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## **Vendometric analysis of perception of advertising by consumers of medicinal drugs**

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### **Abstract**

The objective of this study is to develop a methodology for assessing the perception of advertising slogans by consumers of medicinal drugs. To assess the perception of advertising by consumers of medicines, a methodological approach to vendometric analysis has been developed and tested, which allows identifying, evaluating and predicting the reaction of consumers to the advertising of pharmaceutical products. Practical implementation of the results of the vendometric analysis can contribute to the success of the advertising campaign and the achievement of the organization's objectives in meeting the needs of consumers.

**Keywords:** marketing, advertising, pharmaceutical, vendometric, slogan.

# Análisis vendométrico de la percepción de la publicidad por parte de consumidores de medicamentos

## Resumen

El objetivo de este estudio es desarrollar una metodología para evaluar la percepción de lemas publicitarios por parte de los consumidores de medicamentos. Para evaluar la percepción de la publicidad por parte de los consumidores de medicamentos, se ha desarrollado y probado un enfoque metodológico para el análisis vendométrico, que permite identificar, evaluar y predecir la reacción de los consumidores ante la publicidad de productos farmacéuticos. La implementación práctica de los resultados del análisis vendométrico puede contribuir al éxito de la campaña publicitaria y al logro de los objetivos de la organización para satisfacer las necesidades de los consumidores.

**Palabras clave:** marketing, publicidad, farmacéuticos, vendométrico, lema

## 1. INTRODUCTION

The current state of the pharmaceutical market, characterized by the rapid growth of the information flow about new medical technologies and medicines, has led to the formation of an objective need for information impact on consumption markets. A variety of types and ways of distributing information make it difficult for

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users to search for and choose its optimal version. The current direction in solving the emerging problems is the improvement of the market function of advertising as a marketing tool. Namely, the reorientation of the role of advertising from informing consumers of goods and attracting their attention to the modeling of public opinion and consumer preferences (Antipov,2010).

Pharmaceutical companies of various countries spend huge money on the advertising campaign of their pharmaceutical products. In Russia, the ATS group [A] "Digestive tract and metabolism" occupy the leading positions in sales on the commercial market of medicinal drugs (MD). In addition, gastroenterological drugs are among the leaders in the volume of pharmaceutical advertising on television and in the costs for radio advertising. By the volume of advertising (seconds), TOP-10 brands, advertised on the radio, include Ophthalmoferon eye drops (Pharmaceutical industry, 2016).

An integral part of the whole advertising campaign, expressing its key idea, is the slogan. The main task of the slogan, representing the advantage of the goods, is to attract consumers' interest, thus prompting them to familiarize themselves with the product and (or) acquire it. Ultimately, the effectiveness of the advertising slogan largely determines the possibility of achieving the goals of the pharmaceutical organization in the implementation

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of its marketing strategy (Arustamova, 2013;Pankratov et al., 2012).

The results of our own research and analysis of literature sources substantiated the objective of this study - to develop a methodology for assessing the perception of advertising slogans by consumers of medicinal drugs.

## **2. METHODOLOGY**

To solve the set objective, a methodical approach was developed, which we called Vendometric analysis (lat. vendo - advertising, metrikos - measuring). The developed approach is a complex program based on a step-by-step algorithm for the consistent application of qualitative methods (focus group discussions) and quantitative (sociological research, variation statistics) marketing analysis, as well as multidimensional statistical (correlation-regression) analysis. The proposed vendometric analysis allows us to identify features, and quantify and carry out forecasting of the effectiveness of slogans' influence on consumer choice (Blum et al., 2011; Lobuteva et al., 2014a; Lobuteva et al., 2014b).

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A block diagram of the vendometric analysis is shown in Figure 1.

