

Search or Experience Products: an Empirical Investigation of Services, Durable and Non-Durable Goods

Philippe Jourdan

► To cite this version:

Philippe Jourdan. Search or Experience Products: an Empirical Investigation of Services, Durable and Non-Durable Goods. Asia Pacific Advances in Consumer Research, sous la direction de P.Tidwell, 2000, Brisbane, Australia. pp.167-182. hal-01134383

HAL Id: hal-01134383 https://hal.science/hal-01134383

Submitted on 23 Mar 2015

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Search or Experience Products: an Empirical Investigation of Services, Durable and Non-Durable Goods.

Philippe **JOURDAN** Assistant professor IUT Evry CERAG 26 rue Richer 75009 Paris Email.: philippe.jourdan5@wanadoo.fr

CONTENT AND METHODOLOGICAL CODES:

Content area codes: 32 - 39 - 58 - 59 Methodological codes: 15 - 24 - 27

TYPE OF SUBMISSION:

COMPETITIVE PAPER

This is to certify that the present article is not published or is not under review in any other publication than the 2000 ACR proceedings for the duration of its examination by reviewers.

ABSTRACTS:

The purpose of this article is to propose a new measurement scale of search and experience characteristics based upon a new definition for search and experience products. The author comes up with a new definition for search and experience products based on concepts such as determinant attributes, either intrinsic or extrinsic, revealed or hidden. The constructed scale is used to classify 52 product categories ranging from durable and non-durable goods to services. The results confirm to some extend the validity of the measurement tool. New insight on the service category is also emphasized. The implications in term of advertising strategy are then discussed.

ACKNOWLEDGMENTS:

The author would like to thank Mr. Alain Jolibert, thesis adviser for his constructive comments and suggestions, Mr. Gilles Roehrich and Jean Yves Saulquin for their involvement in the data collection, the members of the AFM for their participation in the data collection, and Valerie, his wife for her enlightened comments.

Search or Experience Products: an Empirical Investigation of Services, Durable and Non-Durable Goods.

The purpose of this study is to propose a new measurement scale for search and experience characteristics of product categories. The existing definitions of search or experience products have relied mostly on theoretical classifications such as that of Nelson (1970, 1974). As those classifications are not based upon consumer's judgment, they need to be confronted to consumer's perception of product categories. Therefore, this article departs from the economic information theory to present a new definition of experience or search products. Furthermore, A scale is thus built and validated. New insights on the service category will be emphasized.

1)- SEARCH OR EXPERIENCE PRODUCTS: FOUNDATIONS AND AMBIGUITIES

In the analysis of consumer information processing, economists first worked on two important elements of product evaluation: price (Stigler, 1968), and quality (Nelson, 1970, 1974). Nelson put forward the assumption that "evidence of the quality is the main question for the consumer". He did however note that price and quality are attributes which are different in nature: quality being uncertain in that it can only be confirmed *after* purchase from usage of the product over a certain period, whereas price is known with certainty *before* the transaction is made.

This difference between these two important product characteristics led Nelson (1970) to classify the characteristics of a merchandise into two categories: *experience claims*, which can only be evaluated with certainty after purchase and usage and *search claims* of which a definite evaluation can be made before purchase and use. Leading on from the definition of a search or experience characteristic, Nelson (1970) defined a search merchandise as a merchandise whose *essential* characteristics are those of search. Conversely, if its essential characteristics are those of experience it is an experience merchandise.

Ford et al. (1988) provided a more precise definition. Experience characteristics are those that " can be accurately evaluated only after the product has been purchased and used for a period of time which is relatively short in comparison to the product's total usage life" (p. 241)¹. These authors also expanded the notion of search characteristic to "those claims that can be accurately evaluated prior to purchase using prior knowledge, direct product inspection, reasonable effort and normal channels of information acquisition, such as Consumer Reports" (p. 241)².

Darby and Karni (1973)'s research on fraudulent advertising brought the authors to distinguish two categories within experience merchandise: real experience products and credence products. For Darby and Karni, real experience products are those whose buying quantity is known before the purchase and whose qualities can be verified at a low cost after the purchase and at the end of a reasonable period of usage. However, for certain goods, it is difficult for the consumer to fully appreciate the quantity to buy or the quality of the goods even a long time after their purchase (the cost of obtaining this information then becomes too expensive). These goods are called *credence products* because the consumer's evaluation of the quality depends entirely on the trust given to the product manufacturer. For example, the consumer does not know how often they have to consult their doctor nor the long-term efficiency of the prescribed treatment.

¹ The taste of a grocery product would be a typical example of an experience characteristic.

² The style of a dress, but also the color of a car are examples of search characteristics.

