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**EXPERIENCE OF APPLICATION OF SEMANTIC APPROACH
FOR BRAND ANALYSIS OF UNIVERSITY**

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Abstract

The article deals with the issues of branding higher educational institutions. In higher education, it is paid less attention to branding than it is paid in the commercial field. However, this situation has changed recently. In marketing researches in the commercial sector, there is interest in projective and psychosemantic methods of research. In this article, features of psychosemantic methods are considered. Methods of experimental psychosemantics allow one to receive information about ideas and attitudes of a person, including attitude to a particular product or service. The possibility of using the semantic differential of C. Osgood for the purposes of the conducted research is substantiated. Zaltman's ZMET method was modified as a method of investigation. The objects of the study were students of Peter the Great St. Petersburg Polytechnic University. The lexical material obtained during the study was processed using scaling. In the process of analyzing the lexical material, 8 bipolar scales were singled out in which students described their attitude to the university. Further, these scales were analyzed on compliance with the scale of the semantic differential of C. Osgood. The study reveals that respondents perceive the university's brand as strong, active and evaluate it in a positive manner (feel unity with the University, its involvement in their life). The obtained results can be considered as satisfactory since the students' perception of the university brand is adequate to the idea laid in its development.

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Keywords: University brand, psychosemantic methods, Osgood semantic differential, the ZMET technique for education.



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1. Introduction

The sphere of higher education, both in Russia and abroad, in recent years has become more competitive than ever before. Nowadays, applicant can get education anywhere in the world. Similarly, universities compete with alternative forms of education: distance courses and corporate universities.

In addition, when applicants and their families decide to choose a university, they are not able to conduct a large-scale comparative study that takes into account many factors (from living conditions to career prospects). Therefore, they rely on the University's brand to simplify their decision (Nevzat, 2016).

Thus, universities need to develop marketing programs, including a strong brand with clearly differentiated positioning (Palmer, 2016; Rauschnabel, 2016). However, in higher education, less attention is paid to marketing and branding than in the commercial sector. Universities (in both developed and developing countries) are now trying to overcome this gap (Erdoğmuş, 2016). For example, in 2016, the Journal of Business Research devoted a special section to branding of universities (Hemsley-Brown, 2016; Kalafatis, 2016).

2. Problem Statement

To develop an effective brand, as well as to clarify its positioning, it is necessary to conduct marketing research. Currently, in the commercial sector has been a shift from methods of verbal self-report (questionnaires) to more in-depth methods, projective and psychosemantic (Naidoo & Hollebeek, 2016). This shift has been made due to the active development of such scientific fields as the psychology of consumer behavior and neuromarketing. Modern research in neuromarketing shows that consumers rely on emotional factors that they do not often realize while choosing a product, as well as unconscious templates and stereotyped reactions that help to save time in making decisions (Ababkova, 2016).

In branding, in terms of projective methods, so-called "brand personality" is formed. The brand is "embodied" in an imaginary person, animal, plant, etc. Personification of the brand can be wide enough and include one's profession, circle of acquaintances, lifestyle, epitaph, carefully kept secrets, etc.

The arsenal of projective methods used for such personification is extremely broad, so it includes: "questions to a third party" (indirect survey), "verbal associations", "unfinished sentences", "distribution by similarity", role-playing games (in the "store" "Advertising agency", "family", "holiday preparation", etc.). Projective techniques are not only less exposed to the risk of motivational distortions on the part of respondents, but also allow excluding rational analysis that obscures the real causes of consumer preferences.

The third group of psychodiagnostic methods used in marketing research are psychosemantic methods. It can be said that psychosemantic methods combine the virtues of both projective and verbal self-reporting methods. The results obtained through psychosemantic methods can be quantified. At the same time, the research objective remains hidden from the respondent and it reduces the risk of motivational distortions. It is also important that the procedure for conducting psychosemantic research is standardized. This reduces the requirements for the qualifications of the specialist conducting the study.

Methods of experimental psychosemantics are used to measure the individual system of subjective meanings of various objects for a person. Experimental psychosemantics is an interdisciplinary area of

knowledge that arose at the border of the sections of semiotics, psycholinguistics, psychology of perception and personality psychology. The theoretical and methodological foundations of experimental psychosemantics were laid in the mid-1950s in the works of American psychologists Charles Osgood "Measurement of meaning" and George Kelly "Psychology of personal constructs." In Russia, psychosemantic methods were developed by the psychologists A.G. Shmelev, V.F. Petrenko, and V.I. Pokhilko.

The success of psychosemantic techniques is considerable due to a simple and convenient mathematical model of the individual consciousness, which lies at their base - a semantic space. Semantic space is a system of attributes that describe objects of reality. Different attributes can be represented as the coordinate axes of a multidimensional semantic space, objects as points in this space, the values of the attributes of these objects as the coordinates or projections of points on the axis, and the differences between objects as the distances between points.

