Journal of Marketing Communications
Vol. 18, No. 2, April 2012, 91–111

Routledge
Taylor & Francis Group

'Thinking and feeling' products and 'utilitarian and value-expressive' appeals in contemporary TV advertising: A content analytic test of functional matching and the FCB model

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Using the Foote, Cone and Belding (FCB) grid model and functional matching effects as theoretical frameworks, this study analyzed 1356 primetime TV commercials to assess the extent to which there is a functional match-up between think and feel product types and utilitarian and value expressive message appeals in contemporary TV advertising. Additionally, the use of sales promotion techniques in those TV commercials relative to the FCB model's think/feel and involvement dimensions was analyzed. Results reveal that utilitarian appeals were used more in commercials for think products while value expressive appeals were used more in spots for feel products. Presence of sales promotions in the TV commercials was found to differ by product involvement rather than by the prediction of the functional matching hypothesis. The results suggest that contemporary TV advertising practice is more complicated than conceptualized in the four quadrants of the FCB model (i.e. relative to the integration of product, message, and sales promotion techniques). Discussion and implications of the results are presented.

Keywords: IMC planning; promotion management; FCB grid; functional matching; match-up hypothesis; advertising appeals

Introduction

One of the basic principles of creating persuasive advertising is 'matching the advertising appeal with product type' (see Belch and Belch 2003, 162; Kamins 1990; Shavitt 1989, 1990). This principle, known as the match-up hypothesis or functional matching, suggests that advertisement creation is best served by matching advertising appeal to the product function (Lavine and Snyder 1996; Paek, Choi, and Nelson in press; Shavitt 1989; Shavitt and Nelson 2002).

In this article, we report a content analysis of the extent to which there is a functional match-up (i.e. the match-up hypothesis) between think and feel product types and utilitarian and value expressive message appeals in contemporary TV advertising using the FCB grid model as an analytical framework. Additionally, the analysis examined the use of sales promotion techniques in those TV commercials relative to the FCB model's think/feel and involvement dimensions to determine whether sales promotions are practiced in accordance with the functional matching principle. A series of chi-square and logistic regression analyses were conducted to test the hypotheses derived from past

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ISSN 1352-7266 print/ISSN 1466-4445 online

http://dx.doi.org/10.1080/13527266.2010.484581
http://www.tandfonline.com

research. Even though advertisers have made good use of the FCB grid in advertising planning in the past (Ratchford 1987), only a few studies have employed the grid in systematically examining the content properties of contemporary advertisements (see Dubé, Chattopadhyay, and Letarte 1996, for an exception). The FCB model specifies two dimensions, the think dimension and the feel dimension, that are differently associated with the utilitarian and value-expressive functions of a product. The model is presented in Figure 1.

In the FCB model, the think dimension (cognitively based) is closely related to the utilitarian function while the feel dimension (affectively based) is related to the value expressive function. The model predicts that consumers buy (1) think category products

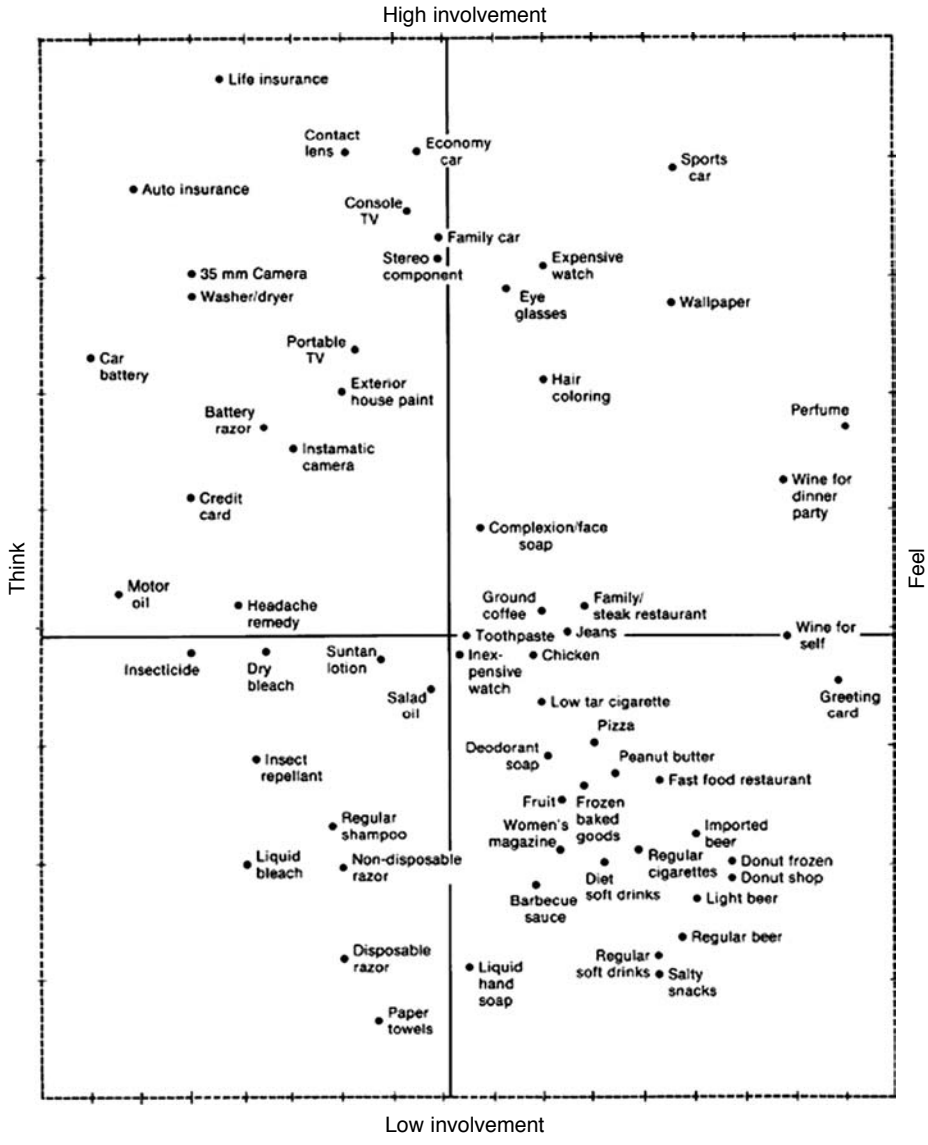

Figure 1. FCB grid and Ratchford's (1987, 31) categorization of 60 common products.

because they are motivated by the utilitarian attributes of products and (2) feel category products because they are motivated by the value expressive product functions. The implication of the match-up principle for advertising planning is rather straightforward – it implicates that it would be beneficial to use a value expressive appeal for a product with an affectively based primary function and to use a utilitarian appeal for a product with a cognitively based primary function.