In practice, all products have various search or experience characteristics: in this light, what does the term "essential" mean in Nelson's definition? This lack of precision in the definition of a search or experience product by the nature of its characteristics could be overcome by considering the issue based on the determinant attributes. This will be done in this research.

2)- SEARCH OR EXPERIENCE PRODUCTS: A COMPLEMENTARY POINT OF VIEW FROM REVEALED AND HIDDEN ATTRIBUTES

The classification of search or experience products can be compared to a human mental judgment, that is to say the determination of a specific category in which one places the object or event in question, and the degree of certitude, i.e. the degree of trust one puts into his judgment. Similarly, in marketing, the consumer's product evaluation is based upon the evaluation itself and the certitude of this evaluation (Olson, 1977). Furthermore, the overall evaluation of a product is carried out in a two steps process: the specific evaluation that is made on certain product attributes from certain pieces of information and the overall evaluation that arises from this specific evaluation. This mental process leads us to present a definition of search and experience products based on their relevant attributes. This will be achieved by introducing the notions of determinant product attributes, either intrinsic or extrinsic, revealed or hidden.

A)- THE DIFFERENT TYPES OF ATTRIBUTES

In our research, we shall adopt a definition of the attribute concept that is different from the concept of a piece of information. In fact, the product attribute is processed information whereas a piece of information is raw information (Jun, Jolibert 1983). The attribute is usually the combination of one or several pieces of information. This dichotomy between the two concepts of attribute and piece of information is similar to the one set out by Cowling and Cubbin (1971) or Maynes (1976). Although these authors offer different definitions, they agree on the existence of at least two levels of product characteristics: a group of directly and objectively measurable characteristics, referred to here as pieces of information and an abstraction of basic characteristics, qualified here as attributes.

As it is difficult to establish the number of attributes that are taken into account in the consumers' process of attitude formation towards a product, market research is essentially focused on attributes that explain the choice of a product (Alpert, 1971, 1980). From this perspective, only the determinant attributes are retained, thus meaning only those which "are important in the purchase decision but which also allow differentiation between one alternative solution and another" (Alpert, 1980, p. 88).

Another approach is centered on the nature of the product attributes, distinguishing between their intrinsic or extrinsic, revealed or hidden characteristics.

The dichotomy between *intrinsic* and *extrinsic* attributes originates from research by Olson and his colleagues (Jacoby, Olson and Haddock, 1971; Olson, 1972; Olson and Jacoby, 1972; Olson, 1977). An intrinsic attribute is an integral part of the physical product. Conversely, an extrinsic attribute does not form part of the product but part of its environment. For example, the color or the design are intrinsic product attributes, whereas the price, brand or store image are extrinsic attributes. Olson (1972) states that, "for most product categories", intrinsic characteristics are "generally" better indicators of quality than those of an extrinsic nature. The author deduces that the consumer uses extrinsic attributes each time that intrinsic attributes are not available for evaluation. From this perspective, the value of an extrinsic attribute is a function of the value of an intrinsic attribute.

Thus product attributes can be divided into two categories: *revealed* attributes and *hidden* attributes. Consumers evaluate revealed attributes on the basis of sensorial observations, whether it be visual, olfactory, tactile, gustative or auditory. Product color, texture, size, volume and price, as well as some directly observable performance criteria such as the power of an engine, are examples of revealed attributes. Conversely, hidden attributes are all the attributes that the consumer can not evaluate by sensorial observation. Durability, reliability and efficiency of a medication are examples of hidden attributes that can not be evaluated until after the usage or consumption of the product.

We can link the hidden or revealed nature of product attributes to the concept of descriptive and deductive beliefs of Fishbein and Ajzen (1975). Descriptive beliefs are elaborated from pieces of information that are available in the immediate environment, whereas deductive beliefs are developed by indirect human inference regarding a concept or an event that is not directly accessible or evaluable (Fishbein and Ajzen, 1975; Lutz, 1975). We can deduce from this that descriptive beliefs are formed around revealed attributes while deductive beliefs are based on the hidden attributes of the product.

The adopted classification of product attributes leads us to assimilate a search characteristic with a revealed intrinsic product attribute. As we are only taking into account the determinant product attributes, we are defining a *search product* as a product *whose majority of determinant attributes are revealed intrinsic attributes.*

A reasoning similar to that applied to search products leads us to assimilate an experience characteristic with a hidden intrinsic product attribute. Therefore, we are defining an *experience product* as a product *whose majority of determinant attributes are hidden intrinsic attributes*.

