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NEED-APPEALS, BENEFIT-APPEALS,
AND BRAND-USER-TRAIT-APPEALS
IN TELEVISION ADVERTISING:
A CONTENT ANALYSIS OF COMMERCIALS

The aim of the exploratory study was to answer the question of which categories of needs domi-
nate in television commercials of material products in Poland, which of the activated needs make
up clusters in the light of marketing practice, which of the benefits offered the most frequently
accompany the arousal of different categories of needs, and what are the most important correlates
of activated needs from the perspective of design features and scenarios of advertising. A content
analysis of a sample of 418 spots was carried out by 10 judges, whose reliability was psychometri-
cally verified before and after the analysis. We adopted Maslow's elaboration of his own theory of
needs as the basis of taxonomy. Averaged assessment of judges became the basis of quantitative
analysis, which showed the dominant role of lower-order needs in television commercials, the

co-occurrence of higher-order needs, and their close link with the symbolic benefits (social, emotional and expressive) associated with advertised product brands and with the user image.

Keywords: needs; benefits; brand user image; TV commercials; brands; goods.

INTRODUCTION

A great majority of studies in psychology and marketing devoted to advertising focus on the influence of TV commercials on consumers' cognitive processes, attitudes, and behaviors. A relatively small number of studies, in contrast, focus on the contents of commercials (e.g., Belk & Bryce, 1986; Buijzen & Valkenburg, 2002; Kim, Lee, Hong, Ahn, & Lee, 2015; McNeal & McDaniel, 1984). The main two reasons should be noted for which it is worth analyzing the contents of TV commercials, television still occupying the key position among the media of advertising in Poland and worldwide. First, such an analysis provides an abundance of information about what implicit hypotheses the authors of commercials have regarding what contents are the most effective in achieving marketing goals in different target groups. Second, the systematization of the contents of commercials makes it possible to understand what stimuli and in what proportions give shape to consumers' subjective perception of the world of consumption. Conducting such studies involves a number of methodological problems, of which the most important one seems to be the objectivization of the process of qualitative content analysis of commercials. One of the ways to solve this problem is to use the method of judges, as we did in the present study.

Anything that may be useful for the consumer is a potential instrument of marketing in the struggle to win his or her favor. For this reason, effective identification of consumers' needs and creating the kind of offer that will satisfy those needs largely determines success in the market (Reeves, 1961). What needs a particular product can satisfy depends not only on its physical properties but, above all, on the manner of communicating the broadly defined benefits resulting from the consumption of that product (Razmus, 2013) and on the characteristics of brand user image generated by a commercial (Gorbaniuk, 2014). Consumers either confirm their current self-image or supplement it by reaching for products of brands that are associated with the attributes they find desirable (Belk, 1988). As a result, advertising messages have considerable influence not only on purchase decisions but also on the structure of needs experienced by members of their target audience and on their self-image (actual and ideal), which is important from the point of view of individuals' psychological well-being.

There are different classifications of needs, but the ones usually used for marketing purposes are Murray's (1938), Bayton's (1958), and Maslow's (1970). It is the last of these that enjoys the widest popularity and acceptance among scientists and practitioners (Kurtz, 2013; Poston, 2009) and that has been one of the models most often referred to in the context of consumer behavior (e.g., Finsterwalder, 2010; Forbes, 2015; Ross & Harradine, 2004; Schneider & Bowen, 1999). Its main advantage is the conciseness of description (McNeal & McDaniel, 1984). This classification frequently serves as the basis for analyzing the contents of commercials in terms of the needs activated by them and in terms of the methods used for that purpose (Chun, 2010; Kozłowska, 2014). Some of the needs distinguished by Maslow have been renamed and adjusted to the context of marketing (Schneider & Bowen, 1999), transformed (Koltko-Rivera, 2006), criticized, and tested (Yalch & Brunel, 1996). Still, this theory is regarded as universal and relating to various groups of people, and despite criticism it continues to have descriptive value (Taormina & Gao, 2013). Analyzing consumer decisions in the light of Maslow's theory, scholars often conclude that they are rooted in higher-order needs and can be used to explain them (Csikszentmihalyi, 2000).