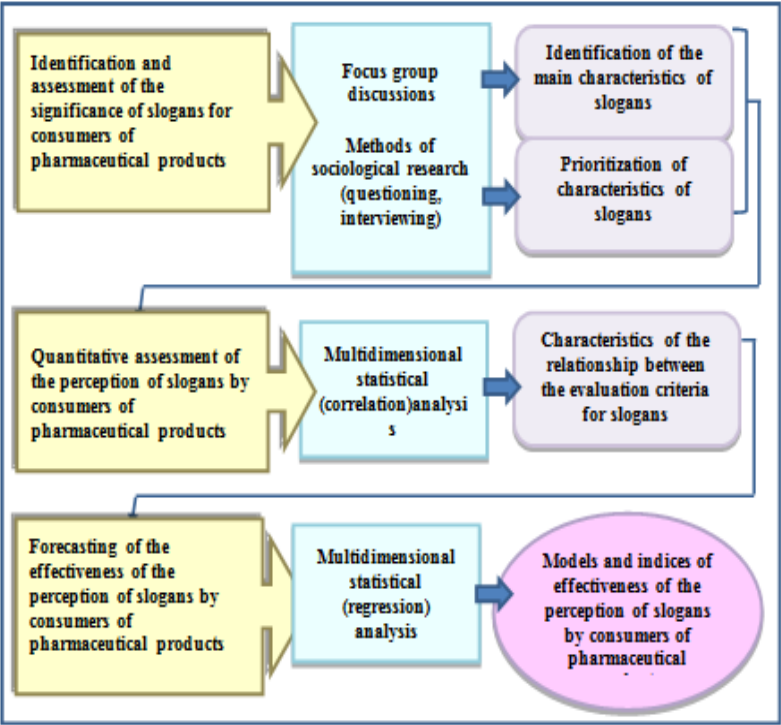


Figure 1. A block diagram of the vendometric analysis

**Stage one: Identification and prioritization of the main characteristics of slogans**

To identify the main characteristics of slogans, we used qualitative methods of marketing research: focus group discussions (Tokarev, 2011; Shchepilova and Schepilov, 2013.).

The following scenario was developed for the study. From the basic set of characteristics of the slogan, respondents were asked to choose characteristics that could, in their opinion, have the greatest impact on the consumer's desire to buy the advertised product or get acquainted with it. For this purpose, the survey was conducted in 5 groups of 3-6 people (consumers of pharmaceutical products). Drugs and biologically active additives (BAA), used to treat and prevent diseases of the gastrointestinal tract and drugs for the prevention and treatment of eye diseases were considered as pharmaceutical products. The choice of these products is due to their active advertising support in the pharmaceutical market. In the Russian mass media, gastroenterological and ophthalmic drugs occupy a leading position in the MD and BAA group in terms of advertising costs and the number of ad broadcasts. From the proposed set, which includes 14 characteristics of the slogan, consumers chose seven characteristics: euphony, involvement, reliability, informational value, shortness, originality and emotionality.

In order to prioritize the importance of the main characteristics of slogans for consumers, sociological research methods were used (questioning, interviewing). The consumer survey was conducted according to a developed questionnaire, where respondents were asked to rate on a 5-point scale the importance of each of the seven characteristics for them. The results of the survey of 615 respondents are presented in Table 1.

It was established that the most important characteristics, from the point of view of consumers, are reliability (4.093 points),

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informational value (3.787 points) and shortness (3.455 points). It should be emphasized that it is especially difficult to achieve such a combination of characteristics when creating a slogan (with the maximum level of compliance with the real object in full and at the same time briefly key information about the advertised product) (Williamet al., 2011; Pamela et al., 2016).

The least important slogan characteristics for the respondents is the involvement (2,941 points), i.e. the extent of the influence of the slogan on the consumer making him buy the advertised product. This position of respondents is quite understandable, because, from their point of view, the task of advertising is exclusively the sale of goods, which consumers categorically do not accept.

Table 1. Average weighted respondents' ratings of the characteristics of slogans of pharmaceutical products

<b>Slogan characteristics</b>	<b>Respondents' ratings</b>	
	<b>Points</b>	<b>Ranks</b>
Euphony	3.014	5
Involvement (engagement)	2.941	7
Reliability	4.093	1
Informational value	3.787	2
Shortness	3.455	3
Originality	2.992	6
Emotionality	3.060	4
All characteristics (average)	3.335	-



### **Stage two: Quantitative characteristics of the relationship between the evaluation criteria for slogans**

The seven characteristics of slogans revealed at the first stage of the vendometric analysis were taken into consideration at the second stage as criteria for which consumers were asked to evaluate (on a 5-point scale) the slogans of 13 drugs used in gastroenterological and ophthalmic practice. The results of processing the respondents' answers allowed us to establish the following. The greatest desire arises in consumers for buying those goods, which slogans get the highest average scores for the maximum number of characteristics. For example, slogans of Hilak forte and Renni got the highest score (weighted average for the generalized characteristics were 3.986 and 3.607, respectively). And the greatest desire arose among consumers for purchasing these drugs (weighted average for involvement - 4.122 and 3.451 points). At the same time, the slogans of Biform and Maalox drugs, which received lower consumer's ratings (weighted average for the generalized characteristics were 3.129 and 3.057, respectively), significantly less caused consumers to buy these drugs (weighted average for involvement - 2.610 and 2.749).