1)- REVIEW OF EXISTING CLASSIFICATIONS AND STATEMENT OF RESEARCH OBJECTIVES

The main existing classification into search or experience products comes from the research of Nelson (1970, 1974), to which more recent works refer (Zeithaml, 1981; Riezebos, 1994). Nelson (1970) sets out two classification criteria:

- *Durable goods* are associated with *search products*, except for those for which the cost of repairing represents a large part of the purchase value. Indeed, for these goods, the reliability (defined as the probability of breakdown during the normal life cycle) is a determinant purchase criterion. They are thus considered as experience goods, as the reliability is a hidden characteristic, difficult to evaluate with any certitude without a prolonged usage of the product.
- *Non durable goods* are generally assimilated to *experience products* apart from products for which the promotion includes a systematic delivery of free samples. Indeed, free sampling, prior to purchase and adoption of the product, transforms the search product into an experience product.

The critical examination of the proposed classification criteria goes beyond the context of this article. We only maintain that the lack of precision in the specification of the classification criteria leads to inaccuracy in the proposed classification: what should we understand by a "large part of the purchase value" or by a "systematic presentation of free samples "?

A simple example shows that the product categories of search or experience are not mutually exclusive. Whilst Nelson classes jewels as search products, he lists watches under experience products because of repair costs. Today, the evolution of technology, strong competition and changes in usage, revealed, for example, by the success of SWATCH watches has led the consumer to revise their determinant purchase criteria: the reliability becomes secondary compared to the aesthetic or fashion criteria. With the exception of upmarket models, which obviously have high repaired costs, the watch can therefore be considered as a search product.

Thus the Nelson classification only partially responds to the validation criteria proposed by Hunt (1976). As a result of this, we prefer an evaluation method using a 10 point metric scale. The opposite poles of this scale are labeled according to the adopted definitions of search and experience products.

In more general terms, the objective of this research is to elaborate a product classification based on a metric scale, preferred to a method of classification by judges, in order to achieve a search and experience product classification for all product categories, services included.

2)- METHODOLOGY

The scale used is a continuous "metric" scale from 1 to 10. The grade 10 reflects the revealed characteristic of the product (search product) whereas the grade 1 demonstrates its hidden characteristic (experience product). Respondents are asked to allocate a grade from 1 to 10 to each product category, excluding those that they never purchase:

- The grade 10 means that the product can be fully evaluated before purchase using information sources such as technical or descriptive cards, the specialized press, catalogues, word of mouth or visual examination of the product and of its characteristics prior to use.
- The grade 1 means that only the trial or the usage of the product over a certain time period allows a complete product evaluation, no matter what other available information sources are.
- Intermediary grades allow the respondent to qualify their judgment.

We retained 17 durable goods, 30 non-durable goods and 5 service providers, a total of 52 different product categories belonging to different areas of consumption ranging from groceries, clothes, and hygiene to household goods, transport and leisure. Most of these product categories are equally likely to be evaluated and (or) bought by men and women.

A)- DATA COLLECTION

The questionnaire was administered using two different samples. The first, subsequently called the experts' sample, was composed of 436 people, academics and (or) marketing practitioners, members of the French Market Association (AFM). The second, named the students' sample, comprised of 192 students in the second and third cycle of management science degrees at 4 different business schools or universities. No criteria on sex, age or other demographics were imposed.

The two samples can therefore be qualified as judgment samples (Perrien et al., 1984): this choice was justified in order to include people who were most likely to give pertinent information – hence the choice of experts – and to save the possibility of measuring the gaps in the judgment with a control panel composed of students.

The questionnaire, which was identical for the two samples, was administered using two different methods: a self-administered mail questionnaire for the sample of experts and a self-administered questionnaire under teacher supervision for the student sample. 252 valid questionnaires were returned, a return rate of 57.8%. The number of valid questionnaires filled out by the second sample came to 192. The number of respondents was thus set at 444, the total of the two samples.

1)- RESULTS OF THE RESEARCH

An ANOVA between product categories allowed a comparison of the results from the two samples: as no difference has been detected, the two samples were pooled. The results highlight a relationship between the product class – durable goods, non-durable goods and services – and its search or experience characteristics. This relationship, hypothesized by Nelson, is empirically checked here: a cluster analysis by product category moreover allows us to illustrate the peculiar role of services. These results fit in with the first two objectives of our experimentation. The validity of the measurement instrument – the third objective of the experimentation – will now be investigated.

A)- RELATIONSHIP BETWEEN PRODUCT CLASS MEMBERSHIP AND SEARCH OR EXPERIENCE CHARACTERISTIC

The 52 product categories were clustered according to their class membership: durable goods, non-durable goods and services. Distribution of grades from 1 to 10 for each class membership shows that the durable goods are more search products, as their median on the scale is the highest (7.00), whereas the non-durable goods are more experience products, as their median on the scale is the lowest (3.84). Services hold an intermediary position (5.60). The product categories are ranked according to their mean grade in the following order: Mean (durable goods) (6.83) > Mean (service providers) (5.67) > Mean (non-durable goods) (4.20) (p=.00). Therefore, a relationship seems to exist between the class membership of a product and its search or experience characteristic. This result is confirmed by the following cluster analysis.