The FCB model also incorporates an involvement dimension. This dimension accounts for the level of involvement of the product during purchase decisions (Ratchford 1987). High involvement products have been described as relevant, unusual, difficult to understand, risky, or otherwise worthy of a consumer's attention while low involvement products are described to be commonplace, easy to use, or involve minimal risk or consideration. Risks associated and the level of cognitive elaboration generated are known to be higher for high involvement products than low involvement products. Therefore, the model suggests advertising strategies should also vary depending on the level of involvement of the featured product.

The involvement dimension of the model also provides insight into how promotion tactics ought to be included in the advertising strategy, which guided our study's examination of sales promotion techniques relative to the matching principle. For example, ads with utilitarian appeals should be expected to use more promotional tactics than ads with value expressive ad appeals because the former is more cognitively oriented than the latter. Thus, advertising practitioners might use more rationally adaptive advertising strategies to persuade consumers. However, when the involvement dimension of the FCB grid is considered, strategies for high involvement products might be expected to provide more promotional options than strategies for low involvement products to influence consumers because high involvement products need multiple and convincing appeals (Batra and Ahtola 1990).

Furthermore, the particular promotion option used in each quadrant might be different because each promotional option has its own utilitarian or hedonic (value expressive) characteristic (Chandon, Wansink, and Laurent 2000). For example, price-oriented promotions may be used more in ads for high involvement products than in those for low involvement products. High involvement products have higher risk because of price. In contrast, free-gift promotions may be used more in ads for feel products more than in ads for think products because this type of promotion has more hedonic than utilitarian value (Chandon et al. 2000).

In the following sections, we review the research literature and present the study's hypotheses. Subsequent sections describe the content analytic method, and report and discuss the study's results.

Literature review

FCB model and the functional matching effect hypothesis

A number of advertising researchers have investigated what kinds of appeals work best under which product conditions using the FCB model (Ratchford 1987; Vaughn 1980, 1986; also see Stafford and Day 1995 for a review). In this respect, the FCB grid (see Figure 1) is useful in the fact that it allows categorization of products into a quadrant with a think versus feel dimension and a low versus high involvement dimension. Then, according to the functional matching effect hypothesis, appeals may be more effective when they match the characteristic and likely consumer involvement of a given product (Dubé et al. 1996; Vaughn 1980) than when they do not match.

First introduced in the literature by Vaughn (1980), the FCB grid model assumes that consumers' purchase decisions can be classified on two basic dimensions: think/feel and high/low involvement. The think/feel dimension is based on the McGuire's cognitive and affective classification, which originated from the utilitarian and value expressive functions in the functional attitude theory proposed by Katz (1960). In the theory, Katz argued that there are four psychological reasons for holding or changing attitudes (ego-defensive, knowledge, utilitarian, and value expressive). He posited that attitudes may be changed when a persuasive message and their underlying psychological motives match. The functional matching effect hypothesis, which is based in the structure of functional attitude theory, suggests that a persuasive message works best when the appeal matches with individuals' psychological goals (Lavine and Snyder 1996; Shavitt and Nelson 2002).

As conceived in the marketing/advertising literature, the functional matching effect hypothesis mostly uses the utilitarian and value-expressive functions of the functional attitude theory because those functions exert greater influence on consumer decision making than the other two functions. In effect, the functional matching effect hypothesis focuses on whether consumers' need arousal is due to the utilitarian function relating with functional product rewards, or due to the value expressive function of maintaining or enhancing consumer self- image and identity.

A number of studies have demonstrated the utility of functional matching effect hypothesis in advertising effects and persuasion. For example, Shavitt (1989) tested the functional matching effect by comparing product categories. Her experimental research found that participants identified wedding rings and the American flag as social identity (value expressive) products, while they identified air conditioners and coffee as utilitarian products. In her follow-up study, Shavitt (1990) demonstrated that participants preferred value-expressive appeals (e.g. 'Astoria [perfume] is the sophisticated scent that tells people you're not one of the crowd') for a value-expressive product (e.g. perfume) and a utilitarian appeal (e.g. 'The delicious, hearty flavor and aroma of Sterling Blend coffee come from a blend of the freshest coffee beans') for a utilitarian product (coffee).

Sirgy and his associates also studied the functional matching effect relative to self-congruity and functional-congruity (Johar and Sirgy 1991; Sirgy et al. 1991, 1997). Johar and Sirgy (1991) found that, when the product has value-expressive characteristics, audience persuasion is influenced by self-congruity, but when the product has utilitarian characteristics, audience persuasion is influenced by functional-congruity. Therefore, they posited that persuasiveness is increased by greater congruence between the product-user image and self-image, or by greater congruence between the audience's utilitarian beliefs about the actual brand and the referent beliefs (Johar and Sirgy 1991). Taking into account the above work on the functional matching effect hypothesis, it is indicated that the match-up effect occurs when an advertising message using a value-expressive or utilitarian function fits with the value-expressive or utilitarian function of the advertised product.

By integrating the reasoning behind the FCB model and the functional matching hypothesis, we assume that, when a consumer wants to buy a product in the think category, his/her purchase decision motive should be cognitively based because of the need for functional performance on one or more readily defined attributes – namely, the utilitarian motive is dominantly activated (McGuire 1976; Ratchford 1987). Conversely, we assume that, when a consumer wants to buy a feel category product, his/her purchase decision motive is affectively based because the expressive motive (e.g. such as self-expression, self-image, ego gratification, and sensory pleasure) is dominantly activated.