The obtained results suggest a correlation between the evaluation of specific characteristics of slogans and the desire of consumers to purchase the advertised product. To justify the formulated assumption, we used methods of multidimensional statistical (correlation) analysis. As a result, the characteristic involvement (efficiency) was considered, i.e. the degree of influence of

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the slogan on the consumer's desire to buy the advertised product. As a factor, the following characteristics were consistently considered: euphony, reliability, informational value, shortness, originality and emotionality. The calculated indices of the Pearson pair correlation coefficient are presented in Table 2.

Table 2. The values of the Pearson coefficient (r) of the characteristics of slogans of pharmaceutical products

Characteristics	Correlation coefficient values	
	Indices	Ranks
Euphony	0.607	3
Reliability	0.452	6
Informational value	0.758	2
Shortness	0.591	4
Originality	0.505	5
Emotionality	0.801	1

The quantitative criteria for assessing the strength of relationship were taken on the Cheddock scale. The results of the study showed that the strongest relationship is established between the characteristics involvement – emotionality ( $r=0.801$ ) and involvement – informational value ( $r=0.758$ ). Consequently, the strongest impact on the consumer's desire to buy an advertised product is provided by the characteristics of the slogan such as emotionality and informational value. Moreover, if the characteristic of information, according to consumers, is one of the most important (second place in the ranking of importance of the main characteristics of the slogan), then the

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characterization of emotionality is significantly less important (the fourth rank position in Table 1).

The least strong relationship is revealed between the characteristics involvement – reliability (0.452). Consequently, the promotion of medicines in the advertising component is less affected by the conformity of an image created by advertising to the real object (reliability). The highly valued characteristic reliability, in practice, does not have a great influence on the desire to purchase the advertised product, since the consumer can evaluate the actual reliability of the slogan only after the purchase and use of the goods (Adrienne et al., 2014).

Thus, the conducted studies showed that the consumer's desire to get acquainted with the advertised product and (or) to acquire it largely determines the positive emotional background the slogan evokes in the consumer for this product. In addition, the slogan should be informative, i.e. as much as possible to transmit key information about the advertised product. The relevance of the slogan is emotionality and informational value in the advertising component for the promotion of medicines for older people. The formation of a positive emotional background in the elderly and an increase in their information availability favorably improves the quality of life and ensures active longevity for people of the third age (Krivosheev et al., 2017).

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**Stage three: Forecasting of the effectiveness of the perception of slogans by consumers of pharmaceutical products**

To predict the effectiveness of the perception of slogans by consumers of pharmaceutical products, we used the method of multidimensional statistical (regression) analysis. As a factor, we consistently considered one of the characteristics of the slogan (euphony, reliability, informational value, shortness, originality and emotionality). The regression analysis was carried out with the set level of reliability of 95%. The constructed equations (Table 3) allow solving the task of predicting the effectiveness of the impact on consumers of the slogan depending on the evaluation that consumers give to this slogan on its main characteristics (Wieniewska et al., 2016).

Table 3. Regression equations describing the dependence of efficiency slogan on consumers' assessment of its characteristics

Slogan characteristics	Regression equations	The predicted value of the efficiency index	
		Minimum	Maximum
Euphony	$Y = 1.3763 + 0.6391X$	0.403	0.914
Reliability	$Y = 1.5378 + 0.5221X$	0.412	0.830
Informational value	$Y = 0.5399 + 0.7461X$	0.257	0.854
Shortness	$Y = 1.7964 + 0.5287X$	0.465	0.888
Originality	$Y = 1.6706 + 0.5037X$	0.435	0.838
Emotionality	$Y = 0.5172 + 0.7586X$	0.255	0.862

For example, if no positive emotion arises in the consumer's mind when quoting a slogan or they are not significant (the value of the characteristic emotionality is 1.0 or 2.0 points), the consumer's desire to purchase the advertised product does not appear. In this case, there may be only a slight interest in acquainting with the advertised drug (values of the characteristic involvement, respectively, 1.276 and 2.034 points). The slogan's efficiency index in this case will be only 0.255 and 0.407 (with the maximum possible value equal to 1). If the slogan causes bright positive emotions in the mind of the consumer (the value of the characteristic emotionality is 5.0 points), the consumer with a high degree of probability may show a clearly informed decision to purchase the advertised product (the value of the characteristic involvement is 4.310 points). The slogan's efficiency index, in this case, will be 0.862, and its efficiency approaches the maximum value (Pharmaceutical advertising at year-end, 2015).

