

Elaboration of the Model for the Assessment of Outdoor Advertising Effectiveness

Lina Pilelienė

Vytautas Magnus University
lina.pileliene@vdu.lt

Viktorija Grigaliūnaitė

Vytautas Magnus University
viktorija.grigaliunaite@vdu.lt

Abstract

In today's market economy organizations compete for consumers' attention, because in such information overload there is a high possibility of the advertisement to be not noticed, in which case it has zero probability to become effective. Outdoor advertising presents a unique case in that, unlike advertising in television or magazines, an amount of factors that distract (or can attract) consumers' attention is enormous. The scientific problem solved by this research is defined by a question: what factors affect outdoor advertising effectiveness? This study aims to contribute to the advertising theory by elaborating a model for the assessment of outdoor advertising effectiveness. To reach the aim of the study, the experiment following with questionnaire survey were provided and binary logistic regression analysis was applied for the statistical analysis of the questionnaire survey data. The analysis of the research results revealed that better brand awareness and positive attitude toward the advertisements increase the probability of both unaided and aided advertising recall. Hence, the conclusion was made that brand awareness and attitude toward the advertisement have the enormous effects on outdoor advertising effectiveness. Moreover, the left road side of the advertising placement decreases the probability of both unaided and aided advertising recall. The bigger is the outdoor advertisement, the less likely it is to notice the brand, which in turn leads to lower unaided brand recall probability. However, the size of the outdoor advertisement does not influence aided recall, signifying that for well-known brands the size of the outdoor advertisements is less important, while for less-known brands the smaller size of outdoor advertisements should be chosen. Aiming at generating aided recall, rational outdoor advertising appeal should be preferred to emotional one. Finally, the placement enabling the best outdoor advertising visibility must be thought through in order to make outdoor advertising effective.

Keywords: advertising effectiveness, advertising placement, environmental factors, outdoor advertising.

JEL classification: M31, M37.

1. Introduction

In today's market economy organizations compete for consumers' attention, because in a framework of contemporary information overload there is a high possibility that the advertisement will be not noticed. Based on the popular marketing maxim that "unseen is unsold", it can be argued that in such a case advertisement has a zero probability to become effective. Therefore, finding ways to reach potential customers by grabbing their attention becomes a relevant topic in marketing theory and practice. Organizations often use several advertising channels at a time; this lead to a situation when the measurement of each advertisement effectiveness becomes complicated. However, the assessment of the effectiveness of each advertising channel may help organizations to choose the optimal array of channels for the advertising campaign.

In this research the emphasis is put on outdoor advertising as one of inevitable parts of urban consumer environment. Donthu, Cherian and Bhargava (1993, p.64) emphasize that measurement of outdoor advertising effectiveness is a very challenging task. Moreover, Koeck and Warnaby (2014, p.1402) emphasize that "compared to other forms of marketing

communications activity, outdoor advertising has been relatively neglected by marketing academics”. Outdoor advertising entails much more than the ordinary billboard (Jordaan, 2001). This type of advertising presents a unique case in that, unlike advertising in television or magazines, an amount of factors that attract or distract consumers’ attention is enormous. However, Rosewarne (2007, p.1) argues that “unlike television, radio, print, internet, cinema, and mail advertising, outdoor advertising cannot be turned off, put away or easily avoided”. Therefore, the determination of the factors affecting outdoor advertising effectiveness becomes an important issue. The scientific problem solved by this research is defined by a question: what factors affect outdoor advertising effectiveness? This study aims to contribute to the advertising theory by elaborating a model for the assessment of outdoor advertising effectiveness.

The structure of the paper is as follows. In Section 2 a scientific substantiation for the assessed factors affecting advertising effectiveness is provided; the theoretical model for the assessment of outdoor advertising effectiveness is composed and research methodology is presented in the Section 3. The research results and validated model of outdoor advertising effectiveness is presented in Section 4; discussion and conclusions are provided in the Section 5.