Therefore, in accordance with the FCB grid model and the functional matching hypothesis, we surmise that it would be beneficial if utilitarian appeals would be used in TV commercials for think products, while the value expressive appeals should be beneficial if used in commercials for feel products. Despite the fact that the benefits of this strategy have been advocated by researchers (Arens 2003; Belch and Belch 2003; Jones 1998), there is a lack of research that observes as to whether and to what extent advertisers practice this strategy. The only related study that investigated the line of inquiry was Dubé and her associates (1996).

The Dubé et al. (1996) study was conducted in two stages. In the first stage, the researchers obtained the general attitude base of consumers toward a food category through a field study. Then, in the second stage, they conducted a content analysis of food ads to investigate whether the advertising practitioners use appeals that functionally match consumer attitudes. The results provided little support for the expected match between advertising content and attitude base (Dubé et al. 1996). It was found that the majority of TV ads for food products used primarily utilitarian appeals, despite the fact that many food products could fall in the feel category. However, because the study dealt with only one product category (food), it is difficult to generalize the finding to other product categories (see Ratchford 1987).

Thirteen years have passed since Dubé et al.'s (1996) study was published. As a consequence, we believe that it is worthwhile to reassess the extent to which contemporary TV advertising reflects the functional matching principle based on the FCB grid model across an extended number of product categories. Despite the rise of the Internet, TV receives the largest share of advertising expenditures (e.g. 69% for TV vs 7% for the Internet) (Nielsen Online and AdAcross 2008). Thus, TV advertising is a relevant medium for examining the representativeness of the functional matching principle in advertising practice. Thus, we hypothesize:

H1: In TV advertising, utilitarian appeals will be more frequently used in commercials for think (utilitarian) products (H1a), and value-expressive appeals will be more frequently used in commercials for the feel (value-expressive) products (H1b)

The functional matching effect hypothesis and promotion in the FCB grid model

Appropriate application of sales promotion into the FCB grid is also essential. First, however, some terminology should be clarified regarding sales promotion and its application in integrated marketing communication (IMC) strategies.

According to Shimp (2003, 469), promotion is defined as 'any incentive used by a manufacturer to induce the trade (wholesalers, retailers, or other channel members) and/or consumers to buy a brand and to encourage the sales force to aggressively sell it'. Sales promotion is usually used for obtaining trial- and repeat-purchase, holding or snatching brand loyals, enhancing product usage, gaining shelf space for a brand, and so on. Although sales promotion itself has naturally short-term sales effects, it can produce long-term and synergetic effect with advertising. This 'ratchet effect', as it was labeled by Moran (1978), means that effectively combined advertising and sales promotion provide a reciprocal process thereby of affecting favorable brand attitude and increasing purchase behavior. Thus, well-coordinated sales promotion efforts can greatly strengthen advertising effect (Shimp 2003, 480), indicating that it is especially important in an IMC strategy to create

'one voice' between advertising and sales promotion (Percy 1997; Percy and Elliot 2005), irrespective of whether utilitarian or value expressive appeals are used in advertising.

In this context, for two reasons, we believe that TV advertising will present certain sales promotion tactics that will vary by the level of think/feel dimension in the FCB grid model. First, sales promotions have a primarily utilitarian function. In their examination of perceived benefits provided by sales promotions, Chandon and his associates (2000) found that the majority of sales promotions provide a relatively higher utilitarian benefit than the hedonic benefit (Chandon et al. 2000, 71). Second, the utilitarian appeal for think products is more cognitively oriented than the value expressive appeal for feel products (Dubé et al. 1996). Taking into account the characteristic of consumers who desire to maximize the rewards gained from participating in a promotion while minimizing the amount of time and effort invested (Shimp 2003, 563), think category products might be a better fit with the use of sales promotions because sales promotions provide consumers with a shortcut reducing consumers' prolonged cognitive information processing.

On the other hand, studies that examined the application of the FCB grid model (e.g. Dubé et al. 1996) have not investigated the role of involvement, the other dimension of the FCB grid model, relative to the think/feel dimensions of the model and the functional matching hypothesis. The involvement dimension in the model explains perceived level of involvement in making a product or brand choice (Ratchford 1987), and suggests that advertising strategies should be differentially used depending on the level of involvement and the think/feel dimensions.

As a concept, involvement has been defined in various ways in the advertising literature: how consumers react to the advertisement (Krugman 1965); personal relevance (Engel and Blackwell 1982; Greenwald and Leavitt 1984; Zaichkowsky 1985); amount of arousal, interest, or drive evoked by a particular stimulus (Mittal 1982); and goal-directed arousal capacity (Park and Mittal 1985) (as cited in Ratchford 1987). However, as conceived by Laurent and Kapferer (1985, 1986) and summarized by Ratchford (1987), the concept of involvement in the FCB grid model is defined as the perceived interest and imporisk (importance and risk importance) that consumers have toward a certain product when they make purchase decisions. Thus, high or low involvement of specific products may be measured by assessing whether the perceived degree of interest and imporisk is high or low. In other words, involvement can be determined by gauging the level of information processing needed for decision making, degree of thoughts required for information processing, and perceived risk of choosing the wrong brand to be high or low (Rossiter, Percy, and Donovan 1991). While involvement can differ among individuals, homogeneous perceptions of a product can be found at an aggregate level (Dholakia 1997). For instance, Zaichkowsky (1994) found that certain products such as instant coffee and breakfast cereals have a tendency to be processed through low levels of cognitive processing, while products such as automobiles solicit high cognitive processing for most individuals. In essence, because of their inherent nature and purpose of use, some product classes can be placed on the low involvement end and some product classes are classified as products generating high involvement. Low involvement product purchases have been associated with peripheral cues (Petty and Cacioppo 1981), global responses (Wright 1975), and simple awareness (Krugman 1965) whereas high involvement product purchases have been linked to central information processing (Petty and Cacioppo 1981). Based on theory, past studies have successfully categorized products into high or low involvement (e.g. Bearden et al. 1993; Laurent and Kapferer 1985; Zaichkowsky 1985, 1986).

