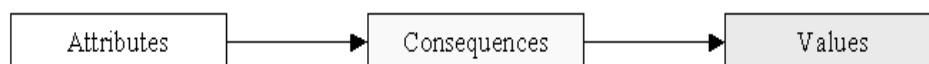


Figure 1. Basic structure of the Means-End Chain model

Source: Bech-Larsen et al., 1996, pp1 [4]

2.2 The laddering technique

Laddering is an in-depth, one-on-one interviewing technique used to gain an understanding of how consumers view the attributes of products to obtain higher order values in life, following the means-end chain theory [14]. Laddering involves a finely designed interviewing format using primarily a series of directed probes, typified by the “Why is that important to you?” question, with the final goal of determining sets of linkages between the key perceptual elements across the range of attributes, consequences and values. These association networks, or ladders, represent combinations of elements that serve as the basis for distinguishing between consumers perceptual orientations or different products in a given product class [19].

Two types of laddering can be distinguished; ‘hard’ laddering and ‘soft’ laddering. In ‘hard’ laddering the interviewer forces the respondent to answer in sequential ladders. In ‘soft’ laddering the means-end chain is used to structure data in an otherwise free-flowing natural speech [20]. ‘Soft’ laddering is believed to be more appropriate when the cognitive structure of the respondent is expected to be weak, due to low involvement with the product (food products are believed to be low involvement products) or when we do not have much previous knowledge about respondents’ cognitive categories.

2.3 Means-End Chains Theory applied to Irish convenience food consumers

2.3.1. Recruitment of respondents for individual laddering interviews

In total, twenty individual interviews were carried out with ten hedonistic consumers and ten adventurous consumers. Consumers were recruited by a market research agency using the reduced FRL questionnaire. The only two important recruitment criteria were segment membership, and being the main food purchaser and preparer in the household. All interviews were held in Cork in summer 2002. The majority of the respondents were female between the age of 25 and 60 years, with varying family sizes and employment status. Respondents received an incentive of 25 euro for a 1-1.5 hours interview. All interviews were taped.

2.3.2. Elicitation of product attributes

The first important step in the laddering interviews was the identification of product attributes that are important to consumers. The free sorting technique was used as it is recommended when the researcher is interested in eliciting attributes which could be used as the basis for probing further into the consumers’ cognitive structures of low involvement products [21]. Each respondent was presented with fifteen products (Table 2) that were identified as ‘most convenient’ during the focus group interviews (see introduction).

The fifteen products represented five different product categories within the broader category of convenience foods; vegetables, starch products, ready meals, meal centres, and meal preparation aids. Within the five different categories, preparation method (oven, hob, microwave) and preservation method (ambient, chilled, frozen) were varied. Variations in product category, preparation method, and preservation method were made to stimulate attribute identification in the elicitation exercise (discussed in the next section). All products were presented with packaging. In an attempt to minimise any response bias, a variety of product brands were included (including own labels).

Normally in a free sorting exercise, the respondent is asked to group products, which on some important point(s) are the same, and at the same time different from the products in other groups. However, the pilot interviews highlighted that this approach was too complicated due to the number of products presented. It was therefore decided to ask the respondent to group

these products into three sets based on frequency of purchase. Group one was products that were bought *often* (about once a week) by the respondent, group two was products that were bought *sometimes* (about once or twice a month), and group three was products that were never bought. Table 2 shows the results of this grouping exercise, i.e. the frequencies of purchase for all products per segment. These frequencies are similar across segments, except for ready meals, which were more frequently purchased by the hedonistic consumer. After grouping the products, the respondent was asked how the products in the groups were alike, and how they differed from the other groups of products [21]. The elicited attributes were used by the interviewer as a basis to probe further up the ladder to elicit all consequences and values associated with each particular attribute.

Table 2. Products used in the elicitation exercise in the laddering interviews and the categories they were attributed to in the elicitation exercise.