2. Theoretical substantiation

Akören (2015, p.799) defines outdoor advertising as “an advertisement type that can be found frequently as directly proportional with outdoor places”. Koeck and Warnaby (2014, p. 1403) suggest using the term *outdoor advertising* to refer to the various forms of advertising which occur within a wider urban environment. It is highly visible, often very large, and placed in heavily trafficked areas in order to attract as many viewers as possible (Rosewarne, 2007). According to Cronin (2010, p.10), as the greatest density of people can be found in cities, the vast majority of outdoor advertising can be observed there. Outdoor advertising makes a significant impact on economics, environment, urban planning, traffic security, heritage and tourism etc. (Suditu, et al., 2016, p. 185).

Cronin (2010, p.13) emphasizes three outdoor advertising-related factors: (1) particular theme (advertisement), (2) certain structures (type of panel), and (3) location’s specifics. Latter factors based on their nature can be classified as internal (or ad-related) and external (or condition-related) factors.

2.1. Internal factors

As the factors that contribute to the outdoor campaign effectiveness Donthu, Cherian and Bhargava (1993, p.65) distinguish seven campaign-related factors:

- Purpose (directional, price point, or image);
- Number of concepts/words;
- Key concept to be communicated (price, promotion, image);
- Color;
- Illustration (picture, cartoon, none);
- Quality of the illustration; and
- Product characteristics (high involvement vs. low involvement).

Advertising message related factors (different advertising layouts, visual and textual elements, advertising complexity level) are the ones that marketers can gain advantage from. Since one of the main objectives of advertising is attention grabbing and motivating consumers to purchase advertised product, many researchers have been trying to find out which appeal or advertising strategy work best (Keshari & Jain, 2014, p. 43). According to Davies (1993) the core purpose of emotional appeal is to encourage the consumer to reach for a reward or to avoid the punishment – i.e. to evoke positive or negative emotions, based on the idea that many

consumers make purchase decisions achieving to experience positive feelings. On the other hand, Panda, Panda and Mishra (2013) propose that the rational appeal highlights the value for money (the usability, disposability of the brand, etc.) emphasizing that consumers process information based on logical or/and utilitarian decisions. It can be stated that advertising appeal encompasses such elements of advertising layout as words, key concepts, and illustrations. Previous research revealed that textual elements in outdoor advertising must be laconic and contain clear font, while visual elements must contain contrasting colours in order to attract consumers' attention (Pilelienė, Grigaliūnaitė and Bakanauskas, 2015).

2.2. External factors

The literature analysis shows, the external factors can be divided into structure-related (type of panel) factors and location-related factors.

As the predominant mode of outdoor advertising Koeck and Warnaby (2014, p.1404) suggest 2D advertising as the most fundamental form of outdoor media which is “defined by, attached to, and as such, visually harnessed through, a singular surface”. However, many types of 2D advertisements based on their *structure* can be found in scientific literature.

Based on the researches of the industry's relationship to urban space, Cronin (2010, p.10) argues that outdoor or out-of-home advertising is oriented towards speaking to the largest possible number of potential consumers and can be classified into roadside billboards, panels in pedestrian zones, advertisements on buses (vehicle decals), in train and underground stations, and on taxis. Rosewarne (2007) extends this list by adding shopfront and window displays, murals on buildings, sandwich boards, and street furniture including:

- public transport shelters (PTSh);
- kiosks;
- public toilets;
- waste bins;
- public bicycle stations;
- phone booths; and
- park benches.

According to Donthu, Cherian and Bhargava (1993, p.65) the selected format of billboards is one of the factors that contribute to the outdoor campaign effectiveness.

Rezvan, Norouzi and Firouzi (2015, p. 96) argue that the *location* of an advertisement will affect the probability and frequency of exposure. Donthu, Cherian and Bhargava (1993, p.64) suggest that factors such as length of approach, angle of the structure, position relative to other structures, and speed of travel make up these ratings. The same authors indicate such location related factors as: size of board; type of road; and side of road (right vs. left) (p. 65).