However, in the literature on the subject there is a lack of publications that would show, based on psychometrically reliable qualitative studies of the contents of advertising and their quantitative analysis, which categories of needs dominate in advertising messages, what clusters the needs activated form in marketing practice, the offer of what benefits usually accompanies inducing different categories of needs, and what typical brand user image characteristics are generated in the process. Knowledge on these issues would make it possible at the level of stimuli to determine the relation between benefits and the characteristics of the image of the user of advertised brands. In a vast majority of studies to date, these constructs were considered separately. The aim of the present study was to fill this gap in knowledge.

RESEARCH QUESTIONS

We formulated the following exploratory research questions that the content analysis of commercials was supposed to answer:
Q1: Which needs do commercials appeal to the most often?
Q2: Which need-appeals co-occur with one another in commercials?
Q3: Which benefit-appeals co-occur with which categories of need-appeals?
Q4: Which brand user image traits are activated together with needs?

METHOD

Sample of TV commercials

The units of analysis were commercial spots. The selection of the sample took place between October 20 and October 28, 2013, during prime time (17.00-22.00), in channels enjoying the greatest popularity among viewers according to TV audience research conducted in October 2013 (AGB Nielsen): TVP1, TVP2, Polsat, TVN, and TV4. We recorded all advertising blocks, cut them into spots, and rejected the ones that recurred. The method of sample selection was comparable to the methods used in other studies in which the contents of commercials are analyzed (cf. Kim et al., 2015). The sample consisted of $N = 418$ spots. Their duration ranged from 10 to 45 seconds: 10 s (6.0%), 15 s (29.5%), 20 s (7.6%), 30 s (54.0%), or 45 s (1.6%). The sample comprised only commercials of goods (we excluded commercials advertising services).

Training of judges

Before commencing the classification, ten judges underwent 20-hour theoretical and practical training, scheduled over a period of two months, as part of their graduate seminar. Theoretical preparation comprised learning the scope of the definition of each category of needs, benefits, and brand user image characteristics as well as becoming acquainted with the operational indicators of these variables. Between meetings, the students attending the seminar became acquainted with source publications discussing the adopted taxonomic categories. Next, the participants in the training selected examples of commercials the most strongly activating particular categories of needs, benefits, and brand user image characteristics; the results of the selection were discussed in detail during the meetings. In the next stage, the participants in the training performed an independent assessment of the degree to which each commercial in the randomly selected sample of 20 spots activated consumers' needs, benefits, and attributes. The verification of interjudge reliability showed it to be satisfactory in specific taxonomic categories ($\alpha > .70$), while individual judges lowering the group's classification reliability were given additional training, narrowed down to the categories in which they performed worse than the rest of the group.

Operationalization and the procedure of the main study

After training, the ten judges began to analyze the sample of 418 spots. Each judge's task was to independently assess all spots in terms of (1) the degree to which a given commercial appealed to each of the needs distinguished by Maslow (1970), (2) the degree to which emphasis was placed on functional benefits (price, warranty, servicing) and on symbolic ones (social, brand-related, emotional, expressive, prosocial), identified in exploratory research by Razmus (2013), and (3) the degree to which a given commercial highlighted the eight traits of brand user image in terms of which consumers compare themselves to others, namely: agency, sociability, responsibility, sophistication, haughtiness, old-fashionedness, boorishness, and avarice (Gorbaniuk, 2014). The judges performed the rating on a scale from 1 to 4 (*not at all*, *to a small degree*, *to a moderate degree*, *to a high degree*).