Table 3 shows the calculated minimum and maximum predicted values of the slogan's efficiency indices (respectively, for the minimum and maximum scores of the specific characteristics of the slogan). The predicted values obtained in this way are the average values that can be expected. The rationale and interpretation of the regression models obtained allow us to predict the effectiveness of the impact of specific slogans on consumers of pharmaceutical products.

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### **3. SUMMARY**

1. To assess the perception of slogans by consumers of pharmaceutical products, a vendometric analysis is proposed that allows identifying, evaluating and predicting the reaction of consumers to the advertising of pharmaceutical products.
2. When creating a slogan, it is advisable to focus on the conveyance of key information about the advertised product to and the formation of a positive emotional background among consumers, recognizing the priority of the slogan's characteristics such as emotionality and informational value in the advertising component when promoting medicines for older people.
3. Practical implementation of the results of the vendometric analysis can contribute to the success of the advertising campaign and the achievement of the organization's goals in meeting the needs of consumers, including those of mature people.

### **REFERENCES**

- ADRIENNE, E., FAERBER, D., & KRELING, H. 2014. **Content Analysis of False and Misleading Claims in Television Advertising for Prescription and Nonprescription Drugs.** Journal of General Internal Media. pp. 110-118. Germany.
- ANTIPOV, K. 2010. **Basics of advertising.** p. 328. Russia.
- ARUSTAMOVA, A., POKROVSKII, M., SHABELNIKOVA, A., & KASHUBA, A. 2013. **Analysis of the Russian wholesale**
-

- market of eye drops.** Bulletin of I.P. Pavlova Russian Medical and Biological Academy. N° 4. pp. 71-76. Russia.
- BLIUM, M., GERASIMOV, B., MOLOTKOVA, N. 2011. **Marketing advertising.** p. 143. Russia.
- KRIVOSHEEV, S., KARTASHOVA, O., TIKHONOVA, U., ZAKHAROVA, O. 2017. **Pharmaceutical care for patients of the third age in pharmacy organizations as a significant aspect of social gerontology.** Advances in Gerontology. Vol 30 N° 4: 596-600. Russia.
- LOBUTEVA, A., ZAKHAROVA, O., KRIVOSHEEV, S., & LOBUTHEVA, L. 2014a. **The effect of advertising slogans on consumers of ophthalmic drugs.** Pharmacia. N°7. pp. 27-30. USA.
- LOBUTEVA, A., ZAKHAROVA, O., KRIVOSHEEV, S., & LOBUTHEVA, L. 2014b. **Features of perception of advertising slogans of ophthalmic drugs by subjects of the pharmaceutical market.** The collection of educational-methodical and scientific works dedicated to the 35th anniversary of the Department of Management and Economics of Pharmacy of the State Medical University of SBEI HVE "Kazan State Medical University" of the Ministry of Health of the Russian Federation. Kazan. Medicine. pp. 92-94. Russia.
- PAMELA, A., AMIE, C., O'DONOGHUE, H., SULLIVAN, J., CLAUDIA, S., PARVANTA, S., & BETTS, K. 2016. **Communicating efficacy information based on composite scores in direct-to-consumer prescription drug advertising.** Patient Education and Counseling. Vol. 99. pp. 583-590.  
<http://dx.doi.org/10.1016/j.pec.2015.10.019>. Netherlands.
- PANKRATOV, F., BAZHENOV, K., SEREGINA, T., & SHAKHURIN, V. 2012. **Advertising activity.** M.: Dashkov and Co. p. 338. Russia.
- Pharmaceutical advertising at year-end.** 2015. Russian pharmaceutical market. Results of the year. Remedium. pp. 205-208. Moscow. Russia.
-

- Pharmaceutical industry**.2016. Sectoral bulletin of the KSK groups. N<sup>o</sup>7. p. 2. Russia.
- SHCHEPILOVA, G., & SCHEPILOV, K. 2013. Basics of advertising. M.: Iurait. p. 528. Russia.
- TOKAREV, B.2011.**Marketing research**.M.: Magistr. INFRA-M.p. 512. Russia.
- WILLIAM, A., SCHAEFER, D., & WEIGOLD, M. 2011. **M:Advertising**. M. EKSMO. p. 880. Russia.
- WIENIEWSKA, E., CZERW, A., MAKOWSKA, M., & FRONCZAK, A. 2016.**Television advertising of selected medicinal products in Poland and in the United States - a comparative analysis of selected television commercials**. ActaPoloniaePharmaceutica - Drug Research. Vol. 73. N<sup>o</sup> 4: 1083-1097. Poland.
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