2.3. Other factors

Beside internal and external factors that could contribute to outdoor advertising effectiveness, Donthu, Cherian and Bhargava (1993, p. 65) provide two more groups: respondent (or target market) related factors and synergy with other media related factors.

Respondent-related or personal factors can be characterized by the level of product involvement, involvement with the outdoor advertisement, and attitude toward the advertisement.

Considering the synergy with other media Jordaan (2001) provides six principles to be followed to handle the impact of outdoor advertising properly:

- Competition or snowball principle – adding bigger, higher, brighter, closer to the street advertisement than the one of competitors may cause a snowball effect;
- Encroachment principle – encroaching onto or into the roadway or pedestrian route may

be violent;

- Attachment or domination principle – obtrusive and audacious attempts of an advertisement to dominate the visual scene by taking advantage of prominent elements in a visual setting may destroy both prominent elements and visual setting;
- Imperialistic or ubiquity principle – outdoor advertising wants to be ubiquitous and tries to conquer new territories by entering or filling new spaces;
- Transition principle – the display periods of individual advertisement tend to be relatively short and can therefore not be seen as permanent visual elements;
- Disorder principle – when outdoor advertising is managed insufficiently visual disorder and deterioration will increase with time.

Donthu, Cherian and Bhargava (1993) emphasize that traditional measurement of recall and awareness levels are used to measure effectiveness of outdoor advertising.

3. Research organization

Achieving to determine the elements or factors affecting outdoor advertising effectiveness an experiment was provided. The 4.4 kilometers segment of Kaunas streets with high traffic load and medium advertising density was chosen for the experiment. Given the difficulty of providing the real time field experiment, the street segment was filmed with Canon EOS 600D Digital SLR Camera (with 18mm-55mm and 14mm fixed canon lenses and using Glidecam HD2000 Stabilizer System) from a front right-seat passenger's position driving at the average 40 km/h speed (excluding waiting time at crossings). All the video was composed into 8`48``.wmv format 8Mbps HD 1080-30p quality film.

The experiment was provided at Vytautas Magnus University in May 2016; 194 undergraduate students (119 women) participated. The participants were divided into smaller groups of 19-20 people to watch the film in an auditorium environment on 4:3 screen. During the watching time, the participants were asked to count the advertisement they notice.

After watching the film a questionnaire survey was provided. The questionnaire was composed of 5 questions, also, the participants had to indicate their gender and the number of advertisements counted. The first question in the questionnaire was provided in order to measure *unaided recall* – it was an open-ended question where participants had to name all the brands that they remembered from the film. The second question of the questionnaire was composed to determine *aided recall* – 6 brands (selected based on the quality of their visibility in the film and characteristics provided in Table 1) which could be observed in the film and 6 brands which were not in the film were provided and the respondent had to indicate the brands that they saw.

Advertised brand No.	Side (1-left; 2-right)	Size (1-gantry; 2-PTSh; 3-Free-stand; 4-Wall-banner; 5-Billboard)	Appeal (1-emotional; 2-rational)	Dominate (1-text; 2-images)	Visibility (1-clear; 2-signs)	Repetition
I	1	3	1	2	1	3
II	2	4	1	2	1	2
III	2	1	2	1	1	2
IV	2	5	1	2	2	1
V	1	2	1	2	2	4
VI	2	3	1	2	1	1

