

# ATTITUDES TOWARDS GREEN ADVERTISING IN HUNGARY

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**Abstract** - Today, a significant number of academic studies analyze the changes in sustainable development and consumer attitudes that it brings along. Advertising research is still very popular nowadays, but few results have been published in the international literature on the attractiveness of green advertising, including Hungary. The present study aimed to assess the purchasing patterns and product preferences influenced by green advertising strategies, highlighting aspects of trend following and environmentally friendly product attributes. In our primary research, Out of 22 statements, four factors, and based on them five clusters were developed, which clearly distinguish groups with different attitudes from each other.

**Keywords** – green advertising; sustainable development; attitude; LOHAS; factor analysis

## 1. INTRODUCTION

Global issues in our environment such as climate change, have brought to the surface the need to seek solutions. The modernization of the 20th century has played a major role in shaping the concept of environmental challenges, as innovation in science and technology has brought along with the depletion of natural resources (Fleischer, 2014). The idea of sustainability was introduced in the Brundtland Commission's 1987 report "Our Common Future," which painted a picture of economic growth that incorporated social and environmental considerations. These three factors – economic, social, and ecological – are a complex set of factors that define the tasks of sustainability and are therefore subject to a variety of interpretations by ecologists, economists, and politicians (Szűcs – Pónusz, 2020). The different ways in which they are understood and applied make it extremely difficult to align the objectives of these criteria since it is through trade-offs and compromises that the ultimate common goal can be achieved. The paradox between the interests of the parties is easily illustrated by the example of marketing. According to Kotler, the main objective of marketing is to satisfy consumer needs profitably, and the focus is therefore on profitability. In addition, environmentally conscious marketing takes into account environmental protection, i.e. the production of goods with the lowest possible ecological impact at the lowest possible cost. This is where the social pillar of sustainability is concerned, as the definition above does not address issues such as labor exploitation or corruption (Nagy, 2009). This gap is filled by the societal marketing concept, which seeks to align business objectives with social objectives, i.e. to define and meet the needs and wants of target markets in a way that takes into account the well-being of consumers and society now and in the future. In this case, social responsibility also plays a role, which is important because one of the most crucial conditions of businesses is the community itself (Solomon – Takoradi, 2012).

### 1.1. Literature review

#### 1.1.1. Sustainable consumption habits

The continuing spread of sustainability and the growing sensitivity of the population to environmental issues are becoming increasingly linked every day. Along with this sensitivity, consumers have also become more aware of environmental information (Jelena et al., 2021); therefore, it has become increasingly important to them to change their previous habits and to buy environmentally friendly alternatives instead of conventional products (Hazaea et al., 2022). Values seem to be changing, but it is questionable whether this change is reflected in everyday actions of consumers. Several studies have shown that survey respondents have the willingness to buy sustainable products, but only one-fifth of them reach the checkout and buy products that support environmental protection (Darnall et al., 2018).

There are several possible explanations for the difference between willingness and action. One of these is the “dual identity” of customers, i.e. people value products as both consumers and citizens when making purchases. Hence, when individuals are shopping, they may evaluate the environmental and other moral benefits of a consumer product as a citizen, while as a consumer they might consider other product attributes, such as price (Kees et al., 2017). This contradictory situation can ultimately lead to the decision to leave a product in the shop. The lower impact of environmental attributes in the decision-making process is influenced by many different factors, such as brand strength, culture, demographics, habits, lack of information, lifestyle, personality, and ethical factors (William et al., 2019).

#### *1.1.2. The LOHAS segment*

As mentioned earlier, lifestyle also plays a crucial role in whether consumers choose green products when shopping. The literature refers to health and environmentally conscious consumers as LOHAS (Lifestyle of Health and Sustainability) segment, and their appearance is due to the development and interaction of several megatrends (Töröcsik, 2007). The main values that define the attitudes of this segment, according to research by the Natural Marketing Institute, are environmental awareness, social commitment, and the expectation of socially responsible business. LOHAS consumers embrace novelty, are less price-sensitive, are typically brand loyal, and value sophistication and aesthetics. While they do not reject hedonism, they seek sustainable solutions and are highly profitable to build on from an economic point of view, as they usually can be seen as opinion leaders, therefore, they can influence the purchasing decisions of others in their environment (Lehota et al., 2013). The group takes into account all three pillars of sustainability (social, economic, ecological), but the values associated with them are often contradictory (e.g. naturalness and innovation), and can therefore be considered a hybrid lifestyle (Kiss et al., 2016). Some experts have questioned whether this group is the main representative of sustainable consumption due to their hedonic values, and they suggest another but significantly smaller segment (i.e. voluntary simplifiers) being the segment most committed to sustainability (Balsa-Budai – Szakály, 2018). Nevertheless, it is worth studying the LOHAS segment due to its size, and because it is likely to represent the part of the population most easily reached and motivated to act by green advertising (Sözer et al., 2024).