The classification used is the hierarchical classification according to Ward's algorithm (1963). The analysis of grouping levels such as they figure on the dendrogram allows us to determine an optimal number of three groups. This classification gathers, almost perfectly, durable goods, non-durable goods and service providers (see table 1). Only three product categories were "wrongly classified". In fact, the class that includes the 5 service providers also includes 3 durable goods: the coffee machine, suitcases and luggage and the mountain bike.

Table 1

	Durable Goods		Service Providers		Non Durable Goods		Total	
	n	% line	n	% line	n	% line	n	% col.
Group 1	14	100.0	_	_	_	_	14	26.9
Group 2	3	37.5	5	62.5	-	_	8	15.4
Group 3	-	_	_	_	30	100.0	30	57.7

CROSSTABULATION BETWEEN THE 3 TYPOLOGICAL GROUPS AND THE CLASS MEMBERSHIP OF THE PRODUCT CATEGORIES.

The χ^2 test between the three clusters and the durable goods, non-durable goods and service providers shows that there exists a significant relationship between the search or experience characteristic and the class membership of a product category ($\chi^2_{calc.} = 78.76$; p = .00). Fisher's F test on the search or experience grade is significant (F_{calc.} = 53.86; p = .00): the membership of one of the categories, durable goods, non durable goods or service providers thus has a statistically significant effect on the search or experience characteristic, according to the following relationship: Mean_(Gr.1) > Mean_(Gr.2) > Mean_(Gr.3).

The first cluster includes all *durable goods*. It has the highest mean on the classification scale (6.98): we will qualify the durable goods classed in this way as search products, using the definition we adopted. The second cluster is essentially composed of *service providers*. It has a mean (5.83) slightly above the scale's median position (5). It expresses the double characteristic of these products: the consumer thinks that the certitude of evaluation of these products is gained just as much by information already available as by preliminary product usage. We thus qualify those as products with a double characteristic. Lastly, the third cluster includes all *non-durable goods*. It has the lowest mean on the classification scale (4.21): non-durable goods classed in this way will be named experience products.

The cluster analysis illustrates the distinct position occupied by services in an intermediary level between durable goods and non-durable goods.

1)- VALIDATION OF THE SCALE

The choice of a continuous "metric" scale seems fully justified as the instrument predicts well the product classification. Nevertheless, its content and its construct validity will now be studied on the basis of the obtained results.

A)- CONTENT VALIDITY

The undertaken approach explores, on one hand, the confrontation of previous works and, on the other hand, a review of the choice of a metric measure, preferred here to a categorical classification. Methodological precautions, taken to ensure that the instrument suits perfectly the measure of the construct, are also discussed.

The results of the classification show that a strong dependence exists between a product class membership and its search or experience characteristic. These results conform to previous works (Nelson, 1970). However, Nelson only dealt with material goods (durable or non-durable). Taking service providers into consideration allows the extension of the search or

experience characteristic to less tangible products and to generalize the use of the construct and its measure to all goods, whatever their class membership.

The classification of all the products into three groups proves that the characteristic of search or experience product is not "reducible" to the notion of durable or non-durable goods. The service providers form a distinct group called "double characteristic products". Their grades, which are significantly different within their group, are relatively well spread out around the median position of the scale (5): the lowest value is 4.44 (s.d. = 2.94) for the bank and the highest is 7.45 (s.d.= 2.83) for the credit card. There is thus no systematic relationship between the service provided by a good and its search or experience characteristic.

We have emphasized that Nelson's classification (1970) only partially responds to the validation criteria of a classification proposed by Hunt (1976): it is for this reason that we have rejected his two categories classification. Furthermore, the use of a metric scale allows a continuous measurement of a product's search or experience characteristic. This choice is more consistent with the adopted definitions of a search or experience product. In fact, from these definitions it can be seen that the consumers' judgment on the dominant search or experience characteristic of a product is subjective and depends essentially on two factors: the opinion on the hidden or revealed characteristic of the products' intrinsic attributes and the relative weight of each attribute in the overall product evaluation. This weight is an individual measure of the importance of the attribute as a product choice criterion. The subsequent analysis of the dispersion of mean grades by product category justifies our reasoning: in effect nearly 83% of the 52 product categories have a mean grade between 3 and 7.