TYPE OF FOOD	Preservation method	Preparation method*	Frequency of purchase, groupings in elicitation exercise in laddering interview					
			Often		Sometimes		Never	
			Hed	Adv	Hed	Adv	Hed	Adv
Vegetables								
Beans	Tinned	H, M	6	8	4	2	0	0
Peas	Frozen	H, M	8	8	0	0	2	2
Stir-fry	Fresh/ chilled	H, M	3	3	2	5	5	2
Starch								
Noodles	Ambient	H	3	5	4	3	3	2
Pasta	Chilled	H	9	9	1	1	0	0
Fresh pasta	Chilled	H	2	2	3	5	5	3
Boil-in-the-bag rice	Ambient	H	9	10	1	0	0	0
Oven chips	Frozen	O	4	3	4	6	2	1
Ready meal								
Chicken curry	Chilled	M, O	3	0	2	6	5	4
Pizza	Frozen	O	6	3	3	5	1	1
Meal centre								
Chicken nuggets	Frozen	O	4	1	5	5	1	4
Burgers	Frozen	H, O	1	1	3	4	6	5
Breaded fish	Chilled	H, O	4	3	3	5	3	2
Meal preparation aids								
Pasta sauce in sachet	Ambient	M	6	4	4	5	0	1
Salad in bowl	Chilled	-	8	9	2	1	0	0

1. All products were presented in their original packaging

2. H = on the Hob, M = Microwave, O = Oven

2.3.3 Analysis of laddering data

All attributes, consequences, and values were entered into Laddermap and summarised by synonyms. Both authors of this paper coded the interview data (one author was the interviewer). Interpretation bias as a result of not having conducted the interviews [22] was minimised for the second author, as full transcripts of the interviews were available, i.e. all

context information was available. The inter-coder reliability was about 80%, i.e. there was about 80% agreement between the two coders on the coding of the data.

The analysis of laddering data was done by the Laddermap software and starts with a standard content analysis procedure in which a summary is made of the product attributes, consequences and values obtained [23]. Following on from this a summary table was constructed representing the number of connections between these elements (i.e. the implication matrix). Connections were then graphically represented in a tree diagram, termed a Hierarchical Value Map (HVM) [23]. In a HVM the thickness of the lines connecting the attributes, consequences and values represents the frequency of association.

3. Results

3.1 Attributes, consequences and values

The content analysis of the 20 interviews resulted in 556 idiosyncratic concepts, being registered and categorised under 30 labels; 8 attributes, 14 consequences, and 8 values. Table 3, 4, and 5 show the elicited attributes, consequences and values, the levels of abstraction of the attributes and consequences, and the number of respondents in each segment (and total number of respondents) that mentioned the attributes, consequences and values, respectively. Table 3 depicts all the attributes that were mentioned by the respondents. The attribute mentioned most by every respondent was *prepared*. This finding confirmed the assumption that it is indeed the most distinctive attribute related to convenience foods. The concept *prepared* included all idiosyncratic concepts that related to the food being prepared or processed, e.g. ready meals, ready washed salads, frozen foods, snacks. *Natural* and *fresh* were the second and third most mentioned attributes. *Natural* included concepts such as ‘no additives’, ‘raw ingredients’, and ‘grown in the ground’. *Fresh* represented ‘fresh food’, ‘fresh vegetables’, and all other terms in which the word fresh was mentioned. With respect to the two consumer segments, the attributes *flavour* and *nutrition* were mentioned more often by the hedonistic consumer than by the adventurous consumer, while *fresh* was mentioned more often by the adventurous consumer. All other attributes were mentioned with the same frequency across segments.