For the well-coordinated sales promotion efforts, therefore, the involvement dimension is important in terms of determining sales promotion tactics used in TV

advertising relative to the FCB grid model and the functional matching hypothesis. Due to high imporisk, consumers may engage in more thorough information processing for products in the high involvement category than those in the low involvement category, regardless of whether those products are think/feel products. Also, in the persuasion literature (e.g. Elaboration Likelihood Model or Heuristic Systematic Model), product involvement has been one of the most important and widely employed concepts for examining and determining psychological processing of advertising (e.g. Paek 2005; Petty and Cacioppo 1986; Petty, Priester, and Wegener 1994).

In this context, sales promotion is a useful tool for reducing the high imporisk that consumers perceive for high involvement products. Again, since most consumers desire to maximize the rewards gained from participating in a promotion while minimizing the amount of time and effort invested (Shimp 2003, 563), sales promotion provides consumers with the benefits of monetary savings and reduced search and decision cost (Shimp 2003, 475). The benefit of monetary savings may serve to reduce the pain and risk of paying for an expensively priced product (Blattberg and Neslin 1990). In terms of reduced search and decision cost, sales promotions can result in improved shopping efficiency by reducing information processing time and easing product deliberations (see Bawa and Shoemaker 1987; Dickson and Sawyer 1990; Inman, McAlister, and Hoyer 1989, 1990; Wansink, Kent, and Hoch 1998). Finally, sales promotion allows shortcuts in decision processing, and the advantage might be most useful for high involvement products which need long information processing and have high imporisk.

Based on this reasoning, advertising planners might use multiple sales promotions to reduce prolonged information processing and perceived high risk in TV commercials. Percy (1997) and Percy and Elliot (2005), recommended that advertising and sales promotions should be used together because sales promotions accelerate consumer purchase behavior. Batra and Ahtola (1991) also mentioned that high involvement products need multiple appeals to most effectively influence behavior. Assuming these recommendations may be practiced in contemporary advertising, we tested the following hypothesis:

H2: In TV advertising, sales promotions will be more frequently used in commercials for high involvement products than in commercials for low involvement products category (H2a) and more frequently used in commercials for think products than in commercial for feel products (H2b)

In addition to the second hypothesis which examines the supporting role of sales promotion in IMC strategy, we further examine the inherent utilitarian and value expressive functions that various sales promotion tactics deliver. According to Shimp and Delozier (1986; see also Shimp 2003), there are various ways for the categorization of sales promotions. For instance, sales promotions can be categorized into consumer-oriented and trade-oriented promotions depending on the promotion target. Sales promotion also can be classified in terms of whether the reward offered to consumers is immediate or delayed and whether the manufacturer's objective is to achieve trial impact, customer holding/loading, or image reinforcement (Shimp 2003, 524, 563). For TV advertising, however, some of these categorizations are not so applicable because (1) TV advertising usually aims to target consumers, not trade, and (2) some of immediate or delayed sales promotion rewards, such as shelf/scanner-delivered coupons and mail-in coupons, are inappropriate for notification through TV advertising.

Rather, the classification of utilitarian and hedonic (value-expressive) sales promotion tactics (see Chandon et al. 2000; Shimp 2003, 523) would be a more appropriate typology

for the functional matching effect in TV advertising. Indeed, Chandon and his associates (2000) classified sales promotions into two types: monetary promotion and nonmonetary promotion. According to their categorization, monetary promotions (e.g. coupons, price reductions, rebates, and free product) primarily fulfill utilitarian needs because they provide financial benefits. In contrast, nonmonetary promotions (e.g. free gift and sweepstakes) primarily serve benefits that are more hedonic (value expressive). Through these distinctive sales promotion types, Shimp (2003) explains that consumers obtain the utilitarian benefits of obtaining monetary savings, reducing search and decision costs, and obtaining improved product quality by a price reduction that allows consumers to buy superior brands. Consumers also receive hedonic (value expressive) benefits which include accomplishing a sense of being a wise shopper, achieving a need for stimulation and variety of product selection, and obtaining entertainment value via promotional contest or sweepstakes.

From the conceptual categorizations discussed above, we make a number of assumptions. The first assumption is that the number of promotions having utilitarian benefits in TV commercials will be greater than the number of promotions having value expressive benefits in commercials. The second assumption that we make is that more monetary promotion will be used in TV commercials for high involvement products than in commercials for low involvement products because high involvement products have higher risks associated with higher price. As previously mentioned, advertising planners try to reduce such perceived risks by providing multiple sales promotions. Our third assumption is about the utilitarian and value expressive (hedonic) division. Chandon and his colleagues (2000) found that monetary promotions have primarily a utilitarian benefit, while nonmonetary promotions have primarily a hedonic benefit. Taking these theoretical grounds into consideration, we predict that specific sales promotion techniques will be used in accordance with their dominant function. Thus, the following set of hypotheses is proposed.

H3: Different types of sales promotions will be in TV commercial advertising such that: (H3a) Monetary promotions will be more frequently used in commercials for think products than in commercials for feel product; (H3b) Nonmonetary promotion will be more frequently used in commercials for the feel products than in commercials for think products; (H3c) Monetary promotions will be more frequently used in commercials for high involvement/think products than in commercials for any other product category; (H3d) Nonmonetary promotions will be more frequently used in commercials for high involvement/feel products than in commercials for any other product category

Method

Sample

A sample of 1356 television commercials was collected from primetime TV programming. The commercials aired on the four major networks (ABC, NBC, CBS, and FOX) during the week of 14 May 2007 (i.e. Monday, 14 May through Friday, 18 May) between 8 and 11pm (except for FOX, 8 to 10pm). Primetime network TV programming was selected because it attracts the largest viewing audience among all age groups (Nielsen Media Research 1999; Story and Faulkner 1990). The sampling procedure was modeled after similar studies in the advertising literature (see Cheng and Schweitzer 1996; Cho et al. 1999; Lin 1993; Ramaprasad and Hasegawa 1992; Resnik and Stern 1977; Stern and Resnik 1991).