Thus in psychosemantics, a person is a space of subjective features, the points in which there are different objects.

Methods of experimental psychosemantics allow the researcher to receive information concerning any representations and attitudes of a person, including his attitude to a particular product or service (Evans, 1970).

Classical psychosemantic methods are presented by the semantic differential method of C. Osgood and the repertory grids test of J. Kelly. The Color Attitudes Test (CAT) of M. Etkind is also widely used in Russia.

The authors will rely on the scaling technology developed by C. Osgood during processing the data of the modified ZMET technique which the authors will use in the practical part of this study. Therefore, they will consider these two techniques in more details below.

The method of the semantic differential was developed by Charles Osgood. It is designed in order to measure the significance in perception of different objects by the people who evaluate these objects. This method refers to the unique meaning that a particular object has acquired for a particular person. This unique value is determined by individual experience and differs from the generally accepted value. Thus, the semantic differential allows one to obtain quantitative characteristics of the respondent's emotional attitude to objects of almost any type, expressed in the form of concepts including goods or services, the subjects of marketing research (Klementl, 2015).

In the classic procedure of the semantic differential, the respondent evaluates a given set of concepts using seven-point scales whose poles are antonyms ("big - small", "hot - cold", etc). The set of scales may vary, depending on the objectives of the study and the objects being evaluated. However, the uniqueness of the method of the semantic differential is that all these scales can be reduced to three global factors: evaluation, strength (potency), and activity. These factors were identified by C. Osgood through factor analysis and subsequently obtained in a variety of studies conducted in different groups of respondents and for different sets of objects. That enabled C. Osgood to draw a conclusion about the fundamental three-dimensionality of the semantic space.

The valuation factor includes scales expressing the emotional attractiveness of the objects ("good - bad", "pleasant - opposite" "beautiful - ugly", etc.). The force factor (potency) includes scales such as "big

- small", "strong - weak", "hard - soft" and others, characterizing the subjective degree of objects' influence on a person. The activity factor combines such scales as "fast - slow", "active - passive", "hot - cold" and others, corresponding to the degree of dynamism, the variability of objects in time.

The factors of the semantic differential are the rectangular axes of the semantic space. Estimated concepts are points whose coordinates in this space correspond to the meanings of concepts. Distance between points is an indicator of the difference (or the similarity) between concepts.

One can cite an example (with reference to conduct a marketing research): if a respondent estimates the notions of "ideal brand" and "brand presented by the experimenter" on different scales roughly equally, then they will be located close to each other in the semantic space. This will allow the researcher to conclude that the positioning of the brand was chosen successfully. The remoteness of the concepts "ideal brand" and "brand presented by the experimenter", on the contrary, will show that for the given respondent the developed brand is not attractive.

Psychosemantic toolkit has already been actively used while working with the brand.

The projective nature of the method of the semantic differential lies in the fact that the respondent is forced to scale the object according to attributes that are not applicable to him (it is unlikely that we will describe any brand image in the "fast-slow" characteristics in everyday life). This frees the respondent from being limited by the real properties of the object and gives him freedom to express a subjective attitude towards him, and imparts metaphorical character to scale evaluations.

In the marketing of educational services in the Russian market, psychosemantic methods have not been practically used. In the world market of higher education, the situation is somewhat different (Balaji et al, 2016). In the survey of 2016 examples of marketing research of various universities related to the evaluation of brand effectiveness are given. In a number of studies both projective and psychosemantic methods are used (Dean, 2016; Dennis, 2016; Hemsley-Brown, 2016; Yuan, 2016).

The ZMET methodology is also used in the marketing of educational services which was also used in this study.

3. Research Questions

The central research question addressed by the present paper and the pilot study described in this article is "was the positioning of the university's brand the same as its creators wanted it to be", as well as to develop the direction of correction if necessary.

4. Purpose of the Study

The objectives of the study are to study the brand of the university in the perception of students.

5. Research Methods

The main method chosen for the following study is the modified version of the ZMET method (Zaltman, 2016). In the marketing of educational services, this approach has already been used (Wilson, 2016).

In the original version of the procedure, the respondents who are representing the target audience were given a task: to select pictures that reflect their inner feelings and experiences with respect to the given product. There was no direct binding to a particular product in these pictures. Pictures reflected the qualities inherent in this product, but not the product itself. Then a structured interview was conducted with each of the respondents, and the selected picture served as a starting point. With such procedure, ZMET can be attributed to projective rather than to psychosemantic techniques (van Dessel, 2005).

In this study, the original ZMET procedure was changed.

The authors asked respondents to choose a picture that was associated with the university for them. Next step was to give a name to the picture, comment on it and describe the emotion that was associated with this picture. This procedure allows one to get less information from an individual respondent than the original ZMET. But it allows the researcher to cover a large sampling in a shorter time, since it does not require an in-depth interview with each respondent.

Later the authors analysed the lexical material, the starting point for which was the picture chosen by the respondent.