Table 3. Attributes elicited in the laddering interviews

ATTRIBUTES	CLASSIFICATION	HED ¹	ADV ²	Total
Prepared	Concrete	10	10	20
Natural	Concrete	9	7	16
Fresh	Concrete	5	8	13
Flavour	Abstract	8	4	12
Nutritious	Concrete	8	4	12
Fat content	Concrete	6	5	11
Aesthetics	Abstract	2	3	5
Origin	Concrete	1	3	4

1 The number of hedonistic respondents that mentioned this attribute,

2 The number of adventurous respondents that mentioned this attribute

Table 4 shows that the most mentioned consequences are *healthiness*, *wholesomeness* & *naturalness*, followed closely by *convenience*, *eating enjoyment* and *quality of ingredients*. To give the reader an idea about what concepts are included in the summarising terms of these most

mentioned consequences the following examples are given. *Healthiness* represents concepts such as ‘it is better for your health’, and ‘they are healthy in terms of vitamins, to name but a few. *Wholesomeness & naturalness* includes ‘the food provides nutrition’, ‘they give nourishment’, and ‘it makes a food more natural’. *Convenience* includes ‘it is convenient’, ‘it is handy’, or ‘it makes things easier’. *Eating enjoyment* summarises concepts such as ‘for enjoyment of food’ and ‘makes eating more enjoyable’. *Quality of ingredients* relates to the (dis) trust in the quality or origin of ingredients and is therefore represented by concepts such as ‘I just don’t trust where it is coming from’, and ‘I just prefer to know what is in it’. With respect to differences in the number of respondents that mentioned a certain consequence in each consumer segment; *convenience, eating enjoyment, weight control, a treat, and limit waste of food* were mentioned more by the hedonistic consumer than the adventurous consumer. The adventurous consumer mentioned *quality of ingredients* and *environmental concerns* more often than the hedonistic consumer.

Table 4. Consequences elicited in the laddering interviews

CONSEQUENCES	CLASSIFICATION	HED ¹	ADV ²	Total
Healthiness	Functional	8	9	17
Wholesome, naturalness, freshness	Functional	10	7	17
Convenience	Functional	10	6	16
Eating enjoyment	Functional	9	5	14
Quality of ingredients	Functional	6	8	14
Variety	Functional	5	5	10
Weight control, physical appearance	Functional/psycho-social	7	3	10
Save time	Functional	5	4	9
Entertaining guests, socialising	Psycho-social	3	5	8
Treat	Psycho-social	6	2	8
Flexibility	Psycho-social	3	4	7
Limit waste of food	Functional	5	1	6
Provide energy	Functional	1	4	5
Environmental concerns	Psycho-social	0	2	2

1 The number of hedonistic respondents that mentioned this consequence

2 The number of adventurous respondents that mentioned this consequence

Table 5 gives an overview of the most important values for the high frequency convenience food consumer. *Feel good* and *relaxation* was mentioned by almost all respondents as was the value *Family’s health, wellbeing and security*. All other values were mentioned by less than half of the respondents. *Feel good* and *relaxation* represents ‘it makes you feel good’, and ‘it gives you a relaxed feeling’. *Family’s health, wellbeing and security* summarises ‘I would especially fear for my children’s health’, and ‘it is for my own wellbeing and the wellbeing of my family’.

