

THE RELATIONSHIP BETWEEN PRODUCT INVOLVEMENT AND HEDONIC AND UTILITARIAN IN PRODUCT CATEGORIES

Mahdiah mirzaagha*

Kambiz Heidarzadeh Hanzae**

Abstract

Consumer behavior involves many activities. Each consumer has thoughts, feelings, plans, attitude, decisions and purchases. Marketers should find how consumers gather information and how they apply such information in selecting competitor's products. Relative information about consumer's behavior will be used in predicting and recognizing their activities in the market. The present research investigates the relationship between involvement and hedonic and utilitarian in four product categories (automobile, perfume, mineral water and cigarette) that evokes various types of anticipatory emotions and reasons and how those emotions and reasons may then be translated into affective/ cognition evaluations of products to influence the way consumers construct their preferences. Different emotions are related to the affective evaluations of the hedonic product versus Different reason are related to the cognition evaluations of utilitarian product. Data was collected from sample of 235 student from Islamic Azad university science and research branch, Tehran, Iran. Results of data analysis have shown confirmation of relationship. In other word, there is significant relationship between dimensions of consumer involvement (PIIAFF) with hedonic and (PIICOG) with utilitarian

Keywords: Consumer Behaviour;Product Involvement;Hedonic;Utilitarian.

***Mahdiah Mirzaagha MA, Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, Iran.**

****Heidarzadeh Hanzae Kambiz, Ph.D., Associate Professor, Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, Iran.**

1. Introduction

Successful marketing initiates with apprehending the how and why of consumer behavior since consumers are the turning point of all marketing activities. Researchers of costumer behavior have historically developed a number of complex theories in the attempt to explain and predict the behavior of the consumer (e.g., Bettman, 1979; Engel, Kollat, and Blackwell 1978; Howard and Sheth, 1969). These theories propose that consumers actively search for and use information to make informed choices. This implies that the consumer is an intelligent, rational, thinking, and problem solving organism, who stores and evaluates sensory inputs to make a reasoned decision (Markin and Narayana 1975). However, a great deal of consumer behavior does not involve extensive search for information or a comprehensive evaluation of the choice alternatives, even for the purchase of major items (Olshavsky and Granbois 1979). The average consumer makes dozens of mundane decisions each day, few of which may be of importance. For such decisions, it may be inappropriate to assume an active information processor (Kassarjian 1978, 1981).

The domain focus of our research contributes to the relationship between involvement and the hedonic and utilitarian dimensions of attitude. In this regard, the literature lacks clarity regarding the relationship between involvement and the hedonic and utilitarian dimensions of attitude. For example, Mano and Oliver (1993) merge Batra and Ahtola's (1990) scale with Zaichkowsky's (1985) 20-item involvement scale to model what they term utilitarian and affective dimensions. Kapferer and Laurent (1993) introduce a five-dimension conceptualization of involvement in which one dimension is labeled hedonic.

We contend that the involvement construct is distinct from the hedonic and utilitarian dimensions of attitude. Thus, we tested correlation between (PIICOG) and affective (PIIAFF) dimensions of Zaichkowsky's (1990) published scales purporting relationship to HED/UT scale. We used the two-dimensional view of involvement (Zaichkowsky, 1990) in which affective involvement is associated with the personal relevance of the product as a result of emotional attachment (hedonic) and cognitive involvement arises when personal relevance is based in logic (utilitarian).

Theoretical framework

Product involvement

Involvement is a crucial variable in the studies of marketing, social psychology and consumer's behavior (Kim, 2003). In fact, it is over 30 years that the concept of involvement has been studied meticulously in marketing fields (Broderick, 2007). Involvement originates from social psychology and the notion of "ego involvement," which refers to the relationship between an individual and an issue or object. This conceptualization has been the basis for applying involvement in consumer behavior. However, the many and varied definitions and treatments of involvement in social psychology mean that its application in this domain remains complicated. The involvement construct became linked to marketing and consumer behavior following Krugman's (1967) measurement of involvement with advertising (Michaelidou and Dibb, 2006). Since then, and specifically through a period of increasing consumer research activity in the 1980s, attention has focused on the conceptualization and measurement of involvement in relation to "objects" such as a product, message, purchase task, advertising or activity.

