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FROM EXPLORATORY RESEARCH TO STRUCTURAL MODELS: A MULTILEVEL LEXICAL APPROACH TO STUDYING THE IMAGE OF MARKETING OBJECTS¹

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ABSTRACT: The key problem in studies of marketing objects (e.g., brands, political parties) is the lack of agreement on the universal dimensions through which such objects are perceived, as well as on methodologies allowing their identification. As a result, researchers often use structural models (and instruments) that lack ecological validity. We offer a solution to that problem by presenting a methodology that draws on lexical research and which has allowed researchers to establish universal dimensions of personality perception in psychology. By discussing the theoretical and methodological tenets of the multilevel lexical approach to exploring images of marketing objects, we also overcome another problem of neglecting the hierarchical structure of the phenomena and data.

1. Introduction

The image of marketing objects is an important phenomenon both from a scholarly and practical perspective because numerous studies prove that it is related to preference, loyalty, and consumer brand engagement (Poiesz 1989). A coherent image allows the development of groups of loyal customers of the brand (Haynes/Lackman/Guskey 1999) by supporting, expanding, and strengthening the brand's impact over time (Keller 1993). The image also allows consumers to distinguish the brand or other marketing object against other brands or objects on the market (Keller 1998).

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The concept of the image of marketing objects (e.g., brands, brand users, political parties, politicians) is understood differently by different scholars (Dodni/Zhinkhan 1990), which often leads to conceptual chaos, prevents comparative research, and often causes confusion among readers. In this article, we will apply a broad and one of the more accepted definitions of image as general knowledge of a marketing object (Keller 1993).

The definitional confusion in the literature causes problems with the conceptualization and operationalization of the image of marketing (and other) objects. Despite the widespread belief that brand image (Plummer 1985), brand user image (Kressmann et al. 2006), or political party image (Smith 2009) are multidimensional constructs, there is lack of agreement among researchers on the universality of the structure of perception of marketing (and other) objects. Specifically, it is not clear which dimensions of object perception are universal and which are rather culture-specific, and what methodology could best serve to determine such a universal structure. The lack of well-established consensual universal structural models and measurement tools prevents comparative research. Moreover, researchers often apply models and tools that have not been tailored to study the specificity of a particular object (e.g., using models constructed for measuring brand personality to measure political party image), which inhibits our understanding and systematic accumulation of knowledge about the determinants of image, as well as its impact on the attitudes, preferences, and behavior of image recipients.

In this paper, we want to address the above issues by proposing a way of conceptualizing the image of a marketing object, drawing on the methodological framework of psycholexical research. We will also lay out the principles and steps for building structural models by means of an analysis of a lexicon of people's associations with a marketing object. We argue that analysis of this kind may serve as a universal basis for a taxonomic agreement among researchers.

2. Criteria for the “goodness” of structural models

The solution to problems related to the measurement of marketing object images lies in building appropriate structural models. H. Eysenck (1991) laid down eight fundamental criteria for a model, which remain valid also in relation to marketing objects. First of all, such a model reflects the social importance of variables or factors. This means the descriptions of marketing phenomena proposed by the model should not only be of theoretical importance, but they should also be practical.

The second important aspect of a good model is its predictive power and the validity of the variables or factors the model comprises. In other words, the model

should include dimensions that explain and predict people's behavior, for example, shopping behavior, voting decisions, choosing destinations, and so on.

The third criterion is concerned with the comprehensiveness of the set of variables or factors that form a model. The adequacy of such a model needs to be verified with respect to the range of phenomena to be described.

Fourth, the reliability and cross-time stability of the model requires that the researcher verifies the presence of the dimensions established in people's perception of an object. Importantly, the capacity of the dimensions to explain and predict the behavior of image recipients should also be assessed over time.

Fifth, the model should allow generalizability across various types of data. This criterion is often overlooked in research involving marketing objects within one brand or product category, which prevents a wide range of generalizations. Another important issue is the capacity of a structural model to discern multilevel or hierarchical data. Structural models should allow for generalizations at different levels: object-level (e.g., differentiations between brands, i.e., their aggregated images) vs. person-level (differentiations of consumer opinions about the brand).

Sixth, one of the key elements of the taxonomic consensus is that the structural model achieves generalization across cultures and languages. This criterion may be satisfied by identifying universal and culture-specific dimensions across countries using methodologies that yield comparable results (Saucier/Hampson/Goldberg 2000).