#### *1.1.3. Green advertising nowadays*

The concept of green marketing was first introduced in the 1970s but did not receive much attention until the 1980s when consumers began to adopt green considerations in their purchasing decisions. In the last 20 years, the concept of environmentally conscious marketing has evolved into green marketing and then sustainable marketing (Sander et al., 2021). These concepts are now often used synonymously, as there is no specific, distinguishable definition of their meaning. Overall, based on previous definitions, green advertising addresses consumers' needs and wants in environmental terms and is part of companies' overall ecological marketing strategy to provide them with a sustainable competitive advantage (Kao

– Du, 2020). Although green advertising aims to encourage green purchasing behavior, consumers do not usually buy immediately as a result of the advertisement and there are two ways in which advertising can be interpreted. In the positive approach, the individual is aiming to achieve the desired goal (e.g. to consume more green products), while the negative approach is to avoid an undesirable consequence (e.g. to pollute less). It is therefore worth being prepared for both scenarios and understanding how consumers respond to these advertisements (Sun et al., 2020). In addition, it is worth considering that in many cases individuals may perceive the problem as distant in time or location (e.g. in the case of a climate disaster), and may not feel the problem as serious as it is, therefore the message may not lead to the desired behavior (McDonald et al., 2015). Furthermore, consumer perceptions of advertising may also be affected by antipathy: previous research has found that the public perceives active environmental organizations as the most trustworthy source of ecological communication, while green advertising by large companies is the least credible (Iyer – Banerjee, 1993). The structure of green advertising has several common features. In terms of terminology, the keywords “eco-friendly,” “green,” “natural,” “organic,” “recycled,” and “sustainable” are commonly used, as they are the most likely to be associated with environmentalism by consumers (Castro – Drews, 2023). Similar associations are also found in the visual field, with green landscapes, small children, young people, and images of nature being the most frequently used elements (Nagy, 2010). Advertising appeal can also be grouped into two types: the abstract appeal refers to product characteristics in the abstract, while the concrete appeal describes the green products in the advertisement in detail. The benefits of green consumption can also be communicated to society and the consumer (Yang et al., 2019).

#### *1.1.4. Green advertising research*

Despite the importance of promoting and communicating sustainability to consumers, a limited amount of research has been conducted to analyse influencing factors and results of green advertising. The practical analysis of traditional advertising has been more common, and the specific issue of sustainability has not been studied by many researchers before. Since the research aimed to determine attitudes toward green advertising, we were using a set of 23 statements based on the work of Kim and Cha (2021). The researchers’ purpose was to investigate the relationship between attributes of green advertising and purchase intention considering consumer innovativeness. For this reason, they conducted a survey with 200 participants in South Korea. The researchers distinguished five factors based on the 23 statements, which are as follows: reliability, attractiveness, informativity, consumer innovativeness, and purchase intention. Their conclusions included that the first three components have a positive effect on purchase intention, while consumer innovativeness had a moderating effect on it. By examining the above-mentioned set of statements, the main objective of our research was to identify and isolate the groups associated with each attribute in Hungary in order to identify the target group for whom a green marketing communication strategy could be beneficial.

## **2. METHODS**

The earlier mentioned set of 23 statements based on the work of Kim and Cha (2021), was used in our research, from which we could keep 22 statements for further examination (factor and cluster analysis). The set of statements was part of an online questionnaire survey in summer of 2024 that included questions on demography and general advertising attitudes. The questionnaire was answered by 306 respondents in Hungary using convenience sampling, where 20.3% of the respondents were male and 79.4% were female. The distribution of respondents by age group was the following: under 25 years old accounted for 40%, 25–34 years old for 27%, 35–44 years old for 9%, 45–55 years old for 15%, and 54 years old and over