The concept of product involvement has been studied by numerous researchers in consumer behavior and offered as a useful way to understand characteristics of various consumer groups as well as their behavioral tendencies. Product involvement involves an ongoing commitment on the part of the consumer with regard to thoughts, feelings, and behavioral response to a product category (Miller and Marks, 1996; Gordon et al., 1998). Product involvement is independent of situational influences (Rodgers and Schneider, 1993; Miller and Marks, 1996). Richins and Bloch (1986) note that consumers with high product involvement would find the products interesting and this would occupy the consumers' thoughts without the stimulus of an immediate purchase. Such interest in the product category may arise from the consumer's perception that the product class meets important values and goals. This study is concerned with the construct of product involvement, a more permanent and consumer based construct. The concept of involvement is well established within the theory of consumer behavior. According to Antonides and van Raaij (1998), involvement "is the level of a consumer's personal relationship with a product or service including perceived importance, value, and risk." The significance of the concept derives from the fact that antecedents ("causes") as well as consequences ("effects") have been detected.

Zaichkowsky (1985, p. 342) defines involvement with an object as a person's perceived relevance of the object based on inherent needs, values and interests. She argues that involvement is a motivational construct (Zaichkowsky 1986a) which touches the "self", and involves both cognitive and affective components (Zaichkowsky, 1994). Cognitive involvement emphasizes the individual's information processing and achievement of idealization states. This differs from affective involvement which emphasizes individual feelings and achievement of emotional states (McGuire 1974). Following McGuire's arguments (1974), Zaichkowsky (1994) stresses that affective involvement describes all emotions, moods, and feelings evoked by an object. Zaichkowsky (1985) reported that her subjects rated automobiles, calculators, jeans and color TVs as high involvement products. By contrast, instant coffee, bubble bath and breakfast cereals were rated as low involvement products.

The affective component of product involvement was initially tested by Zaichkowsky (1986b) using the Foote, Cone and Belding (FCB) model (Vaughn 1980, 1986). The FCB framework suggests that product categories can vary on level of involvement but also on a thinking/feeling dimension, which represent the cognitive/affective components of involvement (Vaughn 1980). The framework suggests that products fall within four quadrants: a high involvement/thinking quadrant, high involvement/feeling quadrant, low involvement/thinking quadrant, and a low involvement/feeling quadrant. Although Zaichkowsky (1986b) treated thinking and feeling as opposite sides of the same scale, a person may be cognitively or affectively involved with a product, or both. Zaichkowsky performed a second study on the affective component of product involvement which confirmed the cognitive and affective subscales of involvement (Zaichkowsky 1994). The measurement of cognitive and affective approaches to advertising involvement might be captured simultaneously due to the interaction between the person and the object. Whether the view of advertising is primarily cognitive, primarily affective or some combination of two, the mental activity and investment involved in processing any given advertisement is likely to be fragile and fleeting (Allen and Madden, 1988).

The degree of consumer involvement in a product category is now widely recognized as a major variable relevant to advertising strategy (Ray, 1982; Rothschild 1979; Vaughn, 1980). Depending on their level of involvement, individual consumers differ in the extent of their

decision process and their search for information. Depending on their level of involvement, consumers may be passive or active when they receive advertising communication, and limit or extend their processing of this communication. To adapt to these differences, advertisers may consider a number of operational variables such as the type of media, the degree of repetition, the length of the message, the tone of the message, and the quantity of information (Tyebje, 1979).

Hedonic versus utilitarian goods

A large number of studies in marketing have examined how consumers choose between dominantly hedonic and utilitarian products (Chernev 2004; Hirschman and Holbrook 1982; Voss, Spangenberg, and Grohmann 2003). Consumer choices are driven by utilitarian and hedonic considerations. Consumers choosing among new automobiles, for example, may care about utilitarian features (e.g., gas mileage) as well as about hedonic attributes (e.g., sporty design). Research suggests that these different considerations map onto independent components of product evaluations and attitudes and enable people to distinguish between goods according to their relative hedonic or utilitarian nature (Batra and Ahtola 1990; Mano and Oliver 1993). Broadly speaking, hedonic goods provide more experiential consumption, fun, pleasure, and excitement (designer clothes, sports cars, luxury watches, etc.), whereas utilitarian goods are primarily instrumental and functional (microwaves, minivans, personal computers, etc.; Hirschman and Holbrook 1982; Strahilevitz and Myers, 1998).