We further specified some of the categories of needs in order to obtain more homogeneous categories for the assessment of commercials – namely, we distinguished sexual drive as a separate category within biological needs; within the respect category, the judges rated the activation of the need for self-respect as well as specific needs distinguished within it: power, achievement, and freedom as well as respect from others. The assessment also covered aesthetic needs (connected with beauty, balance, and harmony) as well as the need for knowledge and understanding, which Maslow (1970) called basic cognitive needs.

The judges' work (five weeks) was organized in such a way that the assessments were independently performed at home and fragments of the material (50 commercials rated) were sent at regular time intervals (once in 3 days).

Interjudge reliability

We tested interjudge reliability using Cronbach's α coefficient. In the case of particular categories of needs, we obtained values ranging from .69 to .93: .93 for physiological needs, .89 for sexual needs, .93 for security, .89 for affiliation, .80 for self-respect, .80 for respect from others, .78 for self-actualization, .87 for power and freedom, .72 for aesthetic needs, and .69 for knowledge and understanding.

In the case of benefits, the values of the α coefficient were as follows: .86 for high quality, .92 for low price, .83 for long warranty period, .75 for social benefits, .56 for benefits connected with entering into a brand relationship, .79 for emotional benefits, .83 for expressive benefits, and .77 for prosocial benefits.

Interjudge reliability in the case of assessing the traits of the brand user image generated by advertising, the order was as follows: .79 for agency, .91 for sophistication, .88 for sociability, .94 for responsibility, .76 for old-fashioned-ness, .59 for boorishness, .75 for haughtiness, and .57 for avarice.

The above values show that only in three out of 25 categories was reliability low (.56 to .59), and these variables were excluded from analyses as not sufficiently reliable. The probable cause of low interjudge reliability in the case of benefits connected with brand relationship was the low consistency of the category itself, while in the cases of boorishness and avarice in brand user image the cause lies in the very low variance of these variables (commercials rarely create a negative brand user image), which made the judges' task more difficult. In the remaining categories, the level of interjudge reliability was acceptable, and these ratings were subjected to further statistical analyses.

RESULTS

Frequency of need-appeals in TV commercials

In order to answer the question of how often commercials appeal to different categories of needs distinguished by Maslow, we performed a dichotomization of judges' ratings. In the case of a spot receiving an averaged rating of at least 2.0 (*to a small degree*) on the 4-point scale, we classified it into a given category of needs. We found a domination of commercials appealing to the need for security (47.6%). The next most frequent category was physiological needs (33.3%), followed by self-respect (28.0%) and respect from others (11.2%), affiliation (25.1%), self-actualization (13.4%), and power and freedom (9.1%). The least frequent category was commercials activating aesthetic needs (8.2%), the need for knowledge and understanding (2.2%), and sexual needs (1.2%).

Co-occurrence of need-appeals in TV commercials

The content analysis of commercials revealed that in 37.4% of cases only one need was activated; in 31.7% of cases, these were physiological and security needs. In the remaining 55.2% of commercials, two or more needs were activated; in 7.4% of commercials the averaged rating did not exceed the adopted criterion of $k \geq 2$ for any of the needs – and so we did not classify those commercials as activating any of the needs. In order to answer the question of which needs more frequently co-occur with one another, we computed the correlations

between them based on averaged judges' ratings. Due to the high power of the test, we limited the interpretation of the results to coefficients statistically significant at $p < .01$, thus excluding correlations of low cognitive value. Table 1 shows that statistically significant correlation coefficients indicate weak or, at the most, moderate associations.

Table 1
Co-Occurrence of Need-Appeals in TV Commercials: Spearman's ρ Correlation Coefficients

Needs	Physiological	Sexual	Security	Affiliation	Self-respect	Respect from others	Power and freedom	Self-actualization	Aesthetic	Knowledge and understanding
Physiological	–									
Sexual	-.19**	–								
Security	-.22**	-.11	–							
Affiliation	-.20**	.07	-.03	–						
Self-respect	-.27**	.40**	.15*	-.16**	–					
Respect from others	-.18**	.35**	-.22**	.36**	.41**	–				
Power and freedom	-.09	.11	-.28**	-.09	.18**	.42**	–			
Self-actualization	-.17**	.15*	.16**	.24**	.31**	.39**	.40**	–		
Aesthetic	-.35**	.47**	-.29**	-.15*	.40**	.34**	.08	.02	–	
Knowledge and understanding	-.09	-.19**	-.05	-.07	.01	.03	.35**	.28**	-.14*	–

Note. * $p < .01$, ** $p < .001$.