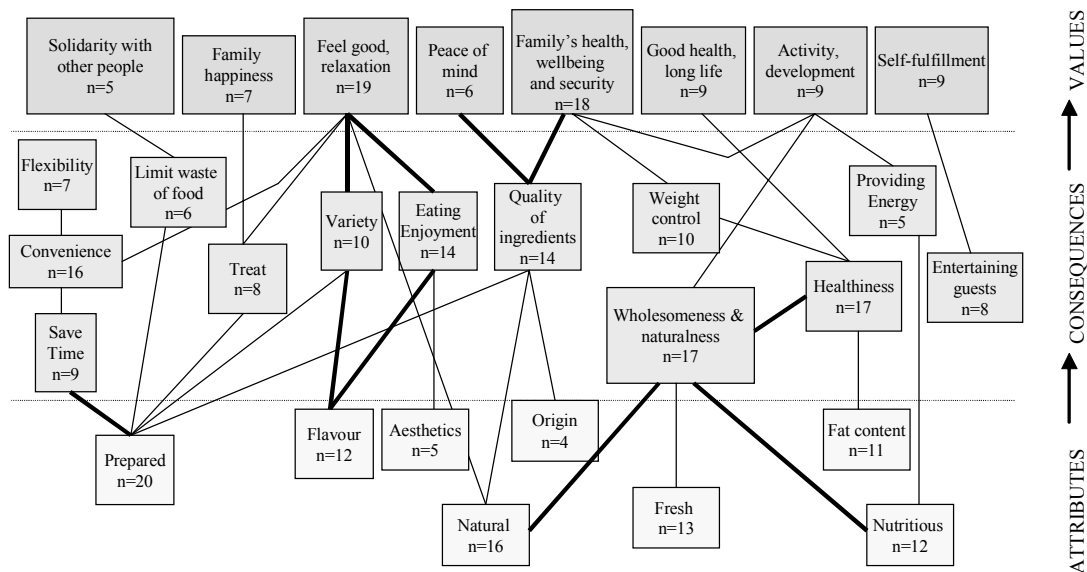
The most important values (three top ones in Table 5) were mentioned with the same frequency both segments. The hedonistic consumer mentioned *activity & development* more often, while the adventurous consumer mentioned *long and healthy life* and *peace of mind* more often. The HVM of all respondents (n=20) is given in Figure 2 and gives an overview of the cognitive associations related to convenience food consumption for high frequency convenience food purchasers (hedonistic and adventurous segments) in Ireland. A full discussion of this HVM would be too extensive for the scope of this paper as its focus is to discuss consumers’ cognitive networks originating from the attribute *prepared*. However, Figure 2 gives the reader the opportunity to appreciate the type of relationships present between all attributes, consequences and values of

all respondents. Each attribute, consequence and value displayed in Figure 2 was mentioned by at least 4 respondents (cut-off point of 4 was used). The thickness of the lines in the HVM represents the frequencies of association, i.e. a thicker line means a stronger association.

Table 5. Values elicited in the laddering interviews

VALUES	HED ¹	ADV ²	Total
Feel good, relaxation	10	9	19
Family's health, wellbeing and security	9	9	18
Self-fulfilment	4	5	9
Activity, development	6	3	9
Long and healthy life	3	6	9
Family happiness	3	4	7
Peace of mind	0	6	6
Solidarity with other people	2	3	5
Responsibility for nature	0	2	2

1 The number of hedonistic respondents that mentioned this value
 2 The number of adventurous respondents that mentioned this value



* 'brand' was not discussed as respondents were told not to consider brand names

Figure 2. HVM for all respondents (N=20), including all attributes, consequences and values

3.2 The Hierarchical Value Map for the attribute prepared

3.2.1 The hedonistic segment

The HVM for the hedonistic consumer segment is presented in Figure 3. Figure 3 displays those linkages that were mentioned by at least 20% of the respondents (i.e. cut-off point of 2 for a sample of 10 respondents). The choice for a relatively low cut-off point is to prevent much information loss when constructing the Hierarchical Value Map [22].

Figure 3 shows that the hedonistic consumer associated the attribute *prepared* with eleven consequences and four values. The numbers in the consequence/ value boxes represent the

number of respondents that made a direct or indirect association from prepared to the consequence/ value in question. The strongest association was made between *prepared* and *convenience*. All ten respondents made this association, either directly, or indirectly via *save time* “with this product I can prepare the dinner very fast”. *Convenience* was further associated with providing *flexibility*: “people often call in unexpectedly and it is nice to have something that doesn’t need any preparation”. Finally *convenience* lead to attainment of the value *feel good & relaxation* “when you cook seven days a week it is relaxing if you don’t have to cook for one day”. The value *feel good & relaxation* was the most important value associated with *prepared*, as the link (either direct or indirect) was made by 70% of all hedonistic respondents.

The second most important consequence associated with *prepared* was a *treat*. Sixty percent(60%) of all hedonistic respondents made this association. *Treat* was linked with *feel good & relaxation* and *family happiness*, indicating that the hedonistic consumer often sees prepared foods as a treat which makes it possible to relax or which can lead to a happy family in which one knows one’s children will enjoy it.