By the seventh criterion, a model should lay out the causal basis for the variables or factors established. For example, it should account for the creation and conditioning of the image of a politician, party, brand, and so on, in the recipient's mind.

Finally, the model should be based on a theory that is plausible and internally logically consistent. The theory allows testable deductions and hypotheses meant to explain and predict both known and yet unknown phenomena (cf., Eysenck 1991, 774). This criterion is fulfilled by attribution theory, which explains the process of assigning dispositions to perceived objects, thereby offering an appropriate theoretical basis for research on images of marketing and other (e.g., political) objects (Gorbaniuk 2011).

3. Key problems in image research

In terms of challenges associated with the conceptualization and measurement of marketing object images, the researcher's most important tasks in image research include the choice of an exploratory method that will enable identification of the relevant dimensions through which an image is perceived, taking into account the subjectivity of such perception. Exploratory research is aimed at identifying all significant aspects of object perception and, at the same time, establishing

the proportion and importance of the dimensions identified. Moreover, exploratory research results may serve as a reference point for comparative studies, thereby allowing researchers to create culture-specific models of marketing object perception and search for culturally universal dimensions of such perception.

Importantly, the researcher should pay careful attention to solving the problem of different levels, as their model should explain the variance resulting from both individual differences and from differences between marketing objects (e.g., brands, political parties). In order to do so, the researcher may draw on structural models used in the psychology of individual differences, which are employed to study similar phenomena. Such models have been developed through psycholexical research and achieved taxonomic effects distinguished by a high degree of agreement among researchers.

4. Structural models of individual differences in psychology

F. Galton (1884) pointed to the lexicon of natural language as the basis for the systematization of individual differences. Over 50 years later, his idea resulted in a classification of individual differences in English (Allport/Odbert 1936) and exerted a considerable impact on contemporary psychology. Until the 1980s, structural models of personality varied enormously in psychology. This diversification prevented the accumulation of knowledge. To overcome this limitation, researchers turned back to the beginning of lexical research, and L. Goldberg (1981) reformulated the foundation of the modern methodology of lexical research in psychology, that is, the “lexical assumption.” The lexical assumption assumes that: (1) the most important differences between individuals have been coded in a natural language; (2) the more important a certain difference is, the higher number of terms the users of a given language have invented to define it (e.g., through synonyms and antonyms); (3) in order to determine the key dimensions through which people perceive differences (between people or objects), the structure of the comprehensive lexicon that is used to describe such differences needs to be analyzed (Gorbaniuk /Ivanova 2018).

After formulating the methodological basis of the lexical approach, Goldberg (1982) synthesized the results of his predecessors’ research (Fiske 1949; Norman 1963) and conducted his own in-depth research (Goldberg 1990; 1992). As a result, he determined five basic personality traits described by the English lexicon, the so-called Big Five (extraversion, emotional stability, conscientiousness, agreeableness, and intellect), thereby developing a Five-Factor Model of personality (McCrae/Costa 1985; 1987).

The subsequent creation of a questionnaire for the measurement of the five personality traits based on the results of lexical and psychometric studies quickly

popularized the Big Five in the academic and non-academic environment, which initiated a series of similar studies of other languages in the 1990s, which confirmed the universal nature of the traits included in the Big Five (Hendriks et al. 2003; Peabody/De Raad 2002). The results of those studies and the broad acceptance of the personality models developed through lexical research by the academic world indicate that this approach meets the majority of the criteria for the goodness of structural models (Saucier/Srivastava 2015). Furthermore, the knowledge of human beings expressed through language appears to be the common denominator of cross-cultural research. It allows (at least periodically) agreement among researchers on the structure of personality traits, which contributes to the intensification of research in various countries on the basis of compatible models and tools for measuring the traits (Gorbaniuk/Ivanova 2018).

Because psycholexical studies draw on comprehensive lexicons of individual differences, they are highly replicable. Researchers work on the same initial lexicon of descriptions of individual differences, in which the proportion of terms describing different traits is naturally balanced according to their adequate representation in the natural language. The methodology of psycholexical research allows cross-language comparisons and, thus, investigations into traits that are universal (common) and specific (different) for a given language or culture. Accordingly, such research enables a consensus on the issue of culturally universal models of personality and cross-cultural/national comparison of the results of studies that employ this model. Apart from all the positive consequences for the development of psychological research, psycholexical methodology may be used to advance methodologies of other disciplines (e.g., applied linguistics, media and political research) that explore the ways people perceive reality and various objects.