The two ends of the scale have been labeled in order to illustrate the consumer's attitude at the moment of product purchase. For a search product, the notion of information sources has been extended to all media: technical or descriptive cards, specialized press, catalogues, but also word of mouth or visual product examination, in order to take into consideration all the information gaining processes which consumers are likely to use (Ford et al., 1988).

Note that the scale contrasts the notion of trial and usage during a certain period (that defines an experience product) with the absence of preliminary trial or usage (that defines a search product). The two terms are not poles apart from a semantic point of view: "absence of preliminary trial or usage" should logically be weighed up against "trial or usage during a certain period, even if only very short". However, by favoring the term of trial or usage during a certain period, we have eliminated the simple presentation or manipulation of a product at the point of sale: this purely commercial demonstration does not effectively allow the consumer to evaluate the performance of the product with any certainty (quality, durability, etc.) as well as a real situation of use or consumption of the product (Wright and Lynch, 1995).

The instructions given in the prelude of the questionnaire have the aim of eliminating responses judged as "unreliable". As a result of this, the interviewee does not evaluate the product categories that he (she) never buys. The interviewee is also asked not to consider the brands that he knows or his purchase habits but to rely upon his expectations of each product category. The search or experience characteristic, such as we have defined it, is a concept of attitude and not of behavior regarding a product: thus, its measure is supported by the perception rather than the usage of the product.

To summarize, discussion of the content validity allows us to show that the construct *enlarges the field of application* of the concept to the classification of service providers just as much as that of durable and non-durable goods. Secondly, using a continuous scale *allows a better evaluation* of the concept than a classification based on two disjointed categories, as it shows

the existence of an intermediate category called double characteristic products. Finally, the phrasing of the two poles of the scale *conforms to the adopted definition* of the concept. In this manner, we have justified the choice of a scale that privileges the direct perception of the product by the consumer.

B)- THE CONSTRUCT VALIDITY

The multitraits multimethods approach developed by Campbell and Fiske (1959) is a heavy and complex method, which is not without criticism (Peter, 1981) and whose results quality, despite the use of more and more sophisticated analysis methods (Peter, 1979), is not guaranteed. We are therefore adopting another approach, keeping, however, the distinction between the two components of the construct validity – the trait validity and the nomological validity.

The trait validity: the dimensions of cognitive or affective evaluation and involvement

The trait validity is based on the relationship between the construct, as it is theoretically defined, and its measures. It is verified under the following two conditions: the measure is specific and does indeed measure what it is supposed to, with the exception of other traits, which might however be correlated. Because the search or experience characteristic could be confused with the dimensions of involvement and of cognitive or affective evaluation of a product category, we intend to demonstrate its specificity in relation to each of these two dimensions.

We use Vaughn's research (1980, 1986) on a two dimensional product classification: cognitive or affective evaluation and involvement, better known as the FCB grid. This grid allowed Ratchford (1987) to classify 61 product categories, 15 of which also figure in our research.

The first table in appendix 1 summarizes the results of the search or experience characteristics (the dependent variable) regressed on the *cognitive or affective evaluation* (the independent variable). The scores were first standardized. Three linear regressions were compared: one on the whole universe (n=15), the two others on the durable goods (n=4) and non-durable goods (n=9), the credit card and perfume having been removed.

To conclude, a relationship seems to exist between the search or experience characteristic and the cognitive or affective evaluation of a product category. This result holds for the non durable goods ($R^2_{adjusted} = .42$) and the total sample of goods ($R^2_{adjusted} = .64$). The regression is not significant for the durable goods (F = 1.65; p = .33), but the result is based on a very small number of product categories (n=4) and needs to be validated on a larger sample. The negative sign of the regression coefficients³ indicates the direction of this relationship: the products evaluated on an affective basis are classed as experience products. Inversely the products evaluated on an emotional basis are classed as search products.

This statistically proved relationship between the two constructs is also justified from a theoretical point of view. The consumer who deems that a product can be evaluated with certainty before purchase from the available sources of information (search products) more often bases his judgment on rational and cognitive cues (cognitive evaluation). At the other extreme, when the consumer considers that a prior trial or usage of the product is necessary to evaluate the product with any certainty (experience product), his purchase decision relies on

³ respectively $\beta = -.82$ and $\beta = -.71$.

more subjective and emotional cues (affective evaluation). The consumer evaluates the product in a more empirical (in particular, on the basis of his past experience), intuitive and visual way (Wright and Lynch, 1995).

The second table in appendix 1 sums up the results of the search or experience characteristic regressed on the *involvement* variable. On the total universe (n=15), the regression coefficient is statistically significant (p < .05) even though the value of the determination coefficient is low ($R^2_{adjusted} = .29$). However, the linear regressions are not statistically significant on the universe of durable goods (n=4) and non-durable goods (n=9).