Some researchers have used the terms luxury and necessity more broadly, in a less technical sense, to imply that luxuries are consumed primarily for hedonic pleasure while necessities are required to meet more utilitarian goals (Dubois, Laurent, and Czellar 2004; Kivetz and Simonson 2002a, b; Strahilevitz and Myers 1998). Hedonic goods are multisensory and provide for experiential consumption, fun, pleasure, and excitement. Flowers, designer clothes, music, sports cars, luxury watches, and chocolate fall in this category. Utilitarian goods, on the other hand, are primarily instrumental and their purchase is motivated by functional product aspects. Examples are microwaves, detergents, minivans, home security systems, or personal computers (Dhar and Wertenbroch 2000; Hirschman and Holbrook 1982; Strahilevitz and Myers 1998).

Different products can be high or low in both hedonic and utilitarian attributes at the same time.

In fact, most evaluations in our consumption profile are based on the degree, to which various alternatives satisfy utilitarian and hedonic goals (Batra and Ahtola, 1990). A person evaluating a pair of sneakers may care for both functional features (e.g., durability) as well as hedonic features (e.g., design). Usage and consumption motives are central in determining whether an item is perceived as primarily hedonic or utilitarian (e.g., Pham 1998). For example, purchasing a cell phone to access help in times of trouble makes a cell phone a utilitarian product. Buying the same phone to chat with friends makes it hedonic.

In this regard, Researchers continually seek a richer understanding of consumer attitudes. Investigation of the hedonic and utilitarian components of attitude has been suggested in such diverse disciplines as sociology, psychology, and economics. This multidisciplinary recognition of the hedonic and utilitarian elements of consumption mirrors parallel theoretical development in marketing, mainly from a series of articles by Hirschman and Holbrook (1982; Holbrook and Hirschman 1982). In an early attempt to measure multiple dimensions of product/ brand attitudes, Batra and Ahtola (1990, p. 159, emphasis added) state, “consumers purchase goods and services and perform consumption behaviors for two basic reasons:

- (1) Consummatory affective (hedonic) gratification (from sensory attributes), and (2) instrumental, utilitarian reasons.” We adopt this two-dimensional conceptualization of consumer attitudes: The first dimension is a hedonic dimension resulting from sensations derived from the experience of using products, and the second is a utilitarian dimension derived from functions performed by products.

(2)

More recently, other researchers have attempted to measure the "hedonic" versus "utilitarian" aspects of consumption (Babin, Darden, and Griffin 1994; Batra and Ahtola 1991; Mano and Oliver 1993; Spangenberg, Voss, and Crowley 1997). Viewed broadly, these two aspects of hedonic and utilitarian value correspond to the archetypal constructs of emotion and reason. In this connection, it has been found that affect and reason meaningfully describe a variety of product categories (Buck et al. 1995). Measures of the hedonic and utilitarian dimensions of

attitude enable marketers to test the effectiveness of advertising campaigns that stress experiential or functional positioning strategies (Park, Jaworski, and MacInnis 1986).

2. Research Method

In selecting categories for the study, we identified products that had semi-structured interview (who were given definitions of the hedonic and utilitarian dimensions and involvement). The product categories we identified were mineral water, Cigarettes, automobiles, and perfume; has shown that these product categories are high and low in both utilitarian and hedonic and involvement ratings. This products identified that have no gender difference.

Subject and design

In order to get evaluation of these 4 product categories, we conducted in a two-step process with 235 students participants from Islamic Azad university science and research branch, Tehran, Iran. As a first step, we asked them to rate level of product involvement for each of the 4 product categories using 10-item, 5-point scale by Zaichkowsky (1987). Thus, as two step, after one week, the same participants evaluated 4 products according to HED/UT items by Voss et.al (2003). SPSS software were applied for analysis and comparison of data. Cronbach's α value was used to test the reliability of questionnaire and Pierson's correlation coefficient to investigate the relation between two variables.

Data Analysis

Reliability and Validity Analysis:

To assess the reliability of questionnaire, Cronbach's α value was applied. To examine that, a pre- test was carried out on sample with 60 respondents and 50 practical questionnaires were collected. The conclusion shows that Cronbach's α value of each variable was more than 0/7 .The least significant reliability for research questionnaires is 0/7; thus, this questionnaire was recognized reliable.

The content validity was used in this paper to examine the validity of the questionnaire. Content validity is performed based on the researcher's professional ability to judge subjectively if the selected scale can measure the researcher's intended-to-measure feature correctly. The

dimensions and items explored in this study are based on relevant theory. This inventory or measuring item was used by many scholars globally. In addition, we carried out a pretest and did some revision before setting out the questionnaire. Therefore, the questionnaire as a measuring tool used in this study should meet the requirement of content validity.