5. Attempts to apply solutions from psychology to conceptualize brand image

A groundbreaking attempt to transfer a personality model to marketing research has been made by J. L. Aaker (1997) who developed a model of brand personality that measures brand-related human traits. The model exemplifies an eclectic combination of the lexical approach (Goldberg 1990) with the psychometric approach (Costa et al. 1991) to marketing research; both approaches have been developed simultaneously in the psychological trait theory. It can be assumed that differences in the perception of brands can be explained in a similar way as differences between people (hence the use of personifying instructions that present a brand as a person).

Through research on an American population, Aaker (1997) identified five dimensions that differentiate mostly preferred personified brands: competence; excitement, sophistication, sincerity, and ruggedness. She also developed scales for

their measurement. Her research has triggered a plethora of studies, which made her model and tool extremely popular (9,870 citations at the end of August 2019).

However advantageous the very presentation of a tool for measuring brand image is, plenty of publications question Aaker's model. In a study reanalyzing the generalizability of brand personality structure, J. R. Austin, J. A. Siguaw, and A. S. Mattila (2003) found that the structure does not adequately describe the diversity of consumer opinions about the brand, but is limited to describing the dimensions of differences between the aggregated brand images. Hence, the model cannot predict consumer behavior – which is indicative of the ecological fallacy. There are also many critical voices questioning the theoretical and methodological value of the model in relation to product and service brands (Ambrose/Valette-Florence 2010; Austin/Siguaw/Mattila 2003; Avis/Forbes/Ferguson 2012; Bosnjak/Bochmann/Hufschmidt 2007; Gorbaniuk 2011).

Given the above shortcomings, Aaker's model appears to be unsuitable for exploring heterogeneous marketing objects such as brand users, countries, cities, parties, etc., because it does not reflect the specificity of the perception of those objects. Additionally, the model does not meet most of the criteria of "goodness" of structural models and does not solve the problem of the multilevel structure of the brand image (Gorbaniuk 2011). Therefore, it is necessary to develop new culture-specific models that will meet the postulated criteria, which is possible through exploratory research.

6. Taking the lexical approach to explore the structure of an image

Lexical research exemplifies exploratory research that requires a minimal number of assumptions and is not constrained by any theory (De Raad 1998); the only limitation is imposed by the adopted definition of the personality-descriptive term understood as a property that differentiates between people. The lack of restrictions resulting from the adopted theory should be considered as an advantage of the lexical approach (De Raad 1998) because it allows the researcher to go beyond current taxonomies and answer the question of whether or not such taxonomies are exhaustive.

Lexical studies should be regarded as comprehensive because they allow for collecting a complete lexicon of descriptors of individual differences (e.g., in terms of perceiving marketing objects). A typical study of the lexicon's structure comprises two stages: (1) *qualitative* – the researcher identifies a pool of descriptors, that is, lexemes used to describe differences between people or objects (e.g., image descriptors) or their representative sample through a qualitative analysis of a lexicon of natural language using the most comprehensive and up-to-date universal dictionaries; (2) *quantitative* – the researcher identifies the structure

of the lexicon of perceived differences based on the descriptions collected at the first stage through questionnaire surveys in which the users of a given language (from 300 to 1,000 persons) describe themselves or a given object using the descriptors (e.g., of the brand image); next, the researcher categorizes the list of descriptors through exploratory factor analysis (EFA), which identifies groups of strongly correlated lexemes (e.g., positively – synonyms, negatively – antonyms).

As shown above, taking the lexical approach to study the structure of the image of marketing objects requires two key stages of research. The first stage aims to identify a lexicon of a marketing object, that is, a set of associations with a given object that is important from the perspective of marketing research (e.g., brand, political party, country, etc.). According to Eysenck's (1991) goodness criteria of structural models, the study should include the full population or a representative sample of stimuli (categories, brands, politicians, political parties, countries, etc.) whose image will be described by the respondents, to ensure the extrapolation of the results to different types of data. Such studies should also be conducted on a representative sample of image users by means of, for example, an individual interview during which the users describe the stimuli (marketing objects). Next, a morphemic-semantic analysis of the users' associations with the stimuli is performed, along with the registration of association frequencies, to prepare an abbreviated list of associations (100-150) representative for the lexicon used to describe the image of a given object.