Our study sampling consisted of third-year students (91 respondents) from the Humanitarian Institute of Peter the Great St. Petersburg Polytechnic University.

The current students of the university are a representative sample for marketing research. First, all of them came into contact with the advertising campaign of the university at the time of admission and made a positive decision about choosing St. Petersburg Polytechnic University among other higher education institutions of the city. Second, students who received a brand message interacted with teachers and participated in the life of the University, and then broadcasted it on.

6. Findings

The authors found that the respondents' description of their emotional attitudes can be divided into three factors of C. Osgood's semantic differential: evaluation, strength and activity. That fact allows one to assess the location of the university's brand in the semantic space of respondents. 8 bipolar scales in which students describe their attitude to the university were singled out in the process of analysing the obtained lexical material. Scales and treatment are presented in Table 1.

Table 01. Bipolar scales describing the attitude of students to the university

Positive scale	Negative scale	Treatment of categories
Vital power	Fade	Realization of potential, vigor, purposefulness;
Pleasure	Discontent	Extra-curricular activities, entertainment, fulfillment of desires;
Unity	Separation	Participation in something, harmony, unification;
Power	Powerlessness	Success, leadership, achievements;
Belonging to	Absence of traditions	Traditions, history, links;
Individuality	Collectivism	Self-determination, a feeling of being special;
Control		Stability, "cold" mind;
Security	Lack of security	Stability, transparency, absence of conflicts with the outside world.

7. Conclusion

Further, these scales were analyzed for compliance with the scale of the semantic differential of C. Osgood. The selected bipolar scales grouped according to three dimensions of the semantic differential of C. Osgood are presented in Table 2.

Table 02. Bipolar scales allocated in 3 dimensions of the Osgood semantic differential

The Semantic Differential measuring	Scale Positive pole	Scale Negative pole
Strength	Belonging	Lack of Tradition
Strength	Control	Lack of control
Strength	Security	Unprotected
Evaluation	Pleasure	Discontent
Evaluation	Unity	Individuality
Evaluation	Individuality	Collectiveness
Activity	Vital power	Fading
Activity	Power	Impotence

Figure 1 shows the results of the study.

As it is showed in Fig. 1, the most significant point in assessing the university is the positive pole of the measurement of "strength" (the scale "belonging", 33% of respondents' responses). The indicators of the positive pole for measuring "activity" (vital force scales - 19% and "power" - 14%) are also clearly pronounced. In third place there is the measurement of "score" (the "unity" scale, 19% of respondents' answers).

All the aforementioned aspects provide one with the possibility of concluding the following perception of the university:

- strong brand (with strong traditions);
- active brand (contributing to the realization of their potential and achievement of leadership);
- positive evaluation (respondents feel unity with the University, their involvement in its life, etc.).

Generally speaking, the findings can be considered satisfactory, since the perception of the university brand by the students is adequate to the idea laid in its development.

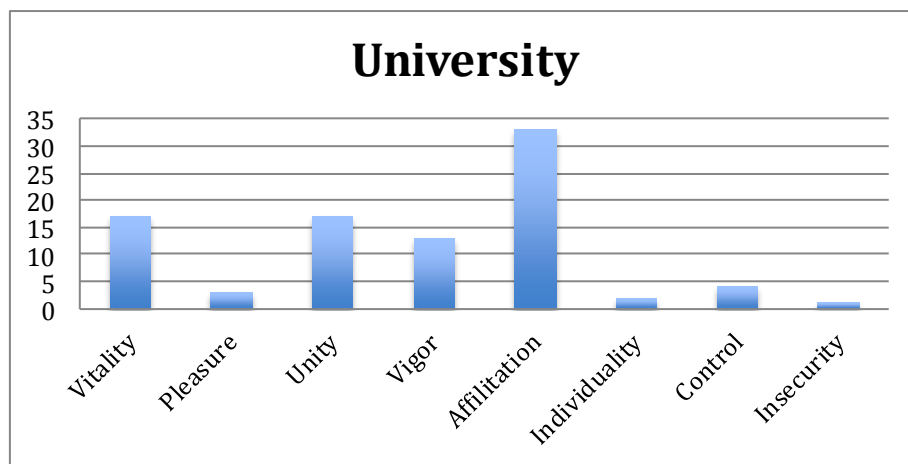


Figure 01. The results of the study based on the ZMET technique

The results of this study are a platform for further study of the advertising image of St. Petersburg Polytechnic University with the aim of changing the characteristics of the university used in advertising. It is important to mention the novelty of this research: psychosemantic marketing methods were used, as well as a modified ZMET technique and semantic scaling. This study can be broadened by expanding the sampling to study the perception of the university by faculty and graduates.

Nowadays Russian universities are at the beginning of the way of using psychosemantic methods for building a strong and active brand. The following research can be a significant contribution to this process and can ameliorate the current branding of the university.

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