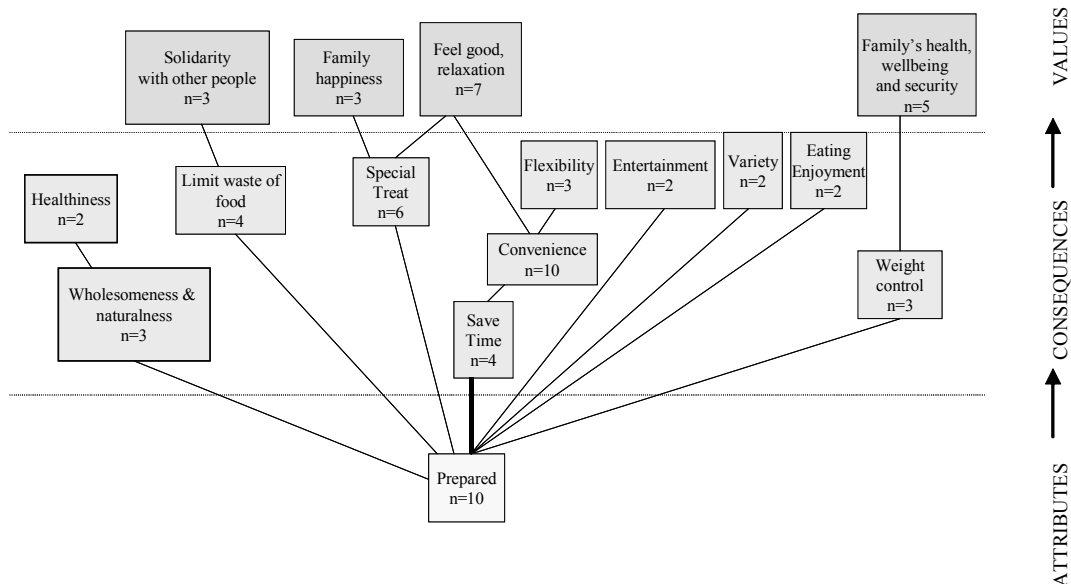


Figure 3. Hierarchical Value Map for the attribute prepared (the hedonistic consumer)

For the hedonistic consumer, the third most important consequence of *prepared* was *limit waste of food* “I hate buying loads of stuff and seeing things go off”. For example, the hedonistic consumer prefers to buy a salad bowl instead of buying a lot of different ingredients to make up a salad as these ingredients could go bad and consequently may have to be thrown away. *Limit waste of food* lead to the value *solidarity with other people*: “other people in the world are starving”.

Other consequences related to *prepared* were *weight control* and *wholesome, naturalness & freshness*. Both consequences were negatively associated with *prepared*. With respect to *weight control*, respondents indicated that they thought prepared meals were often high in fat, which would lead to them or their family members putting on weight. *Weight control* was associated with the value *family's health, wellbeing and security*: “putting on weight is not good for my family’s health”. The value *family's health, wellbeing and security* was the second most important value related to *prepared* (50% of the hedonistic consumers made this link). With respect to *wholesome, naturalness & freshness*, prepared foods were often associated with not being so fresh: “the pre-

prepared stir-fry vegetables, they are sitting in there for a while". These consumers associated fresh food with good for health and consequently linked less *freshness* to less *healthiness*.

Consequently, the hedonistic consumer appears to be balancing the positive and negative values when considering prepared foods.

Three other consequences, which did not lead to any value attainments were: *entertaining guests & socialising*, *variety*, and *eating enjoyment*. The hedonistic consumer uses prepared foods to socialise, to provide the consumer with some variety in the daily meals, and to increase eating enjoyment "the children love processed meat products such as chicken nuggets".

3.2.2 The adventurous segment

The HVM for the adventurous consumer segment is shown in Figure 4, presenting the cognitive associations with the attribute *prepared*. The most important consequence that the adventurous consumer associated to *prepared* is *convenience*. Sixty percent of the respondents made this association. Convenience was related to providing *flexibility* and *saving* time, finally leading to *family happiness*. The adventurous consumer would for example buy prepared foods to reduce preparation, which is time saving and gives them more time to spend with their family. Other than *family happiness*, *convenience* is associated with the value *feel good & relaxation*. This was the strongest value associated with prepared foods as the link was made by 60% of the adventurous respondents. Also the variety associated with prepared foods linked into value attainment *feel good & relaxation*. Respondents would buy prepared foods when they want a break from cooking so that they can be lazy and relax.