The list of associations is further used as a questionnaire in a quantitative study of the image structure, carried out on the sample of image users and using a representative sample of marketing stimuli. Next, multilevel EFA should be performed. Depending on the research aim, EFA allows the researcher to determine (1) the structure of perception, which is important to predict human behavior, or (2) the structure of differences between aggregated images, which may be used to position marketing objects.

7. Development of structural models based on lexical structures

After determining the structure of people's perception of a marketing object, a theoretical analysis of the content of the dimensions established should be performed. The analysis is aimed at giving the dimensions a theoretical status because the lexical structure alone is not considered a theoretical model – it needs to be interpreted in light of psychological theories (see, e.g., Lee/Ashton 2004; 2006).

In the next stage, a confirmatory study is performed to test the validity of the factor structure of the model and tools used for building it. Based on the results, short scales to measure image dimensions (at least 4-5 items per dimension) are developed. Next, the internal consistency of the scales (that measure the dimensions)

should be assessed and, complying with Eysenck's criteria (1991), the measurement stability and the measurement invariance should be tested at various measurement levels, for various objects within a given category, between categories and between countries (Cieciuch/Davidov/Schmidt et al. 2016).

Further, the predictive/explanatory power of important phenomena or behaviors is measured. For instance, in the case of brand image or political party image, one can predict the preferences or behaviors of brand users and the electorate, respectively.

The psycholexical research methodology has recently been employed to develop structural models of the image of marketing objects in lexical studies of, among others: brand image structure (Gorbaniuk 2011); brand user image (Gorbaniuk et al. 2012; Gorbaniuk/Dudek 2016; Gorbaniuk/Kolańska/Wilczewski et al. 2017); company image (Gorbaniuk/Razmus/Firlej et al. 2017); political party image (Gorbaniuk/Kusak/ Kogut et al. 2015); politicians (Gorbaniuk/Razmus/Slobodianyuk et al. 2017) and countries (Gorbaniuk/Omiotek 2011).

8. Testing the cultural universality of the lexical structures of marketing objects

The next step in building universal models of the image of marketing objects is testing their universality across cultures and languages. Psycholexical research allows for identifying culturally universal (etic) and culturally specific (emic) dimensions of the image (Saucier et al. 2000; Gorbaniuk/Ivanova 2018). The etic approach consists of importing the existing framework into a new culture to determine its adequacy (e.g., the Big Five scales translated into another language). However, the fact that a given model has been replicated in etic studies does not mean that the factors from that model exhaust the whole studied phenomenon, but only that people in other cultures think about the phenomenon in terms of such *a priori* dimensions.

In turn, the emic-type structure of the image can be identified in exploratory studies into the differences in lexical structures in each (national) culture or language. By comparing the lexical structures, it is possible to identify the traits that are common for all (national) cultures or languages (De Raad et al. 2010; 2014) or a group of languages (Ashton et al. 2004), and the traits unique to a language. The effects of cross-cultural comparisons allow the researcher to determine the scope of the universality of the existing models. They also provide guidelines for building new models; they may be regarded as a starting point in developing culture-specific models of personality (Gorbaniuk/Ivanova 2018). When talking about universal dimensions, the repetition of the full procedure (see below) in different countries allows for the identification of culturally universal dimensions and culturally specific dimensions of the image structure.

To date, the etic approach has been dominant in marketing image research because of a five-factor brand personality model (Aaker 1997), which has been used for the measurement of marketing objects. The model has been applied across national contexts by simply using translated versions of the instrument. As already mentioned, Aaker's model is far from universal in research into brand personality, not to mention research into the image of other marketing objects. There is an unfortunate tendency in marketing for following popular models in the literature, regardless of their ecological validity, which is indicative of low scientific skepticism.

From the perspective of marketing practice, it is beneficial to apply culture-specific models because of their validity – the consumer is not a universal person, but an individual functioning in a specific cultural environment. Therefore, it is reasonable when researchers and practitioners (marketers) use culturally and objectively relevant psychometric tools in their research. It would, hence, be a good practice to supplement the existing instruments (e.g., questionnaires), as well as develop new culture-relevant instruments. These could advance the research methodology for the measurement and identification of universal dimensions of the image of marketing (and other) objects across countries.