Correlation and regression Analysis:Correlation coefficient of Pierson was applied to study the relation between two variables (involvement and HED/UT). Pierson coefficients between constructs are significant at 95% confidence level. In addition, regression test was used to investigate the effect of variables on each other.

3. Results and Analysis

Results about the automobile:

According to achieved results from collected and analyzed data by SPSS 20 software, there is a correlation between affective involvement and hedonic dimension toward the automobile in the respondent, based on Pearson Correlation, there is a significant correlation at 0/01 level. In addition, there is a meaningful correlation between two variables, "Cognitive involvement and utilitarian dimension", about the product of automobile. Also Regression test was done about the automobile and the results are shown below:

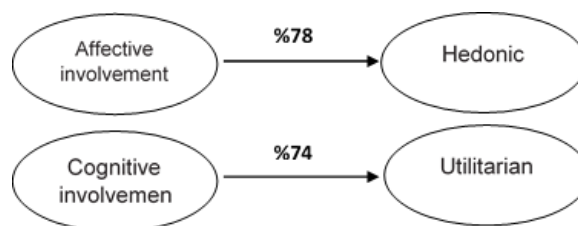


Figure 1: Results about the automobile

Related to mineral water:

However, the product of car is a product with high level of involvement, current result shows that there are correlations between affective involvement and hedonic dimension, and between

Cognitive involvement and utilitarian dimension, in relation with the product of mineral water. Based on Pearson Correlation test, there are meaningful relations. Also Regression test was done about the mineral water and the results are shown below:

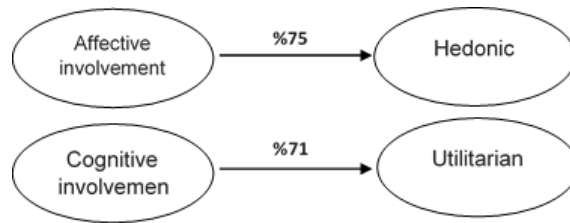


Figure 2: Results about the mineral water

Results about cigarette and perfume:

Results show that there is a high correlation between affective involvement and hedonic dimension; also, there is a high correlation between cognition engagement and utilitarian dimension in relation with the perfume as a product. Regression test was done about the perfume and the results are shown below:



Figure 3: Results about perfume

The correlation test illustrated the correlation between affective involvement and hedonic dimension, related to the product of cigarette, and it was 87%; there was the highest level among other products. Furthermore, the correlation between utilitarian dimension and Cognitive involvement was approved. In addition, current study's results, however, not completely, are similar and accordance with former studies of Mano and Oliver (1995), Merge Betta and Ahtola

(1990), Zaichkowsky (1985), Voss, Spangenberg and Grohmann (2002). And Summary regression results shown in the table 1:

Table 1: regression coefficients

Product categories	standardized coefficients Beta	
	affective involvement --- > hedonic	Cognitive involvement---> utilitarian
Automobile	%78	%74
Mineral water	%75	%71
Perfume	%85	%72
cigarette	%87	%52

4. Conclusion

The problem that companies are facing to is not the lack of product but lack of customer. Hence, customer recognition and consumer behavior apprehension is significant but not easy. To understand consumer's behavior, understanding the structure of consumer's involvement is crucially important and mostly this phrase is used to understand consumer's behavior related to a specific subject. Most of the researchers consider this variable as the most important variable in marketing literature and especially in the marketing research due to the high value of prediction in attitude, purchase intension of consumers. Involvement will create interest or attachment to the product which will lead to the tendency of the customer to collect and interpret data for the current or future decision making and their attitude.

We demonstrated the relationship between consumer involvements and hedonic and utilitarian that is dimensions of attitude in four product (automobile, perfume, mineral water and cigarette). Measures of the hedonic and utilitarian dimensions of attitude enable marketers to test the effectiveness of advertising campaigns that stress experiential or functional positioning strategies (Park, Jaworski, and MacInnis 1986). Hence, Involvement is suitable scale for description of consumer behavior and consuming classification of market. It seems that using intriguing

advertisements (based on the pleasurable feature of the product) to stimulate affections and emotions could be useful to attract new consumers who are on the increase nowadays.