The graphic illustration of the matrix of covariance (co-occurrence) of different needs in TV commercials is the outcome of multidimensional scaling of mutual distances between the needs, presented in Figure 1. In the process of scaling, we excluded the needs with very low variance (sexual as well as knowledge and understanding). The solution that we selected as optimal was the two--dimensional one, due to the Kruskal stress coefficient of .053 and the proportion of the variance depicted in the figure to RSQ = .992 given in source data. Both the matrix of correlations and the outcome of scaling show that biological needs and the need for security are activated by commercials independently of each

other and independently of other needs. Another need relatively independently appealed to is the need for affiliation, which basically co-occurs only with the need for self-actualization ($\rho = .24$, $p < .001$) and respect from others ($\rho = .36$, $p < .001$). As regards sexual needs, distinguished within the category of biological needs – if they are activated, it is usually together with the need for self-respect ($\rho = .40$, $p < .001$) and respect from others ($\rho = .35$, $p < .001$); they also accompany aesthetic need-appeals ($\rho = .47$, $p < .001$). The need for power and freedom is usually activated together with the need for respect from others ($\rho = .42$, $p < .001$) and with the need for knowledge and understanding ($\rho = .35$, $p < .001$).
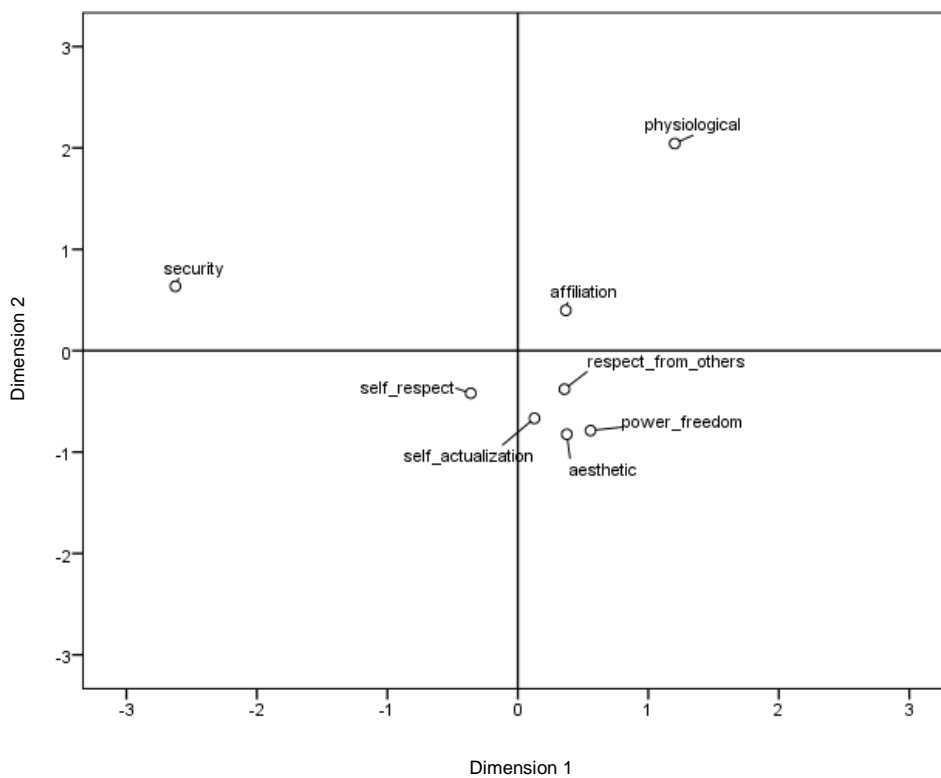

Figure 1. A systematization of the needs activated by TV commercials.