In addition, our consecutive-day sampling technique has been considered to be relatively representative and, thus, to help in inferring the findings to a larger population (Riffe, Aust, and Lacy 1993; Riffe, Lacy, and Fico 1998) and has been commonly employed in content analytic studies of advertising (e.g. Cho, Lee, and Kim 2005).

Local ads, public service announcements (PSAs), and self-promotion ads for the networks were excluded. In addition, based on the FCB grid map of 60 common products (Ratchford 1987, 31), the product categories which could not be categorized into a distinct dimension were removed from the sample (e.g. toothpaste, jeans, and wine for sale).

Coding scheme

The coding scheme included the following three variables: (1) product category; (2) message appeals – slice of life, testimonial, problem and solution, product as a hero, comparison, drama, humor, and sex; (3) sales promotions – sweepstakes, price reductions, rebates, discount coupon, free product offers, and free gift. These categories were adopted from existing advertising literature (Chandon et al. 2000; Gengler and Reynolds 1995; Henderson and Kelly 2005; Parker 2003; Pratt and Pratt 1996).

To code mutually exclusive and exhaustive categories, product category was classified into four types in accordance with the FCB grid map of 60 common products (Ratchford 1987, 31). Then, product category was classified into one of the four groups: high involvement/think, high involvement/feel, low involvement/think, and low involvement/feel. Next, utilitarian and value expressive appeals were created based on the eight message appeals. Testimonial, problem and solution, product as a hero, and comparison appeals were assigned to the utilitarian appeal category because those appeals focus on the utility and functional rewards from the product. Slice of life, drama, humor, and sex appeals were assigned to the value expressive appeal category because those appeals emphasize the products' value expressive function maintaining or enhancing consumers' self-image and identity, ego and sensory gratification, and social acceptance (see Katz 1960). In the same vein, sales promotions were categorized into monetary promotions representing utilitarian benefits and nonmonetary promotions representing hedonic (value expressive) benefits, in accordance with Chandon and his colleagues' (2000) study. Table 1 reports detailed operational definitions and response categories.

Coding procedures

Two coders, who were blind to the purpose of the study, were trained to code ad content. They were trained through multiple sessions and group discussions, in which each coder shared meanings and nuances about the code variables. Three pilot-tests were conducted to identify problems and confusion in the coding sheet and directions. Based on the pilot-test results, a series of training sessions, and discussions, the coding scheme was further developed with more detailed operational definitions (see Table 1). The unit of analysis was each product TV commercial longer than 10 seconds. The coders examined both visual and audio elements of each spot.

For inter-coder reliability computation, we adopted Perreault and Leigh's (1989) Index (P/L Index). The P/L Index is appropriate when there are only two coders and items are in nominal scales, which is the case for this study. In addition, the index is known to be relatively rigorous and to take chance agreements into account (Rust and Cooil 1994). All reliability coefficients exceeded the rule-of-thumb coefficient size, .80 (Rust and Cooil

Table 1. Portrayal of utilitarian and value expressive appeal by FCB grid.

	High involvement		Low involvement		
	Think	Feel	Think	Feel	Total
Utilitarian appeal	62.3% (431)	24.3% (28)	76.0% (114)	30.3% (121)	51.2% (694)
Testimonial by product user	9.8% (68)	7.8% (9)	29.3% (44)	6.3% (25)	10.8% (146)
Problem and solution	10.3% (71)	2.6% (3)	12.7% (19)	5.0% (20)	8.3% (113)
Product as a hero	34.1% (236)	12.2% (14)	24.7% (37)	12.3% (49)	24.8% (336)
Comparison	8.1% (56)	1.7% (2)	9.3% (14)	6.8% (27)	7.3% (99)
Value expressive appeal	37.7% (261)	75.7% (87)	24.0% (36)	69.7% (278)	48.8% (662)
Slice of life	11.6% (80)	45.2% (52)	1.3% (2)	14.5% (58)	14.2% (192)
Drama	15.5% (107)	21.7% (25)	6.0% (9)	25.6% (102)	17.9% (243)
Humor	10.7% (74)	8.7% (10)	16.7% (25)	24.6% (98)	15.3% (207)
Sex	0.0% (0)	0.0% (0)	0.0% (0)	5.0% (20)	1.5% (20)
Total	100.0% (692)	100.0% (115)	100.0% (150)	100.0% (399)	100.0% (1356)
	$\chi^2 = 173.71$, d.f. $= 3$, $p = .00$				

1994), and ranged from .83 to .100. Average inter-coder reliability for all the variables was .86, which exceeds the acceptable level (also see Figure 2 for inter-coder reliability for each coding category). Judgment disagreements between the two coders were resolved by a third judge.

Results

H1. Frequency of utilitarian and value expressive appeals

The first hypothesis predicted that utilitarian appeals would be more frequent in TV commercials for products in the think (utilitarian) category whereas value expressive appeals would be more frequent in commercials for products in the feel (value expressive) category. As expected, chi-square statistics indicated significantly different patterns across the cells ($\chi^2(3) = 173.71, p = .00$). In the high involvement category, about 62% of the commercials for think products used utilitarian appeals (e.g. testimonial by product user, problem and solution, product as a hero, and comparison), compared to 37.7% of the feel product commercials. In the low involvement category, utilitarian appeals were also more dominant (76.0%) in commercials for think products.

Value expressive appeals (e.g. slice of life, drama, humor, and sex) were more frequent in TV commercials for feel products than think product commercials (75.7% vs 24.3%). In the low involvement category, values expressive appeals (69.7%) were also more frequent in commercials for feel products than in those for think products. As shown in Table 1, global utilitarian or value-expressive appeals generally exhibited the same tendency. Thus, the first hypothesis is supported.

H2. Frequency of total sales promotions

Hypothesis 2a predicted that sales promotion techniques would be more frequent in TV commercials for high involvement products than in commercials for low involvement products. A significant chi-square statistic indicates that the use of sales promotion

techniques differed across product/commercial conditions ($\chi^2(6) = 203.95$, $p = .00$). Of the 375 TV commercials with sales promotion cues, 331 (88.27%) were for high involvement products whereas only 44 (11.73%) were for the low involvement products. These results support hypothesis 2a.