We conclude that the involvement and the search or experience characteristic are not correlated: this holds for the durable goods as for the non-durable goods. On the total sample, the dependent relationship, although statistically significant, is low. A mapping of the product categories shows that the durable goods and non-durable goods are at the opposite ends of the two scales used. On one hand, the involvement level is higher for durable goods than for non-durable goods. On the other hand, the durable goods are considered as search products, whereas the non-durable goods are evaluated more as experience products.

The results of the linear regressions prove the fairly *trait validity* of the construct used to measure the concept of search or experience products. Indeed, we conclude that there is a weak correlation between the search or experience characteristic and the level of involvement. Thus, the two constructs measure different concepts. However, there exists a stronger correlation between the search or experience characteristic and the cognitive or affective evaluation. The two concepts, although different, are close from a theoretical point of view. It is therefore logical to find a stronger dependence between the constructs that are associated with them. Moreover, the direction of this dependence fits in with the lessons learnt from the theoretical examination of the underlying concepts.

The nomological validity

Unlike the trait validity, the nomological validity is of a purely theoretical nature. The aim is to evaluate whether the construct is based on a reliable theory. The examination of the underlying theory of search and experience product and the critical review of the measurement instruments used in the literature, partly confirms the validity of our construct. Therefore we only develop here one aspect of the nomological validity: does the construct we used provide results that are consistent with previous pieces of research?

The aim is here to test the Nelson classification (1970) against the results of the cluster analysis that we have carried out. Moreover, because the Nelson method has been criticized, we also use the results of the research conducted by Riezebos (1994), even though they were only based on a few product categories: 12, of which only 6 appear in our study. It should be remembered that both Nelson and Riezebos rely on a classification method of two categories by judges, whereas we have chosen a direct measurement of consumers opinion using a continuous scale.

We note that out of the 20 product categories shared by at least one of the three authors, only 7 differ in the way they are classified as search or experience products. These discrepancies are summarized in Table 2.

TABLE 2

DIFFERENCE BETWEEN THE CLASSIFICATION OF THE AUTHOR AND THE CLASSIFICATIONS OF NELSON (1970) AND OF RIEZEBOS (1994).

Actual Classification		Nelson's Classification		Riezebos' Classifica	Riezebos' Classification		
Coffee machine (**)	Db	Electronic apparatus	Е	Coffee machine	S		
Tennis shoes	Е	Shoes	S	Shoes	S		
Microwave oven	S	Electronic apparatus	Е	_	_		
Washing machine	S	Electronic apparatus	Е	Washing machine	S		
Dishwasher	S	Electronic apparatus	Е	-	_		
Mobile telephone	S	Communication Equip	Е	_	_		
Mountain Bike	Db.	(Motor) cycles	Е	_	_		
(*) F: experience	_ = .			s might differ between aut	hore		

(**) Labeling of the product categories might differ between authors.

E: experience product. S: search product.

Db: double characteristic.

All the differences observed are focused on categories of durable goods: four concerning the product category "electrical apparatus" and three others the product categories "shoes", "communication equipment" and "motorbikes and bikes" (according to Nelson's terms). Nelson classes one product, the "coffee machine" as an experience product whereas it is classed as a search product by Riezebos. The result of our cluster analysis classes it as a double characteristic product. This result confirms a better validity of the classification into three groups as opposed to a classification into only two groups: search products and experience products.

As a general rule, Nelson classifies all electrical apparatus as experience products, whereas our typology designates them as search products. We note however, that the lack of exactness the terms used by Nelson to describe these products restricts the precision of his classification: the product category becomes too generic. This lack of precision in the vocabulary used thus goes against the criterion of " a clear identification of the limits of the perimeter being subjected to classification" (Hunt, 1976). This limit might justify the observed difference, especially for the washing machine, for which our classification matches that of Riezebos (the 2 products are classed as search products). The same remark applies to the "communication equipment" and the "motorbike and bike" categories. These are in fact supra-categories, including different products. From there, the absence of precision in the boundaries of the product categories makes it difficult and even illusive to compare the results of different researches on the concept of search or experience products.

If we take into account the previous remark, the nomological validation observed above is, at best, only a partial validation. We rely, however, on the underpinning theory and on the method of scale construction to conclude in favor of the nomological validity of our measurement scale.

The construct that we have defined is logically correlated to theoretically similar constructs, in particular the cognitive or affective evaluation. Furthermore, it is independent from other constructs that measure different concepts: for example involvement. Therefore, the trait *validity* is satisfactory. The construct also relies on a sturdy theory and a rigorous methodical approach. The results obtained fit the hypotheses based on the theory: the nomological validity is then ensured. The finalized classification scale thus responds to the construct validation criteria.