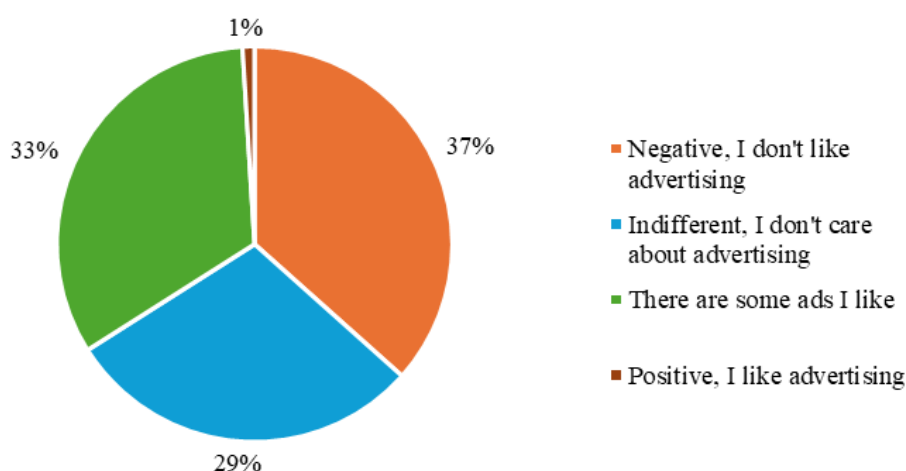
for 9%. In terms of education, the proportion of respondents with primary education is very low (2%), 34% have intermediate education, and 64% have higher education. In terms of income, 5.5% did not wish to answer, 3% live in poor financial circumstances, 21% are just managing to live on their income, 58% live well, and 18% report excellent financial circumstances. Due to convenience sampling and over-represented demographic characteristics, the survey is not representative, but it provides a good representation of the differences in attitudes toward green advertising between these groups.

### 3. RESULTS

#### 3.1. General attitudes towards advertising

The questionnaire's first set of questions focused on general attitudes towards traditional advertising. The respondents' advertising viewing habits were as follows: 41.2% of respondents always switch off or ignore advertising immediately, 56.5% occasionally view advertising but mostly skip it, while 2.3% stated that they usually watch the advertising block and sometimes click on Internet ads.

The attitudes of respondents towards advertising are shown in *Figure 1*.



**Figure 1: Respondents' attitudes towards advertising (N=306)**

Source: Authors' own editing, 2025

The figure shows that the majority of respondents (37%) dislike advertising, but there are also high proportions (29% and 33%) who are indifferent to advertising and who do like some of it, respectively.

Next, respondents were asked to rate on a Likert scale of 1 to 5 (where 1 = I don't agree at all and 5 = I totally agree) how much they consider certain attributes to be characteristic of advertising. The results are presented in *Table 2*.

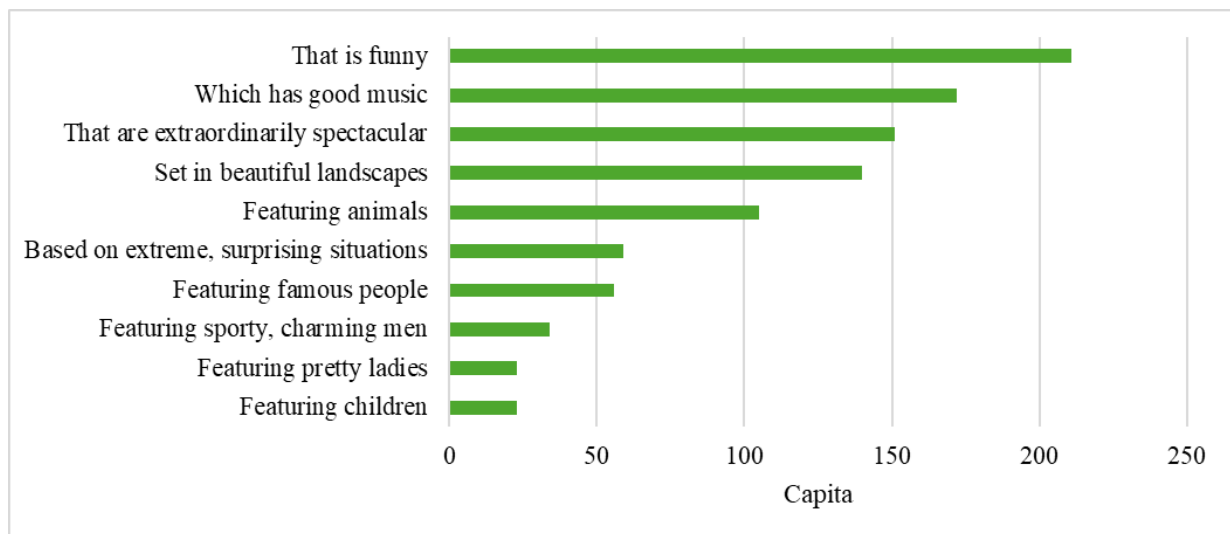
| How much do you find advertising... | Average | Standard deviation | Mode |
|-------------------------------------|---------|--------------------|------|
| ... credible?                       | 2,08    | 0,934              | 2    |
| ...fun?                             | 2,36    | 1,051              | 3    |
| ...useful?                          | 2,7     | 1,083              | 3    |
| ...harmful?                         | 3,31    | 1,19               | 3    |
| ...annoying?                        | 3,9     | 1,073              | 5    |

**Table 2: Evaluation of certain characteristics of advertising according to the respondents (N=306)**

Source: Authors' own editing, 2025

The results show that respondents mostly find advertising annoying, which explains the negative attitudes seen in *Figure 1*. Cross-table analyses revealed that respondents between 45–54 years of age were the only group who most frequently (40%) marked a 3 on the Likert scale, while the other age groups found advertising completely annoying ( $p < 0,01$ ). Participants were least likely to describe ads as “credible.”