Hypothesis 2b, which predicted that sales promotions cues would be more frequent in TV commercials for the think products than in those for feel products, is also supported. Of the 375 TV commercials with promotional cues, 77.6% were for think products; 22.4% were for feel products. It is interesting to note (see Table 2) that no promotional cues were found in TV

Product category (.90)

(1) High involvement-think: life insurance; contact lens; auto insurance; console TV; economy car; family car; stereo component; 35mm camera; washer/dryer; portable TV; car battery; exterior house paint; battery razor; instamatic camera; credit card; motor oil; headache remedy.

(2) High involvement-feel: sports car; expensive watch; eye glasses; wallpaper; hair coloring; perfume; wine for dinner party; complexion/face soap; ground coffee; family/steak restaurant.

(3) involvement-think: insecticide; dry bleach; suntan lotion; salad oil; insect repellant; Low regular shampoo; liquid bleach; non-disposable razor; disposable razor; paper towels.

(4) Low involvement-feel: inexpensive watch; chicken; low tar cigarette; greeting card; pizza, deodorant soap; peanut butter; fast food restaurant; fruit; frozen baked goods; women's magazine; imported beer; regular cigarettes; donut frozen; donut shop; light beer; regular beer; diet soft drinks; barbecue sauce; regular soft drinks; salty snacks; liquid hand soap.

Message appeals (.82)

(a) Utilitarian appeal:

- (1) Testimonial by product user.
- (2) Problem and solution (before-and-after presentation).
- (3) Product as a hero (focus on product features, benefits, attributes, news, or statistics, price, availability).
- (4) Comparison (with other products/services/companies).

(b) Value expressive appeal:

- (1) Slice of life.
- (2) Drama (dramatization, fantasy).
- (3) Humor.
- (4) Sex.

Sales promotions (.90)

(a) Monetary promotions:

- (1) Price reductions.
- (2) Rebate.
- (3) Discount coupon.
- (4) Free product offers.

(b) Nonmonetary promotions:

- (1) Free gifts.
- (2) Sweep stakes.

Figure 2. Operational definitions and inter-coder reliability. Note: Numbers in the parentheses of each item indicate the inter-coder reliability.

commercials for low involvement-think products. Possible explanations for this finding are discussed later.

H3. Frequency of monetary and nonmonetary sales promotions

H3a predicted that monetary promotions would be more frequently used in commercials for think products than in commercials for feel products. Significant chi-square statistics for monetary sales promotions ($\chi^2(6) = 178.59$, $p = .00$) and nonmonetary sales promotions ($\chi^2(3) = 29.36$, $p = .00$) in the TV commercials indicate that promotional technique types differ across product categories. Of the 302 commercials containing monetary sales promotions, the percentage was higher for the think product category (77.2%) than for the feel product category (22.9%). Thus, hypothesis 3a is supported.

Hypothesis 3b, which predicted that nonmonetary sales promotions would be more frequent in commercials for feel products than for think products, is not supported. This type of promotion was used only in TV commercials for high involvement/think or low involvement/feel products.

Hypothesis 3c predicted that monetary promotions would be more frequently used in commercials for high involvement/think products than in commercials for any other product category. This hypothesis is supported in that 233 monetary promotions were observed in the high involvement/think quadrant among 302 total monetary promotions. Thus, the quadrant of high involvement/think products had the greatest percentage of monetary sales promotions (77.2%) for TV commercials.

Hypothesis 3d, which predicted that nonmonetary promotion would be most frequent in commercials for high involvement/feel products, is not supported. Of all TV commercials containing nonmonetary promotional cues (73), high involvement/think products had the highest frequency of appearance (79.5%), followed by low involvement/think products (20.5%).

Overall, the results indicate that sales promotion techniques are mostly concentrated in TV advertising for products representing the high involvement/think dimension. This quadrant represents the only product type that used multiple promotional cues. See Table 3.

Logistic regression analysis

Table 4 summarizes the results of a series of logistic regression analyses. Because chi-square analysis is particularly sensitive to sample size and regression allowing the researchers to make more definite comparisons between involvement level and product type in their relative effect on appeals and promotions use, logistic regression was used in order to provide more rigorous tests of the hypotheses. Table 4 presents hypothesis testing results and explains what independent and dependent variables indicate in the note. For each model, the dependent variable is the logarithm of the odds that dependent variables (i.e. advertising appeal and sale promotion types) will be employed based on a particular dimension or quadrant of the FCB grid, divided by the odds that the dependent variables will not be employed based on that dimension or quadrant. The effect of each independent variable is expressed in terms of the impact of being a given dimension or quadrant of the FCB grid on the log odds of the dependent variable. Odds ratios are also presented for case of interpretation.

The results from the logistic regression analyses are essentially consistent with the results of chi-square tests, providing further support for the hypotheses. All models are statistically significant at $p < .001$. Model H1 in Table 4 shows that, compared to think products, utilitarian appeals are more likely to be used in TV commercials for feel

Table 2. Portrayal of sales promotions by FCB grid.

	High involvement		Low involvement			
	Think	Feel	Think	Feel		Total
Sales promotions	No cues	57.9% (401)	65.2% (75)	100.0% (150)	89.0% (355)	72.3% (981)
	1 cue	34.5% (239)	34.8% (40)	0.0% (0)	11.0% (44)	23.8% (323)
	2 cues	7.5% (52)	0.0% (0)	0.0% (0)	0.0% (0)	3.8% (52)
	$\chi^2 = 203.95$, d.f. $= 6$, $p = .00$					

products. Specifically, compared with value expressive appeals, the log odds that utilitarian appeals will be employed in feel product commercials increased by 1.503. In other words, the odds of value expressive appeals being present in commercials for feel products are over four times greater than they are for think product commercials. The result is reversed for utilitarian appeals for think products. That is, the odds of utilitarian appeals being present in think product ads are over four times greater than they are for feel product ads. Sales promotions are also more likely used in TV commercials for high involvement products, and also in those for think products (see models H2a and H2b in Table 4). The odds of sales promotion being employed in high involvement product commercials are 7.98 times higher than those in low involvement product commercials, and the odds of sales promotion being employed in commercials for think products are 2.7 times higher than those for feel products. Models H3a, H3b, and H3c show how monetary and nonmonetary promotions are used depending on the dimension or quadrant of the FCB grid.