Table 1. Advertisements used in the experiment and their characteristics

Further only 9 (6 from the film and 3 randomly selected) brands were left achieving to shorten the survey duration and simplify the evaluation task for participants. In the 3rd and 4th questions respondents had to indicate their *awareness* and *involvement* with the listed brands in 5-point Likert scale. In the fifth question 11 statements reflecting the *attitude* about each of the nine advertisements (6 from the film and 3 randomly selected brands) were provided to evaluate in a 5-point Likert scale. Respondents had a possibility to skip the evaluation of advertisement they could not remember. Consequently, the hypothesized relations between advertising recall and factors that influence it can be expressed by two equations:

$$(1) \ln \frac{P(\text{unaided recall})}{P(\text{no unaided recall})} = C + \beta_1 \text{Brand awareness} + \beta_2 \text{Involvement} + \beta_3 \text{Attitude} + \beta_4 \text{Side} + \beta_5 \text{Size} + \beta_6 \text{Appeal} + \beta_7 \text{Dominating elements} + \beta_8 \text{Visibility} + \beta_9 \text{Repetition}$$

$$(2) \ln \frac{P(\text{aided recall})}{P(\text{no aided recall})} = C + \beta_1 \text{Brand awareness} + \beta_2 \text{Involvement} + \beta_3 \text{Attitude} + \beta_4 \text{Side} + \beta_5 \text{Size} + \beta_6 \text{Appeal} + \beta_7 \text{Dominating elements} + \beta_8 \text{Visibility} + \beta_9 \text{Repetition}$$

After obtaining the results, 170 respondents' (111 women) answers were admitted as valid. As the dependent variable recall (unaided and aided) was dichotomous, the binary logistic regression was applied for the analysis in order to determine factors that affect outdoor advertising effectiveness. The IBM SPSS Statistics V.20 and XLSTAT 2014 software packages were applied for data analysis.

4. Research results

Regarding the logistic regression analysis in the case of *unaided recall*, two variables – dominating elements and repetition, were eliminated from the analysis due to the multicollinearity. The concordance index value *c* equals to 0.789, which indicates good predictive power of the model, i.e. model can discriminate between observations at different levels of the outcome (see Figure 1 below).

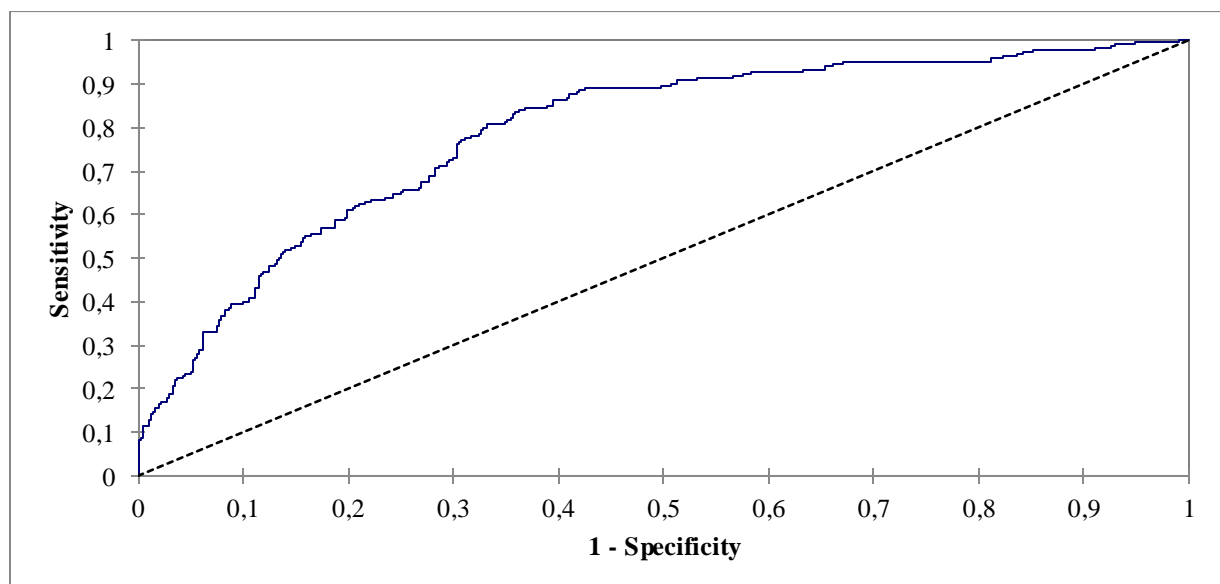


Figure 1. ROC curve (AUC = 0.789)