1)- CONCLUSION, LIMITATIONS AND OTHER OPPORTUNITIES FOR RESEARCH

A new scale of product classification has been developed, relying upon the nature – either intrinsic or extrinsic, revealed or hidden – of determinant attributes to define search and experience products. Results confirm those of previous pieces of research and extend the concept of search or experience products to the services (see also Zeithaml, 1981).

Services are a distinct group that possess a double characteristic: the consumer considers that the evaluation of these products relies just as much on the information available prior to purchase as on the experience gained by preliminary trial or usage. An interesting perspective of research would be to validate this result on a larger number of services, as only 5 services were investigated. We note however that the degree of human interference in the service transaction seems to influence the search or experience characteristic of the services: thus the bank (with a high level of human interference) has a greater experience characteristic (4.40) than the credit card (7.45).

A first validation of the scale (that still needs to be replicated) was then discussed. The examination of the content validity tends to prove the superiority of a continuous "metric" scale using consumer's judgment over a dichotomous classification by judges as used by Nelson (1970, 1974). The fact that we rejected a classification into two categories leads us to the conclusion that it would be more accurate to talk of search and experience characteristics of a product than to simply talk of search and experience products. Finally, the examination of the construct validity, in particular the trait validity, proved that the construct we used is particularly distinct from involvement as measured by Ratchford (1987).

An interesting result is the link measured between search or experience characteristic and the cognitive or affective evaluation of a product. *Experience* products tend to be essentially evaluated on *affective* criteria that are more subjective or emotional. Conversely, *search* products tend to be essentially evaluated on *cognitive* criteria that are more objective or rational. This scale and the obtained results appear relevant to the field of advertising creativity, the choice of messages, supports or characteristics of execution. Search products are most often associated to informational advertising, favoring an emphasis on the product characteristics or performance and media such as press or radio. Experience products, evaluated on more affective criteria, are featured in more emotional advertising for which the quality of execution enhanced via image supports, such as posters or television, is prevalent. A different evaluation process predominates for each product category (this is even more complex for the services because of their "double characteristic").

A final conclusion is based on the dynamic aspect of the search or experience characteristic and its use for marketing strategy. For example, the offer of free trial samples, a comparative advertising campaign or an enhanced packaging obviously contribute to an increase in the search characteristic. Conversely, points of sale tasting or an extended guarantee allow a decrease in the experience characteristic. This dynamic aspect points in favor of a continuous longitudinal measure of search or experience characteristics.

APPENDIX 1

REGRESSION BETWEEN THE COGNITIVE OR AFFECTIVE EVALUATION OF RATCHFORD (1987) AND THE SEARCH OR EXPERIENCE CHARACTERISTIC OF THE PRODUCT.

Regression on Z-eval.	Source of variation	D.F.	Sum of Squares	Mean Square	F-val.	Sign.
R1 : total sample	Regression	1	9.39	9.39	26.45	.00
	Residual	13	4.61	.35		
	Total	14	14.0			
R2 : durable goods	Regression	1	.06	.06	1.65	.33(*)
	Residual	2	.08	.04		
	Total	3	.14			
R3 : non durable goods	Regression	1	.93	.93	6.82	.03
	Residual	7	.95	.14		
	Total	8	1.88			

• Table of Variance Analysis and Fisher's F Test

^(*) highlighted in bold : not significant at a 5% level of confidence.

REGRESSION BETWEEN THE INVOLVEMENT MEASURE OF RATCHFORD (1987) AND THE SEARCH OR EXPERIENCE CHARACTERISTIC OF THE PRODUCT.

• Table of Variance Analysis and Fisher's F Test

Regression on Z-eval.	Source of variation	D.F.	Sum of Squares	Mean Square	F-val.	Sign.
R1 : total sample	Regression	1	4.75	4.75	6.67	.02
	Residual	13	9.25	.71		
	Total	14	14.00			
R2 : durable goods	Regression	1	.04	.04	.86	.45(*)
	Residual	2	.10	.05		
	Total	3	.14			
R3 : non durable goods	Regression	1	.00	.00	.01	.91 ^(*)
	Residual	7	.88	.27		
	Total	8	.88			

^(*) highlighted in bold : not significant at a 5% level of confidence.

REFERENCES

Alpert, Mark I. (1971), "Identification of Determinant Attribute : A Comparison of Methods," *Journal of Marketing Research*, 8 (2), 184-191.

(1980), "Unresolved Issues in Identification of Determinant Attributes," in : *Advances in Consumer Research*, vol. 7, ed. Jerry C. Olson, Ann Arbor, MI : Association for Consumer research, 80-88.