Consistent with chi-square test results, both monetary and nonmonetary promotions are more likely to be used in TV commercials for think products. While the likelihood of employing monetary promotion in think product commercials is 2.46 times higher than that in feel product category commercials, the odds ratio of think product commercials employing nonmonetary sales promotion is 0.4 times lower than that of commercials for feel products. When the categorization is divided into the quadrants of the FCB grid, nonmonetary promotion is 4.38 times more likely to be employed in commercials for think/high involvement products than in the other quadrants of the FCB grid (see model H3c).

On the other hand, hypothesis 3d could not be tested because there is no nonmonetary promotion in TV ads for feel/high involvement products. Nevertheless, the overall results from the logistic regression analyses confirm the notion that the functional matching effect is significant on advertising appeal type. The effects of functional matching seem less significant on sale promotions.

Discussion

The functional matching hypothesis is well documented in the persuasion literature for predicting and matching consumer mental states and product types (Shavitt 1989, 1990). The FCB grid model is considered a useful communication planning tool in advertising management (Ratchford 1987). Yet, despite overlapping conceptual similarities and empirical evidence, little is known about the extent to which contemporary advertising follows the combination of logic represented in these two perspectives on advertising planning. This study was conducted to fill this knowledge gap by examining whether and

Table 3. Portrayals of monetary and nonmonetary sales promotions by FCB grid.

		High involvement		Low involvement		
		Think	Feel	Think	Feel	Total
Monetary sales promotions (price reductions, rebates, coupons, free product offers)	No cues	66.3% (459)	65.2% (75)	100% (150)	92.7% (370)	77.7% (1054)
	1 cue	26.2% (181)	34.8% (40)	0.0% (0)	7.3% (29)	18.4% (250)
	2 cues	7.5% (52)	0.0% (0)	0.0% (0)	0.0% (0)	3.8% (52)
	$\chi^2 = 178.59$, df $= 6$, $p = .00$					
Non-monetary sales promotions (free gifts, sweepstakes)	No cues	91.6% (634)	100.0% (115)	100.0% (150)	96.2% (384)	94.6% (1283)
	1 cue	8.4% (58)	0.0% (0)	0.0% (0)	3.8% (15)	5.4% (73)
	$\chi^2 = 29.36$, df $= 3$, $p = .00$					

Table 4. Logistic regression equations predicting effects of the think/feel and involvement dimensions, and its combinations.

Dependent variables											
H1: Advertising appeal				H2a: Sales promotion				H2b: Sales promotion			
IVs	b	SE	Odds Ratio	IVs	b	SE	Odds Ratio	IVs	b	SE	Odds Ratio
Intercept	−.607***	.072		Intercept	−2.440***	.173		Intercept	−1.633***	.119	
Feel	1.503***	.121	4.495	High involvement	2.077***	.173	7.981	Think	.995***	.140	2.704
Model Chi-square	167.035***			Model Chi-square	200.145***			Model Chi-square	55.748***		
Dependent variables											
H3a: Monetary promotion				H3b: Nonmonetary promotion				H3c: Monetary promotion			
IVs	b	SE	Odds Ratio	IVs	b	SE	Odds Ratio	IVs	b	SE	Odds Ratio
Intercept	−1.864***	.129		Intercept	−2.604***	.136		Intercept	−2.154***	.127	.116
Think	.903***	.151	2.467	Feel	−.901***	.295	.406	Think/High involvement	1.147***	.150	4.377
Model Chi-square	39.544***			Model Chi-square	10.574***			Model Chi-square	111.073***		

Note: IVs = independent variables, b = standardized coefficient, SE = standard error, $*p < .05$, $**p < .01$, $***p < .001$.
Independent variables:

H1 & H3b: Feel product is coded 1, 0 if think product. Think product is the reference group.
H2a: High involvement product is coded 1, 0 if low involvement. Low involvement is the reference group.
H2b & H3a: Think product is coded 1, 0 if feel product. Feel product is the reference group.
H3c: Think/high involvement is coded 1, 0 otherwise. Other three quadrants are the reference group

Dependent variables:

H1: Value expressive copy is coded 1, 0 if utilitarian copy.
H2a: Any sales promotion type shown in ad is coded 1, 0 if no sales promotion shown in ad.
H3a & H3c: Monetary promotions coded 1, 0 otherwise.
H3b: Nonmonetary promotion is coded 1, 0 otherwise. H3d was unable to test due to no case of nonmonetary promotion in feel/high involvement product

the extent to which contemporary TV advertising uses the message strategies suggested by the FCB grid model and the functional matching effect hypothesis. In addition, the study also investigated how sales promotion techniques are reflected in contemporary TV advertising relative to the two perspectives.

A number of interesting findings were uncovered by our analysis. First, we found a high degree of match between message appeals and product types relative to utilitarian (cognitive) and value expressive (affective) functions in TV advertising. This finding is inconsistent with past findings (Dubé et al. 1996) that found the cognitive appeal as dominant in advertising for products in the affective category (food product). Dubé and her associates (1996, 86) discussed this finding that contradicted their hypotheses as advertising managers making less than optimal decisions. Contrary to this, our results suggest that advertising practitioners may be making different decisions than they did a decade ago when it comes to TV advertising; contemporary advertising planning decisions appear to be more in line with the logic of the FCB model and the functional matching effect hypothesis. However, we cannot say from our results that such planning decisions were driven directly by the model and/or matching hypothesis. Questions regarding the actual application of the two concepts in strategic planning would be interesting subjects of future research. Such questions could be addressed by conducting a survey among advertising practitioners for their practices.