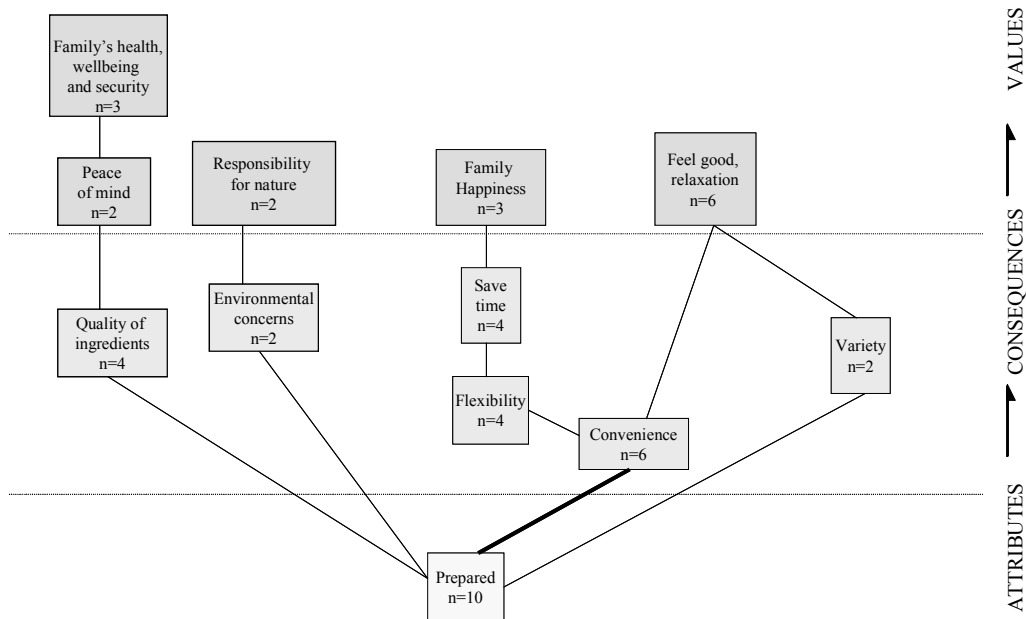


Figure 4. Hierarchical Value Map for the attribute prepared (the adventurous consumer)

Furthermore, prepared was negatively associated with *quality of ingredients*. The adventurous consumer does not often trust the quality of ingredients in prepared foods. As a consequence of this, the adventurous consumer had no *peace of mind* when he/she did not know the type and origin of ingredients in the product. They were afraid that a prepared product (with low quality ingredients) may harm their *family's health, wellbeing and security*.

Another negative association was made between *prepared* and *environmental concerns*. Prepared food was associated with extra packaging (“You can’t recycle those”), which did not get the approval of the adventurous consumer. The adventurous consumer preferred to buy foods with less packaging “I go for things with less packaging or less rigid packaging” as he/she feels *responsible for nature* (“I cannot abide litter, people can make so much more of an effort”).

Similar to the hedonistic segment, the adventurous segment perceives themselves to be both gaining and losing from the purchase and consumption of prepared foods.

4. Discussion and conclusions

In this study, the Means-End Chain Theory was used to explore the motivational cognitive networks of the hedonistic and adventurous consumer segments in relation to their convenience food consumption behaviour. Attributes, consequences, and values related to convenience food consumption were revealed using the laddering technique. The focus of this study was on the attribute *prepared* as this was assumed to be the most distinctive attribute related to convenience foods. The results indeed confirmed that the attribute *prepared* was mentioned most in association with the set of convenience foods presented in the elicitation exercise at the start of the laddering interviews. Results also highlighted that *prepared* had the strongest association with the consequence *convenience*. This was the case for both the hedonistic and adventurous consumer segment.