9. Conclusions

This article presented a lexical approach to exploring the perception of marketing object images. In order to develop an ecologically accurate structural model of the image of a marketing object (or any other perceived object, e.g., media, political) through exploratory research, which meets the strict requirements that we laid out in this article, we suggest that the following exploratory (1-11) and confirmatory (12-17) steps should be followed:

1. Theoretically define the scope of the image of the object in question.
2. Determine a representative sample of stimuli for the population of marketing objects (e.g. brands, countries) or include the entire population of objects (e.g., all political parties recognizable in a country). The greater the differences between the stimuli, the larger the sample of stimuli should be.
3. Define a representative sample of the “carriers” of the image of the object in question (e.g., consumers, tourists, voters), being guided by the power of the test and taking multilevel measurements into account.
4. Build a lexicon of a given object through interviews with a sample of image carriers, using the free association method.
5. Test the compliance of the lexicon built with the theoretical definition of the object in question and – if possible – categorize the lexical material by previously trained judges (Gorbaniuk 2016), which will ensure the reliability of the categorization.

6. Develop an abbreviated list (containing at least 100 items) of the image descriptors of the object in question, based on their frequency in the lexicon. The structure of the listed descriptors should proportionally reflect the key categories of the lexicon.

7. Define a representative sample of image stimuli and carriers, following the methodological requirements of multilevel analyses (repetition of steps 2 and 3). To comply with EFA requirements, the sample should usually involve over 300 respondents.

8. Conduct a quantitative study on a sample of image carriers who describe a given marketing object using the previously developed list of descriptors.

9. Identify a structure of differences in the descriptions of the same marketing object (level 1) and the structure of differences between marketing objects (level 2) using multilevel EFA.

10. Verify, by means of multiple regression analysis or canonical analysis, the explanatory value of the identified structure as a whole, as well as the individual dimensions. The analysis should take into account the respondents' behaviors/attitudes toward the marketing object: the verified dimensions should be relevant to generate useful explanations within a given field of the social sciences (e.g., percentage of explained variance of attitude, preferences or choices).

11. Evaluate the theoretical value of the dimensions established based on the existing literature, and determine the composition of the structural model or several alternative structural models to be tested.

12. Operationalize the dimensions (latent variables) that make up the structural model(s) by identifying the best diagnostic indicators (explicit variables). The items that yield the greatest discriminatory power should be used (i.e., the items that correlate strongly with a given dimension and weakly with other dimensions). Optimally, at least three indicators/items for each dimension should be selected.

13. Conduct a confirmation study based on a representative sample of stimuli and a new representative sample of image carriers (see steps 7 and 8). Either a multilevel or a unilevel confirmatory factor analysis should be performed, depending on whether or not the structural model is meant to describe, respectively, differences between objects or differences between people in the perception of marketing objects. The best model should be chosen according to the model fit indices.

14. Assess the configural and metric invariance of dimensions/scales, considering the key object categories (e.g., product categories) and subject categories (e.g., gender, place of residence, level of income). The results allow the researcher to assess the generalizability and limitations of the model developed.

15. Calculate the psychometric indices of each scale that operationalizes the relevant dimension in the model by (1) rejecting the items with the least discriminatory power and (2) assessing the internal reliability of the scales, which should be equal or higher than .70. The final scale should contain at least three

or four items. When testing several competitive models, the one that exhibits the highest internal reliability should be chosen.

16. Assess the stability of the measurement of the image of the same marketing object(s) on the same sample at an interval of 10 to 20 days.

17. Verify the predictive validity of the model in terms of the behaviors of the image carriers relevant to a given field by, first, a measurement of the image of the object and, second, a measurement (at a later time) of behaviors.

If the tests performed in steps 13-17 yield unsatisfactory results, the model should be modified based on the exploratory research conducted in steps 1-12. Next, the tests should be repeated following steps 13-17 until satisfactory psychometric indicators have been obtained.

Lexical research provides researchers with tools for systematic and methodologically consistent exploration of individual differences and systematization of our knowledge about them. It also offers the researchers studying marketing objects (as well as other objects) a chance to reach an agreement on the scientific taxonomy and on the ways of systematic research into the image of a given marketing object. Importantly, lexical research allows predictions of people's behaviors and attitudes toward the object.

We hope that the researchers and practitioners interested in studying images will find the method and procedure presented in this paper useful in creating new models and tools for measuring images. We are aware of certain limitations the method entails (e.g., its time-consuming nature), as well as of the popularity of other models, which do not necessarily meet the academic/methodological criteria. Nonetheless, believing the presented approach to studying images stands out because of its methodological rigor, we encourage researchers to use it in their systematic investigations across various disciplinary and cultural/national contexts.

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