Needs and brand benefits

Next, we analyzed the correlations between needs and benefits highlighted in commercials (see Table 2). The results of analyses show that functional benefits are weakly correlated with needs. The exception is stressing the quality of the advertised products, usually accompanied by the activation of the need for security ($\rho = .43$, $p < .001$). We found much more numerous and much stronger associations between symbolic benefits and higher-order needs. Social benefits correspond particularly strongly with the need for affiliation ($\rho = .46$, $p < .001$) and the need for respect from others ($\rho = .80$, $p < .001$); they also correlate with the need for power and freedom ($\rho = .38$, $p < .001$), whose fulfillment in commercials often takes place in the company of other people, and with the need for self--actualization ($\rho = .38$, $p < .001$). Emotional benefits also correlate relatively more often with the needs for affiliation ($\rho = .42$, $p < .001$) and respect from others ($\rho = .35$, $p < .001$). The expressive benefits presented in advertising are most frequently accompanied by the activation of the needs for respect from others ($\rho = .53$, $p < .001$), self-actualization ($\rho = .35$, $p < .001$), as well as power and freedom ($\rho = .56$, $p < .001$). Prosocial benefits and benefits connected with brand relationship are weakly associated with the needs distinguished by Maslow. Sexual needs, distinguished within biological needs, are activated in the process of showing how a product of a given brand improves the way its user is perceived by other people ($\rho = .36$, $p < .001$) and how it helps its users express themselves ($\rho = .35$, $p < .001$).

Table 2

Need-Appeals and Functional and Symbolic Benefit-Appeals: Spearman's ρ Correlation Coefficients

Needs	Functional benefits			Symbolic benefits			
	Quality	Price	Warranty	Social	Emotional	Expressive	Prosocial
Physiological	-.07	-.22**	-.30**	-.07	.21**	-.16**	.19**
Sexual	-.01	-.10	.07	.36**	.26**	.35**	-.08
Security	.43**	-.14*	.06	-.23**	-.29**	-.48**	-.13*
Affiliation	-.18**	-.02	-.08	.46**	.42**	.09	.06
Self-respect	.24**	-.11	.14*	.33**	.21**	.38**	-.14*
Respect from others	-.02	.10	.13*	.80**	.35**	.53**	-.01
Power and freedom	-.09	.02	.05	.38**	.27**	.56**	.09
Self-actualization	.07	-.10	.09	.38**	.25**	.35**	.10
Aesthetic	.08	.08	.23**	.26**	.17**	.41**	-.05
Knowledge and understanding	.11	.06	.02	.01	-.05	.22**	.13*

Note. * $p < .01$, ** $p < .001$.

Needs and brand user image traits

The results of the content analysis of commercials shows (see Table 3) that the brand user trait of responsibility for oneself and others co-occurs with the activation of the need for security ($\rho = .89$, $p < .001$). Also emphasis on sociability in advertising strongly corresponds with appealing to the need for affiliation ($\rho = .71$, $p < .001$). Agency is associated with a whole cluster of higher-order needs: self-actualization ($\rho = .46$, $p < .001$), power and freedom ($\rho = .57$, $p < .001$), respect from others ($\rho = .40$, $p < .001$), and self-respect ($\rho = .32$, $p < .001$). The sophistication that may potentially be associated with the brand user is strictly correlated with appealing to aesthetic needs ($\rho = .64$, $p < .001$) and to a relatively smaller degree with the needs for self-respect ($\rho = .49$, $p < .001$) and respect from others ($\rho = .41$, $p < .001$) as well as with sexual needs ($\rho = .45$, $p < .001$). The association of the trait of haughtiness, however, is not unambiguously related to specific needs and is divided between higher-order and lower-order needs. Old-fashionedness does not correlate with any group of needs on a cognitively valuable level.