As it can be seen in Table 2, the Nagelkerke R^2 coefficient equals to 0.329, indicating that latter model is useful in predicting outdoor advertising unaided recall. Moreover, the overall model evaluation reveals that the model provide a good fit to the data as it demonstrates an improvement over the intercept-only model. An improvement is examined by applying three inferential statistical tests: the Likelihood ratio, Score, and Wald. The chi-squared values

generated by latter tests, as well as the p-values associated with those chi-squared tests with 7 degrees of freedom are provided in Table 2 below. The p-values are lower than 0.05, thus including predictor variables results in a statistically significant improvement in the fit of the model. Consequently, the logistic unaided recall model is more effective than the intercept-only model. Nevertheless, the statistical significance of individual regression coefficients, tested using the Wald chi-square statistic, reveals that not all of the hypothesized predictors of unaided recall are statistically significant. As it can be seen, involvement with the brand, advertising appeal, and advertising visibility are not statistically significant predictors of outdoor advertising unaided recall. On the other hand, the higher is the awareness of the advertised brand, the more likely it is that the brand would be recalled. For each point increase on the brand awareness score, the odds of brand being recalled increase 1.571 times. Furthermore, the more positive is the attitude toward the advertisement, the more likely it is that the advertised brand would be recalled. For each point increase on the attitude toward the advertisement, the odds of brand being recalled increase 1.375 times. The size of the outdoor advertisement is negatively related to unaided recall. In other words, the bigger the outdoor advertisement, the less likely it is that unaided brand recall would occur. The assumption could be made, that the bigger is the outdoor advertisement, the less likely it is to notice the brand, which in turn leads to lower unaided brand recall probability. Finally, the odds of the brand being recalled from the outdoor advertisement in the left road side are 0.576 times lower than the odds for the brand presented in the outdoor advertisement placed in the right road side (experiment was performed from the front right-seat passenger's position).

Variables	β	S.E.	Wald	df	Sig.	Exp(β)	95% confidence interval for EXP(β)	
							Lower	Lower
AWARENES	0.452	0.072	39.521	1	0.000	1.571	1.365	1.808
INVOLVEMENT	0.033	0.082	0.160	1	0.689	1.033	0.879	1.215
ATTITUDE	0.319	0.105	9.226	1	0.002	1.375	1.120	1.689
SIDE	-0.551	0.170	10.546	1	0.001	0.576	0.413	0.804
SIZE	-0.370	0.170	4.702	1	0.030	0.691	0.495	0.965
APPEAL	-0.323	0.455	0.504	1	0.478	0.724	0.296	1.767
VISIBILITY	0.281	0.307	0.840	1	0.360	1.325	0.726	2.418
Constant	-1.914	1.027	3.475	1	0.062	0.147	-	-
Nagelkerke $R^2 = 0.329$								
Overall model evaluation	χ^2			df	p-value			
Likelihood ratio test	288.986			7	0.000			
Score test	257.964			7	0.000			
Wald test	202.457			7	0.000			

Table 2. Binary logistic regression analysis results of variable unaided recall

Regarding the logistic regression analysis in the case of *aided recall*, the same two variables – dominating elements and repetition, were eliminated from the analysis due to the multicollinearity. The concordance index value c in this case equals to 0.826, which indicates very good predictive power of the model (see Figure 2 below).