- Campbell, D. T. and D. W Fiske (1959), "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix," *Psychology Bulletin*, 56 (1), 81-105.
- Cowling, Keith and John Cubbin (1971), "Price, Quality and Advertising Competition : An Econometric Investigation of the United Kingdom Car Market," *Economica*, 38 (152), 378-394.
- Darby, Michäel R. and Edi Karni (1973), "Free Competition and the Optimal Amount of Fraud," *Journal of Law and Economics*, 16 (1), 67-68.
- Fishbein, Martin and Icek Ajzen (1975). Belief, Attitude, Intention and Behavior : An Introduction to Theory and Research, Reading, MA : Addison Wesley.
- Ford, Gary T., Darlene B. Smith and John L. Swasy (1988), "An Empirical Test of the Search, Experience and Credence Attribute Framework," in Advances in Consumer Research, vol. 15, ed. Michael J. Houston, Provo, UT: Association for Consumer Research, 239-243.
- Hoch, Stephen and John Deighton (1989), "Managing What Consumers Learn From Experience," *Journal of Marketing*, 53 (2), 1-20.
- Hunt, Shelby D. (1976). *Marketing Theory : conceptual foudations of research in marketing*, Columbus, Ohio : Grid.
- Jacoby, Jacob, Jerry C. Olson and Rafael A. Haddock (1971), "Price, Brand Name and Product Characteristics as Determinants of Product Perceived Quality," *Journal of Applied Psychology*, 55 (6), 570-579.
- Jun, Won Jae and Alain Jolibert (1983), "Revealed versus Hidden Attributes as Determinants of Perceived Product Quality", *Journal of Economic Psychology*, 4 (2), 263-272.
- Lutz, Richard J. (1975), "First Order and Second Order Cognitive Effects in Attitude Change," *Communication Research*, 2, 288-299.
- Maynes, Edwin Scott (1976). Decision Making for Consumers : An Introduction for Consumer Economics, New York : McMillan Pub.
- Nelson, Phillip (1970), "Information and Consumer Behavior," *Journal of Political Economy*, 78 (2), 311-329.

(1974), "Advertising as Information," *Journal of Political Economy*, 82 (4), 729-754.

Olson, Jerry C. (1972), *Cue Utilization in the Quality Perception Process : A Cognitive Model and An Empirical Test*, PhD Thesis, Purdue University.

and Jacoby Jacob (1972), "Cue Utilization in the Quality Perception Process," in *Advances in Consumer Research*, ed. M. Venkatesan, Iowa City, IA : Association for Consumer Research, 167-179.

(1977), "Price as an Informational Cue : Effects on Product Evaluations," in : *Consumer and industrial Buying Behavior*, ed. Arch G. Woodside, Jagdish N. Seth and Peter D. Benett, New York, North Holland, 267-286.

- Perrien, Jean, Chéron Emmanuel and Michel Zins (1984). *Recherche en Marketing : Méthodes et Décisions*, Québec, Canada : Boucherville.
- Peter, J. Paul (1979), "Reliability : a Review of Psychometric Basics and Recent Findings," *Journal of Marketing Research*, 16 (1), 6-17.

(1981), "Construct Validity : A Review of Basic Issues and Marketing Practices," *Journal of Marketing Research*, 18 (2), 133-145.

- Ratchford, Brian T. (1987), "New Insights About the FCB Grid," *Journal of Advertising Research*, 27 (4), 24-38.
- Riezebos, H. J. (1994). Brand-added value : theory and empirical research about the value of brands to consumers, The Netherlands : Eburon Publishers.
- Stigler, George (1968), "The Economics of Information," in : *The Organization of Industry*, ed. George Stigler, Chicago Homewood Ill, Richard D. Irwin.
- Vaughn, Richard (1980), "How Advertising Works : A Planning Model," Journal of Advertising Research, 20 (5), 27-33.

(1986), "How Advertising Works : A Planning Model Revisited," *Journal* of Advertising Research, 26 (1), 57-66.

- Ward, J. (1963), "Hierarchical Grouping to Optimize an Objective Function," *Journal of the American Statistical Association*, 58 (2), 236-244.
- Wright, Alice A. and John G. Lynch (1995), "Communication Effects of Advertising versus Direct Experience When both Search and Experience Attributes Are Present," *Journal of Consumer Research*, 21 (4), 708-718.
- Zeithaml, Valarie A. (1981), "How Consumer Evaluation Processes Differ Between Goods and Services," p. 186-190 in : AMA Proceedings, ed. James H. Donnelly and William R. George, Chicago IL : American Marketing Association.