5. Limitation and managerial implications

Of course, the results may be due to the limitations in the study. For instance, there are limits on four product categories. Therefore, this study could be extended to different product categories. Future research must be conducted among different culture samples, so that demographic differences do not confound the findings. Further research should examine incorporating the hedonic and utilitarian dimensions of attitude and involvement in more complex models with constructs such as attitude toward the ad (McKenzie, Lutz, and Belch 1986) and attitude toward the brand (MacKenzie, Lutz, and Belch 1986; Miniard, Bhatla, and Rose 1990), and a measure of purchase intentions (Dodds, Monroe, and Grewal 1991; Netemeyer and Bearden 1992).

Similarly, this variable can be used to segment the company's market (Reinecke and Goldsmith, 1993), given its capacity to explain and predict consumer behaviour (Evrard and Aurier, 1996). Highly involved people make a further cognitive effort during the understanding and processing of the collected information (Andrews et al., 1990), thus communicating complex messages with detailed information should be recommended. Low involvement people have more confidence in the superficial aspects of the message (Maheswaran and Meyers-Levy, 1990), thus short, simple advertisements would be recommended with a more frequently diffusion. For instance, for organizations whose products are usually in the initial set evoked by the consumer before the purchase, an additional information search can be damaging because it could lead him to competitive brands or to underestimate some features which before were favorably considered. On the contrary, increasing perceived involvement can benefit organizations with less known products and/or new ones in that they could be taken into consideration as a consequence of the information search

References

- [1] Andrews, D. A., et al. (1990). "Does correctional treatment work? A clinically relevant and psychologically informed meta- analysis." Criminology**28**(3): 369-404.
- [2] Babin, B. J., et al. (1994). "Work and/or fun: measuring hedonic and utilitarian shopping value." Journal of Consumer Research**20**(4): 644-656.
- [3] Batra, R. and O. T. Ahtola (1991). "Measuring the hedonic and utilitarian sources of consumer attitudes." Marketing letters**2**(2): 159-170.
- [4] Bettman, J. R. (1979). Information processing theory of consumer choice, Addison-Wesley Pub. Co.
- [5] Broderick, A. J. (2007). "A cross- national study of the individual and national-cultural nomological network of consumer involvement." Psychology & Marketing**24**(4): 343-374.
- [6] Chernev, A. (2004). "Goal-attribute compatibility in consumer choice." Journal of Consumer Psychology**14**(1): 141-15
- [7] Dahl, D. W., et al. (2003). "The nature of self-reported guilt in consumption contexts." Marketing letters**14**(3): 159-171.
- [8] Dodds, W. B., et al. (1991). "Effects of price, brand, and store information on buyers' product evaluations." Journal of marketing research: 307-319.
- [9] Dubois, B., et al. (2004). "Segmentation based on ambivalent attitudes: The case of consumer attitudes toward luxury." HEC, Paris, France.
- [10] Dubois, B., et al. (2004). "Segmentation based on ambivalent attitudes: The case of consumer attitudes toward luxury." HEC, Paris, France.
- [11] Engel, J. F., et al. (1978). Consumer behaviour. Illinois, The Dryden Press.
- [12] Evrard, Y. and P. Aurier (1996). "Identification and validation of the components of the person-object relationship." Journal of business research**37**(2): 127-134.
- [13] Flynn, L. R. and R. E. Goldsmith (1993). "Application of the personal involvement inventory in marketing." Psychology & Marketing**10**(4): 357-366.
- [14] Gerrit, A. and F. W. Van Raaij (1998). "Consumer Behaviour: A European Perspective." Londres: Johnn Wiley & Sons Ltd.
- [15] Hirschman, E. C. and M. B. Holbrook (1982). "Hedonic consumption: emerging concepts, methods and propositions." The Journal of Marketing: 92-101.
- [16] Howard, J. A. S. and N. Jagdish (1969). The theory of buyer behavior.