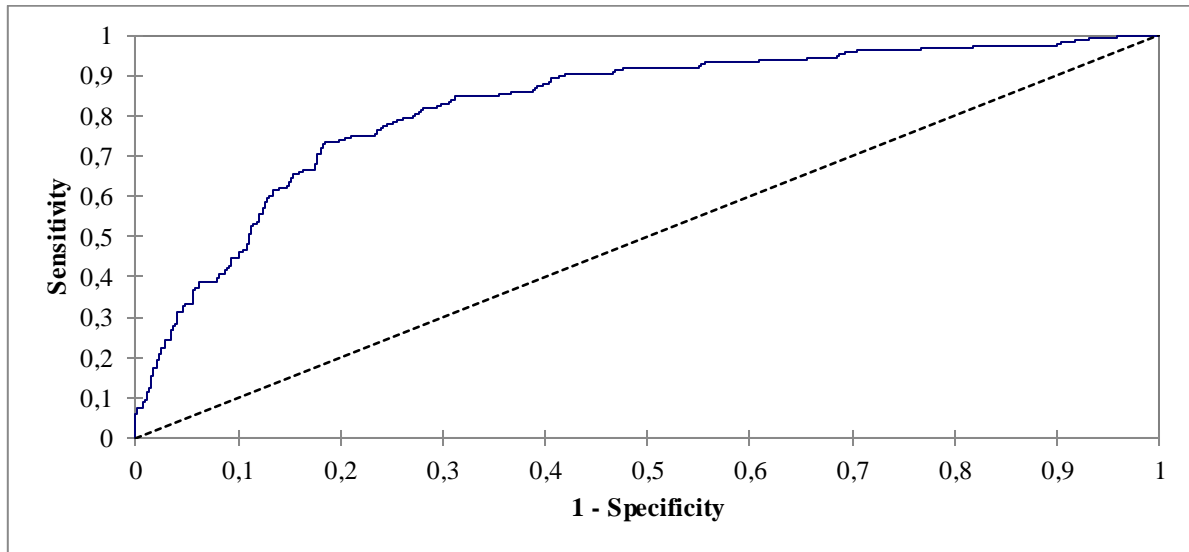


Figure 2. ROC curve (AUC = 0.826)

As it can be seen in Table 3, the Nagelkerke R^2 coefficient equals to 0.403, suggesting that latter model is useful in predicting outdoor advertising aided recall. The overall model evaluation reveals that the logistic aided recall model is more effective than the intercept-only model (the p-values associated with the chi-squared values generated by Likelihood ratio, Score, and Wald tests are lower than 0.05).

The statistical significance of individual regression coefficients, tested using the Wald chi-square statistic, reveals that not all of the hypothesized predictors of unaided recall are statistically significant. As shown in Table 3, involvement with the brand and the size of the advertisement are not statistically significant predictors of outdoor advertising aided recall.

The higher is the awareness of the advertised brand, the more likely it is that the brand would be recalled. For each point increase on the brand awareness score, the odds of brand being recalled increase 1.714 times in the case of aided recall. The more positive is the attitude toward the advertisement, the more likely it is that the advertised brand would be recalled. For each point increase on the attitude toward the advertisement, the odds of brand being recalled increase 1.336 times. The odds of the brand being recalled from the outdoor advertisement in the left road side are 0.405 times lower than the odds for the brand presented in the outdoor advertisement placed in the right road side (experiment was performed from the front right-seat passenger's position). The odds of the brand being recalled from the emotional appeal advertisement are 0.179 times lower than the odds for the brand presented in the rational appeal advertisement. Finally, outdoor advertising visibility is positively related to the aided recall. The better the visibility of outdoor advertisement, the more likely it is that an advertisement would be recalled.