A comparison of the hierarchical value maps for the *prepared* attribute of the hedonistic and adventurous segment highlighted similarities but also some differences in the motivational cognitive networks between the segments.

With respect to the values obtained from prepared foods, these were very similar for the hedonistic and adventurous segment. Both segments associated *prepared* most with *feel good & relaxation*, followed by *family's health, wellbeing* and *security* and *family happiness*. The values *solidarity with other people* and *responsibility for nature* in the context of prepared food, were unique for the hedonistic consumer and the adventurous consumer respectively.

For both segments, *feel good & relaxation* was a positive value obtained from prepared foods. However, some of the consequences preceding this value differed across segments. Both segments attained this value via the consequence *convenience*, i.e. the handiness and convenience of prepared food made it possible for both segments to relax and feel good. With respect to differences in value attainment, for the hedonistic consumer, the consequence *save time* played a role, while the adventurous consumer did not immediately associate *save time* with *feel good & relaxation*. For the adventurous consumer the variety aspect of prepared foods was a reason to *feel good & relax*, as trying out new or different foods was very popular with the adventurous consumer (see Table 1 in the introduction). For the hedonistic consumer, another consequence leading to feeling good and relaxation was the fact that they regarded prepared food as a *treat*. This segment also regarded a treat as bringing *family happiness*. The adventurous consumer did not necessarily regard prepared foods as a treat that provided family happiness, but they considered *flexibility* and *saving time* as the most important consequences from prepared food to attain family happiness. For example, by saving time on food preparation they could spend more time with their children, eventually leading to a happy family.

Another positive value for the hedonistic consumer was *solidarity with other people*, which was as a result of a *limited waste of food* associated with prepared food. The adventurous consumers found themselves *feeling responsible for nature* as they considered the excess of packaging of prepared foods bad for the environment.

Both segments considered their *family's health, wellbeing* and *security* negatively affected by prepared foods. For the hedonistic consumer, this was the case via the association of prepared foods with losing control over weight and physical appearance. For the adventurous consumer, this value was not affected by worries about weight control but by the lack of control on the quality of ingredients in prepared foods, which lead to less peace of mind, and potentially harming *family's health, wellbeing* and *security*. The hedonistic consumer did not make the link between prepared food and distrust in the quality of ingredients but expressed limited faith in the healthiness of prepared food. Furthermore, the hedonistic consumer made more positive associations with prepared food than the adventurous consumer. This could be explained by their slightly higher involvement with convenience food purchase and consumption because, as Krugman (1967) [24] suggested, "a consumer's involvement in a product can be measured as the number of conscious bridging experiences between the product and the consumer's self knowledge". It may also suggest that they have a more positive attitude towards convenience food than the adventurous consumer. Examples of these more positive associations were: considering prepared foods as a treat, enjoyable to eat, and good for entertaining guests & socialising. All these associations could be considered hedonistic in nature, as could their concern with weight control and physical appearance. If we look back at Table 2 we see that the hedonistic consumer often bought ready meals and meal centres, more so than the adventurous consumer. This finding supports the idea that the hedonistic consumer is focusing on the more 'hedonistic traits' in food, as ready meals and meal centres may be regarded as a treat and enjoyable to eat.

The results of this study have given an insight into the motivational structures of two segments of high frequency convenience food purchasers with respect to purchase and consumption of prepared (convenience) food. The understanding of the deeper motivations of why these consumers buy or do not buy prepared foods can aid in product development and future communication strategies for these segments.

Although the small sample size used in this research limits the usefulness of the data for setting forth future communication strategies, we will briefly present a possible way to use the results of this study in building a communication strategy. Reynolds and Gutman [25] proposed the "Means-End Conceptualisation of the Components of Advertising Strategy" or MECCAS model. This model offers a framework to integrate the consumers' motivational cognitive structure, as embedded in the Means-End Chains, with communication strategies. The MECCAS model comprises elements of the communication strategy corresponding with each level of the means-end chain, as illustrated at the left-hand side of Figure 5. In order to be effective, the content elements in a communication message should link product attributes to consumer benefits, i.e. consequences, and values in a coherent and creative manner [26]. The right-hand columns in Figure 5 show the MECCAS representations for possible communication strategies for prepared foods for the hedonistic segment and the adventurous segment. This representation is based on the strongest MECs in the Hierarchical Value Maps for both segments, namely the *feel good & relaxation* value.