Table 3
Need-Appeals and Brand-User-Image-Appeals: Spearman's ρ Correlation Coefficients

	Agency	Sociability	Respon- sibility	Sophisti- cation	Haughti- ness	Old- Fashionedness
Physiological	-.20**	.38**	-.18**	-.14*	-.23**	.19
Sexual	.15**	.03	-.01	.45**	.34**	.00
Security	.03	-.17*	.89**	-.31**	-.29**	-.17*
Affiliation	.08	.71**	-.08	-.04	-.09	.04
Self-respect	.32**	-.16*	.25**	.49**	.29**	-.03
Respect from others	.40**	.29**	-.14*	.41**	.41**	.07
Power and freedom	.57**	.19**	-.28**	.16*	.25**	.04
Self-actualization	.46**	.25**	.17*	.06	.17*	-.05
Aesthetic	.04	-.18**	-.18**	.64**	.35**	.00
Knowledge and understanding	.28**	-.03	-.03	-.03	.09	.05

*Note. * $p < .01$, ** $p < .001$.*

CONCLUSION

The research presented in this report has a cross-sectional and exploratory character; it shows the state of the market of TV commercials of material products in the sample selection period in terms of the needs appealed to, the functional and symbolic benefits for the consumer, the promoted brand used image, and the interrelations between them. The aim of the study was to perform a complex analysis of interrelations between these constructs, which, to the authors' knowledge, have not been investigated together so far. On the one hand, they enrich our knowledge about what methods authors of commercials rely on, consciously or unconsciously, when creating the subjective perception of the world of consumption in the target audience. On the other hand, knowledge about the specificity of creating commercials has great methodological significance because in the future it will facilitate the choice of stimuli as well as contribute to better control of independent variables and increase the internal validity of research on consumers' reactions to commercials.

The good interjudge agreement on taxonomic decisions is indirect evidence of the descriptive value of Maslow's (1970) classification of needs. The analysis of TV commercials showed that what is usually activated in them is lower-order needs (physiological and security-related), which stems to a great extent from the large proportion of commercials advertising medicines and foods, whose intrinsic purpose is to satisfy those needs. Moreover, these needs are usually the only ones activated in commercials, without other needs being activated simultaneously; this is rarely the case with higher-order needs, which usually co-occur with others in various combinations.

We found that emphasis on functional benefits it associated, above all, with lower-order needs; particularly advertising the quality of products goes together with the activation of the need for security. Consequently, purchasing low-quality products becomes tantamount to endangering the consumer's security. In contrast, the activation of higher-order needs is strictly related to emphasizing symbolic benefits. This refers especially to social benefits (being positively evaluated by the environment), emotional benefits (satisfaction with using the product), and expressive benefits (the possibility of expressing oneself through the fact of possessing a product of an advertised brand).

In the existing studies, the characteristics attributed to users of different brands were considered in isolation from the respondents' needs (e.g., Gorbaniuk, 2011; Sirgy, Johar, Samli, & Claiborne, 1991). The results of our research revealed a very close link between the needs that commercials appeal to and the

brand user image traits generated at the level of stimuli. Further exploration of this link at the level of the audience of commercials will make it possible to develop a psychological explanation of the formation of brand image and brand user image.

A few words should be said about the limitations of the reported research. First of all, it reflects the specificity of one medium of advertising (television) and a certain group of advertised brands on the market (product brands). We therefore cannot indiscriminately generalize the results of the present study to other media and to services, where the pattern of interrelations may be different. Besides, the sample of commercials can be regarded as nearly representative of the period in which it was selected, but its representativeness with regard to the whole year is debatable: the sample may be skewed due to the seasonal nature of some products advertised in the investigated period of time. The authors had neither adequate financial and technical resources nor sufficient time to collect the sample during the whole year. At the same time, the main limitations specified above define the prospects of similar future research into the area remaining outside the scope the present study.

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