Variables	β	S.E.	Wald	df	Sig.	Exp(β)	95% confidence interval for EXP(β)	
							Lower	Lower
AWARENES	0.539	0.073	54.647	1	0.000	1.714	1.486	1.977
INVOLVEMENT	0.015	0.091	0.026	1	0.873	1.015	0.849	1.212
ATTITUDE	0.290	0.111	6.820	1	0.009	1.336	1.075	1.660
SIDE	-0.903	0.172	27.560	1	0.000	0.405	0.289	0.568
SIZE	0.241	0.178	1.828	1	0.176	1.273	0.897	1.805
APPEAL	-1.721	0.478	12.972	1	0.000	0.179	0.070	0.456
VISIBILITY	1.058	0.319	11.025	1	0.001	2.880	1.543	5.379

Constant	-4.582	1.099	17.384	1	0.000	0.010	-	-
Nagelkerke R ² = 0.403								
Overall model evaluation	χ^2		df		p-value			
Likelihood ratio test	365.923		7		0.000			
Score test	326.019		7		0.000			
Wald test	248.843		7		0.000			

Table 3. Binary logistic regression analysis results of variable aided recall

For elaborating final models for the assessment of outdoor advertising effectiveness, the statistically non-significant predictors of unaided as well as aided advertising recall were eliminated from the further analysis. Both models were assessed as displaying very good predictive power, useful in predicting outdoor advertising recall, and more effective than the intercept-only models. The results of regression coefficients and odds ratio for the individual variables are presented in Table 4 below.

In the case of unaided advertising recall, for each point increase on the brand awareness score, the odds of brand being recalled increase 1.644 times. For each point increase on the positive attitude toward the advertisement, the odds of brand being recalled increase 1.387 times. Increasing outdoor advertisements' size decreases the odds of the brand being recalled by 0.603 times. The odds of the brand being recalled from the outdoor advertisement in the left road side are 0.578 times lower than the odds for the brand presented in the outdoor advertisement placed in the right road side.

In the case of aided advertising recall, for each point increase on the brand awareness score, the odds of brand being recalled increase 1.743 times. For each point increase on the positive attitude toward the advertisement, the odds of brand being recalled increase 1.350 times. The odds of the brand being recalled from the outdoor advertisement in the left road side are 0.407 times lower than the odds for the brand presented in the outdoor advertisement placed in the right road side. The odds of the brand being recalled from the emotional appeal advertisement are 0.310 times lower than the odds for the brand presented in the rational appeal advertisement. Finally, increasing outdoor advertisements' visibility increases the odds of the brand being recalled by 2.157 times.

<i>Unaided recall</i>								
Variables	β	S.E.	Wald	df	Sig.	Exp(β)	95% confidence interval for EXP(β)	
							Lower	Lower
AWARENES	0.497	0.057	76.773	1	0.000	1.644	1.471	1.837
ATTITUDE	0.327	0.102	10.293	1	0.001	1.387	1.136	1.693
SIDE	-0.578	0.165	12.228	1	0.000	0.561	0.406	0.776
SIZE	-0.506	0.069	54.011	1	0.000	0.603	0.527	0.690
Constant	-1.108	0.450	6.058	1	0.014	0.330	-	-
<i>Aided recall</i>								
Variables	β	S.E.	Wald	df	Sig.	Exp(β)	95% confidence interval for EXP(β)	
							Lower	Lower
AWARENES	0.556	0.070	63.949	1	0.000	1.743	1.521	1.998
ATTITUDE	0.300	0.109	7.556	1	0.006	1.350	1.090	1.673
SIDE	-0.898	0.171	27.594	1	0.000	0.407	0.291	0.570
APPEAL	-1.172	0.271	18.755	1	0.000	0.310	0.182	0.527
VISIBILITY	0.769	0.206	13.907	1	0.000	2.157	1.440	3.231
Constant	-3.549	0.689	26.507	1	0.000	0.029	-	-

Table 4. Binary logistic regression analysis results

Consequently, the elaborated models for the assessment of outdoor advertising effectiveness are expressed by two equations:

$$(3) \ln \frac{P(\text{unaided recall})}{P(\text{no unaided recall})} = -1.108 + 0.497 * \text{Brand awareness} + 0.327 * \text{Attitude} - 0.578 * \text{Side(left)} - 0.506 * \text{Size}$$

$$(4) \ln \frac{P(\text{aided recall})}{P(\text{no aided recall})} = -3.549 + 0.556 * \text{Brand awareness} + 0.300 * \text{Attitude} - 0.898 * \text{Side(left)} - 1.172 * \text{Appeal} + 0.769 * \text{Visibility}$$