An effective communication strategy should focus on two things: 1) improving the strength of the positive ladders (i.e. MECs) and 2) reducing the strength of the negative ladders. An example of the former is to strengthen the links between the MEC elements for the hedonistic and adventurous consumer depicted on the right hand side of Figure 5. The latter can be done by, for example, attempting to reduce the distrust in the quality of ingredients for the adventurous consumer, or reducing the worries about weight gain for the hedonistic consumer. A communication strategy targeting both segments at the same time should include elements that are important to both segments (see Figure 2).

In conclusion, this study highlights the value of the MEC in gaining an understanding of the motivational cognitive networks associated with the purchase and consumption of convenience food. Furthermore, the study highlights the different routes to value attainment for the two segments. This difference should be appreciated in communication strategies to maximise market penetration.

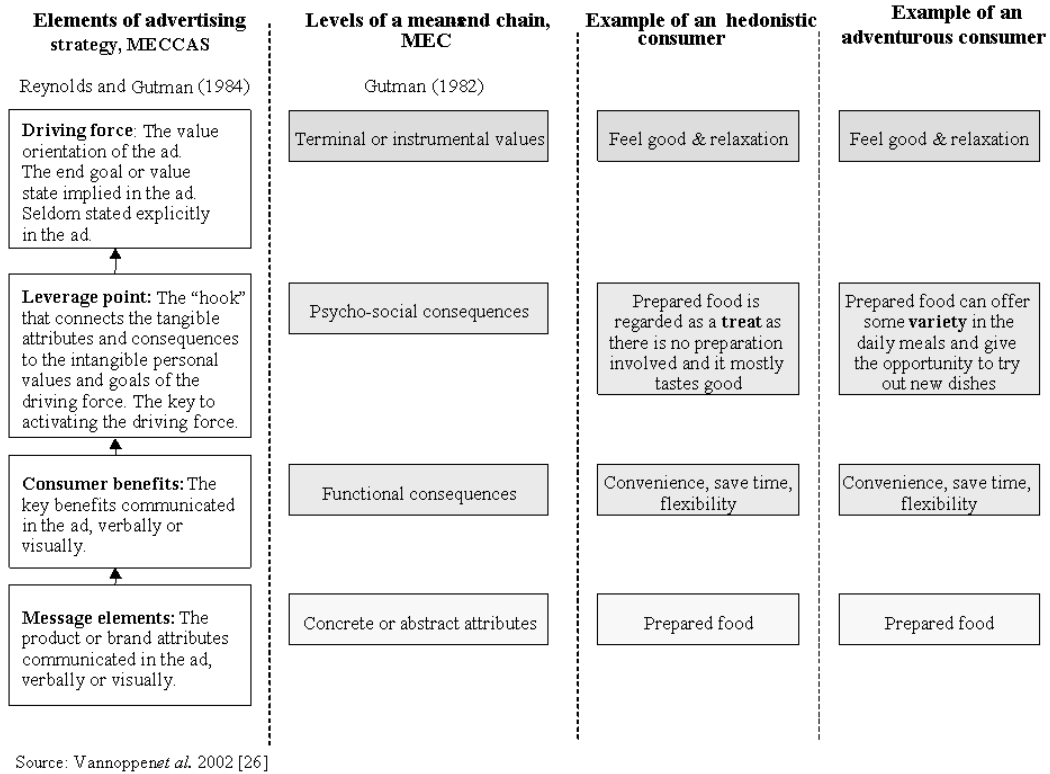


Figure 5. Means-end conceptualisation of the components of advertising strategy (MECCAS) and illustrations for the hedonistic and adventurous segment for the case of prepared food

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