- [17] Hunt, K. (1978). "Advances in Consumer Research, Vol. 5, Association for Consumer Research." Ann Arbor.
- [18] Kapferer, J. N. and G. Laurent (1993). "Further evidence on the consumer involvement profile: five antecedents of involvement." *Psychology & Marketing* 10(4): 347-355.
- [19] Kassarian, Harold H. (1978), "Presidential Address," in *Advances*.
- [20] ———— in *Consumer Research. Vol. 5*, ed. H. Keith Hunt, Ann Arbor, MI: Association for Consumer Research, xiii-xiv.
- [21] (1981), "Low Involvement: A Second Look," in *Advances in Consumer Research, Vol. 8*, ed. Kent B. Monroe, Ann Arbor, MI: Association for Consumer Research, 31-34
- [22] Kim, Y. (2003). "Conceptualizing health campaign strategies through the level of involvement." *Corporate Communications: An International Journal* 8(4): 255-267.
- [23] Krugman, H. E. (1966). "The measurement of advertising involvement." *Public Opinion Quarterly* 30(4): 583-596.
- [24] MacKenzie, S. B., et al. (1986). "The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations." *Journal of marketing research*: 130-143.
- [25] Madden, T. J., et al. (1988). "Attitude toward the Ad: An Assessment of Diverse Measurement Indices under Different Processing Sets." *Journal of marketing research*: 242-252.
- [26] Maheswaran, D. and J. Meyers-Levy (1990). "The influence of message framing and issue involvement." *Journal of marketing research*: 361-367.
- [27] Mano, H. and R. L. Oliver (1993). "Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction." *Journal of Consumer Research* 20(3): 451-466.
- [28] McGuire, William J. (1974), "Psychological Motives and Communication Gratification," in *The Uses of Mass Communications: Current Perspectives on Gratification Research*, J.G. Blumer and Katz E., eds. Beverly Hills, CA: Sage Publications, 167-96.
- [29] Michaelidou, N. and S. Dibb (2006). "Product involvement: an application in clothing." *Journal of Consumer Behaviour* 5(5): 442-453.
- [30] Miller, D. W. and L. Marks (1996). *The moderating effects of enduring involvement on imagery-evoking advertisements*. American Marketing Association.

- [31] Miniard, P. W., et al. (1990). "On the formation and relationship of ad and brand attitudes: An experimental and causal analysis." Journal of marketing research: 290-303.
- [32] Narayana, C. L. and R. J. Markin (1975). "Consumer behavior and product performance: An alternative conceptualization." The Journal of Marketing: 1-6.
- [33] Netemeyer, R. G. and W. O. Bearden (1992). "A comparative analysis of two models of behavioral intention." Journal of the Academy of Marketing Science**20**(1): 49-59.
- [34] Olshavsky, R. W. and D. H. Granbois (1979). "Consumer decision making—fact or fiction?" Journal of Consumer Research**6**(2): 93-100.
- [35] Park, C. W., et al. (1986). "Strategic brand concept-image management." The Journal of Marketing: 135-145.
- [36] Pham, M. T. (1998). "Representativeness, relevance, and the use of feelings in decision making." Journal of Consumer Research**25**(2): 144-159.
- [37] Richins, M. L. and P. H. Bloch (1986). "After the new wears off: The temporal context of product involvement." Journal of Consumer Research**13**(2): 280-285.
- [38] Rothschild, M. L. (1977). Advertising strategies for high and low involvement situations, Graduate School of Business, University of Wisconsin-Madison.
- [39] Spangenberg, E. R., et al. (1997). "Measuring the hedonic and utilitarian dimensions of attitude: A generally applicable scale." NA-Advances in Consumer Research Volume 24.
- [40] Strahilevitz, M. and J. G. Myers (1998). "Donations to charity as purchase incentives: How well they work may depend on what you are trying to sell." Journal of Consumer Research**24**(4): 434-446.
- [41] Tyebjee, T. T. (1979). "Response time, conflict, and involvement in brand choice." Journal of Consumer Research**6**(3): 295-304.
- [42] Vaughn, R. (1980). "How advertising works: A planning model." Journal of advertising research.
- [43] ————— (1986). "How advertising works: A planning model revisited." Journal of advertising research**26**(1): 57-66.
- [44] Voss, K. E., et al. (2003). "Measuring the hedonic and utilitarian dimensions of consumer attitude." Journal of marketing research**40**(3): 310-320.
- [45] Zaichkowsky, J. L. (1985). "Measuring the involvement construct." Journal of Consumer Research**12**(3): 341-352.

- [46] Zaichkowsky, J. L. (1986). "Conceptualizing involvement." Journal of advertising**15**(2): 4-34.
- [47] Zaichkowsky, Judith Lynne (1986b), "The Emotional Aspect of Product Involvement," in *Advances in Consumer Research*, Vol. 14, Melanie Wallendorf and Paul F. Anderson, eds. Provo, UT: Association for Consumer Research, 32-55.
- [48] Zaichkowsky, J. L. (1994). "The personal involvement inventory: Reduction, revision, and application to advertising." Journal of advertising**23**(4): 59-70.