As it can be noticed, better brand awareness and positive attitude toward the advertisements increase the probability of both unaided and aided advertising recall, implying the enormous effects of brand awareness and attitude toward the advertisement on outdoor advertising effectiveness. Moreover, the left road side of the advertising placement decreases the probability of both unaided and aided advertising recall. Nevertheless, latter result can be influenced by the experiment design – experiment was performed from the front right-seat passenger's position, thus it becomes the limitation of this research and the guide for future researches. The bigger the outdoor advertisement, the less likely it is that unaided brand recall would occur. The assumption is made that the bigger is the outdoor advertisement, the less likely it is to notice the brand, which in turn leads to lower unaided brand recall probability. However, the size of the outdoor advertisement does not influence aided recall, signifying that for well-known brands the size of the outdoor advertisements is less important, while for less-known brands the smaller size of outdoor advertisements should be chosen. Aiming at generating aided recall, rational outdoor advertising appeal should be preferred to emotional one. This signifies that consumers process information based on logical or/and utilitarian decisions. Finally, the placement enabling the best outdoor advertising visibility must be thought through in order to make advertising effective.

5. Discussion and conclusions

Outdoor advertising distinguishes from advertising in television or magazines, in a way that an amount of factors that distract (or can attract) consumers' attention is enormous in the case of outdoor advertising. Latter factors based on their nature can be classified as internal (or ad-related) and external (or condition-related) factors. Moreover, outdoor advertising effectiveness is influenced by respondent-related or personal factors as well.

The analysis and synthesis of scientific literature led to the determination of factors assigned to each of the mentioned category, which are theoretically important but still causing debates in the case of their influence on outdoor advertising effectiveness. Specifically, those factors representing the internal factors category are: advertising appeal and dominating elements in the advertisements; those factors representing the external factors category are: road side where advertisements are displayed, size of the advertisements, visibility of the advertisements, and repetition of the advertisements; those factors representing the personal factors category are: advertised brand awareness, attitude toward the advertisements, and involvement with the advertised brand. As outdoor advertising effectiveness can be assessed by the measure of recall level, it can be stated that if any of the mentioned factors influence advertised brand recall, that factor influence outdoor advertising effectiveness.

The analysis of the research results revealed that increasing brand awareness and the more positive attitude toward the advertisements increase the probability of both unaided and aided advertising recall. Consequently, this leads to the conclusion that brand awareness and attitude toward the advertisement have the enormous effects of on outdoor advertising effectiveness. Furthermore, the left road side of the advertising placement decreases the probability of both

unaided and aided advertising recall (contrarily, the right road side of the advertising placement increases the probability of both unaided and aided advertising recall). Bearing in mind the fact that experiment was performed from the front right-seat passenger's position, the conclusion is made that for the front right-seated passengers' the right-placed advertisements on the road have highest probability to be recalled. Nevertheless, such experiment design from the front right-seat passenger's position becomes the limitation of this research and the guide for future researches. The bigger the outdoor advertisement, the less likely it is that unaided brand recall would occur. The assumption is made that the bigger is the outdoor advertisement, the less likely it is to notice the brand, which in turn leads to lower unaided brand recall probability. However, the size of the outdoor advertisement does not influence aided recall, signifying that for well-known brands the size of the outdoor advertisements is less important, while for less-known brands the smaller size of outdoor advertisements should be chosen. Aiming at generating aided recall, rational outdoor advertising appeal should be preferred to emotional one. This signifies that consumers process information based on logical or/and utilitarian decisions. Finally, the placement enabling the best outdoor advertising visibility must be thought through in order to make advertising effective. By following the presented recommendations, organizations can create the highest probability for the outdoor advertising to become effective.

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