Second, from their analysis of food product ads, Dubé and associates (1996) concluded that the FCB grid may be overly simplistic as a model for practical advertising planning. The results of our study raise questions about the validity of their conclusion. In our study, we classified product categories into the four quadrants of the FCB grid in accordance with Ratchford's (1987) classification of 60 common products. By demonstrating that utilitarian messages are more often used in TV commercials for utilitarian products and value expressive messages more in commercials for value expressive products, these results suggest that the FCB grid model in association with the functional matching hypothesis are conceptually well designed tools and, thus might serve as a practical advertising planning approach across a diverse range of product categories. Moreover, when isolating our results to only food products for comparison with Dubé et al.'s food product category findings, the results are opposite in that our findings show affective ad appeals to be dominant in food categories (primarily a feel product category) (results presented in Table 5), which is in line with the functional matching hypothesis.

In the same vein, our study also indicates that sales promotions are used more in TV commercials for high involvement products than in commercials for products in the low involvement category, and more in think product commercials than in feel product

Table 5. The result comparison for food product category between Dubé et al. (1996) and the current study.

	Affective ad appeal	Cognitive ad appeal
The study of Dubé et al. in 1996 ($N = 2996$)	28.0% (839)	57.0% (1709)
The current study ($N = 327$)	73.4% (240)	26.6% (87)

Note: In the study of Dubé et al. (1996), affective ad content (appeal) includes sensorial experiences, emotional experiences, and social experiences; cognitive ad content category includes physiological consequences, product features, functional aspects, and symbolical aspects. In the current study, affective (value expressive) ad appeal includes slice of life, drama, humor, and sex; cognitive (utilitarian) ad appeal includes testimonial by product user, problem and solution, product as a hero, comparison. According to the FCB grid model (Ratchford 1987), food products are included into feel dimension, except for salad oil. But, there is no ad for salad oil in the current study.

commercials. These results suggest that advertising planners may use various sales promotion tactics in TV advertising as inducements to reduce consumers' prolonged cognitive processing and their perceived risk (or real risk) of purchase decisions. For example, in the high involvement/think quadrant of the FCB model, where the level of consumer cognitive processing and perceived risk is assumed to be higher than in any other quadrant, frequency of sales promotion techniques in the commercials was the highest, and the high involvement/think quadrant was the only category where multiple sales promotion cues were observed. These results suggest that advertising practitioners not only use sales promotions to facilitate cognitive information processing and to reduce perceived risk, but they could also consider sales promotions as a tactical part of a TV advertising strategy for high involvement/think products. Therefore, it is reasonable to think that sales promotion in TV advertising is used for high involvement/think products in an effort to strengthen consumers' attitudes and behaviors toward the brand.

Another interesting result indicates that sales promotion techniques were more frequently in TV commercials for products in the high involvement/think quadrant than in the rest of the three quadrants, whereas there were no sales promotion techniques in the low involvement/think quadrant. One possible explanation for this finding is that the level of involvement could be considered more important in practice than functional matching in the think/feel product category when sales promotions in TV commercials are used. The use of price-based sales promotions means less profit per sold unit, depending on the type of involvement/think product. High involvement products should typically generate more financial profits because their prices are generally higher than prices for low involvement products. Thus, greater profit margins for high involvement products may be associated with greater use of sales promotions. Because of the greater profit margin sold per unit that high involvement products make, practitioners might be able to afford greater use of sales promotion tactics, than low involvement products. However, this explanation is rather speculative at this point and should be followed up by studies that examine and compare the cost structures and profit margins of different products in the FCB quadrants with current practices among advertisers.

Lastly, when sales promotion use was compared between monetary promotions associated with utilitarian benefit and nonmonetary promotions associated with hedonic benefit, no significant difference was found relative to the functional matching hypothesis in the TV commercials. One potential explanation may be due to our categorization of promotion types in dividing them into utilitarian and hedonic profits, which is different from existing literature. For example, Shimp (2003) categorized sales promotions into (1) consumer- and trade-oriented promotions, (2) immediate or delayed rewards, and (3) whether manufacturer's objective is to achieve trial impact, customer holding/loading, or image reinforcement (also see Shimp and Delozier 1986). Therefore, future research should explore functional matching by using other sales promotion categorizations to compare the presence of utilitarian and value expressive appeals in ads.

Limitations and future research

Like all social science research, our study has limitations that restrict the applicability and generalizability of the results. The sample of TV commercials collected during a short period of time and in primetime TV programs may not be representative of all TV advertising. Future research should thus replicate our findings using probability sampling of contemporary TV advertising as well as other media. Further explorations and categorizations of product types (e.g. think/feel) should go beyond Ratchford's (1987) classification of 60 products.

Additionally, future research could conduct direct response studies: measure consumers' perceived affective or cognitive attitude toward each brand and evaluate those attitudes relative to the FCB model and the functional matching hypothesis.

While our study found an increase of functional matching in TV advertising, interpretations should be cautioned because we used a different coding scheme than Dubé et al. (1996). Though the two coding schemes are consistent in term of describing the nature of advertising content as either value expressive or utilitarian appeal, there is the possibility that our reported increase in functional matching is the result of the different coding schemes. Thus, future studies should test the consistency of different coding schemes using the same sample of ads.

We also caution against making causal inferences from our content analytic study. It should be noted that studies of ad-content provide evidence on neither the underlying motives of ad creators nor causal-related conditions resulting from ad-exposure (Carlson 2008). As noted by experts, content-based data do establish an empirical basis for making assumptions about the correspondence between creation, content, and effects of advertising (Stempel 1989) and can be used by other researchers to systematically link content both to the forces that created it and to its effects (Riffe et al. 1998). We encourage researchers to empirically test the functional matching hypothesis relative to message appeals, use of sales promotion techniques, and product types in TV advertising following the FCB grid model using both survey and experimental methods.

Conclusion

This study offers a snapshot of how contemporary TV advertising follows the logic of the FCB grid model and the functional matching effect hypothesis. From these results, it would appear that there is a high degree of match between message appeals and products' predominant features relative to utilitarian (cognitive) and value expressive (affective) functions in modern TV advertising. For sales promotion, the results indicate that involvement dimension seems to matter more to advertisers than the functional matching hypothesis. Though the FCB grid model and the functional matching hypothesis seem applicable to advertising planning, other factors (e.g. other types of sales promotions, strategic and tactical characteristics of ads) should be considered and investigated together to better understand modern advertising practices. It is our hope that this study will stimulate more research on the FCB grid model and the functional matching hypothesis.

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