*Figure 2* illustrates the advertising elements that respondents find most interesting when viewing an advertisement. As the figure shows, funny, musical, and spectacular advertisements are the most popular with respondents, while sporty men, pretty ladies, and children are the least attractive.



**Figure 2: Most interesting advertising elements according to respondents (N=306)**

Source: Authors' own editing, 2025

The subconscious influence of advertising was acknowledged by almost all respondents: 83% thought that advertising influences our subconscious, 13% chose the “maybe” option, and 4% thought that advertising had no such influence.

Lastly, respondents were asked if they had ever looked for further information about a product/service after being exposed to an advertisement online. 9.2% of the respondents avoided clicking through to an advertisement on purpose, 14.4% had not looked for such opportunities, 12.1% had clicked through once, 50.7% said they had looked for further information few times, while 13.7% said they had looked for additional information several times.

### 3.2. Attitudes towards green advertising

Prior to the presentation of a set of statements on green advertising, respondents were asked to answer the question of whether they were familiar with the concept of green advertising. 31.7% of the respondents had never heard of the term, 19% had heard of it but did not know the exact meaning, 37.9% were more or less familiar with the concept, while 11.4% said they were fully aware of its meaning. In the next question, we introduced the concept of green advertising to clarify the definition, and asked respondents how well this explanation matched what they had in mind. 17% had never heard of the term, 2.3% thought it was completely different, 35.9% thought it was a similar term and 44.8% fully matched the term we showed.

Kim and Chan's (2019) statement set contained a total of 23 statements, of which 22 were maintained in principal component analysis in order to reliably separate the factors from each other. The results were significant and met the criteria for factor analysis, as confirmed by the KMO value and Bartlett's test. The results are illustrated in *Table 3*.

| <b>Statements</b>                                                                   | <b>Green<br/>advertising<br/>appeal</b> | <b>Green<br/>advertising<br/>informative-<br/>ness</b> | <b>Trendy<br/>product<br/>liking</b> | <b>Green<br/>product<br/>liking</b> |
|-------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------|--------------------------------------|-------------------------------------|
| <b>I think green advertising is attractive.</b>                                     | 0,822                                   |                                                        |                                      |                                     |
| <b>Green advertisements catch my attention.</b>                                     | 0,760                                   |                                                        |                                      |                                     |
| <b>I think green advertising is interesting.</b>                                    | 0,720                                   |                                                        |                                      |                                     |
| <b>I like green advertisements.</b>                                                 | 0,717                                   |                                                        |                                      |                                     |
| <b>I think green advertising is novel.</b>                                          | 0,688                                   |                                                        |                                      |                                     |
| <b>I think green advertising is easy to understand.</b>                             | 0,561                                   |                                                        |                                      |                                     |
| <b>I trust the information on green advertising.</b>                                |                                         | 0,831                                                  |                                      |                                     |
| <b>I think green advertising is sincere.</b>                                        |                                         | 0,828                                                  |                                      |                                     |
| <b>I think green advertising is generally reliable.</b>                             |                                         | 0,808                                                  |                                      |                                     |
| <b>I think green advertising expresses the true nature of the product.</b>          |                                         | 0,793                                                  |                                      |                                     |
| <b>I think green advertisements give me the information I need.</b>                 |                                         | 0,550                                                  |                                      |                                     |
| <b>I tend to buy the latest trendy products.</b>                                    |                                         |                                                        | 0,869                                |                                     |
| <b>I often go to the store to see if a new product is out.</b>                      |                                         |                                                        | 0,850                                |                                     |
| <b>I tend to buy new products before others.</b>                                    |                                         |                                                        | 0,799                                |                                     |
| <b>I tend to watch with interest how other people use new products.</b>             |                                         |                                                        | 0,650                                |                                     |
| <b>I tend to pursue new trends more than others.</b>                                |                                         |                                                        | 0,600                                |                                     |
| <b>I will definitely buy the product shown in the green advertisement.</b>          |                                         |                                                        | 0,519                                |                                     |
| <b>I use eco-friendly products to help the environment.</b>                         |                                         |                                                        |                                      | 0,787                               |
| <b>I am willing to recommend eco-friendly products to others.</b>                   |                                         |                                                        |                                      | 0,771                               |
| <b>I am likely to purchase products shown in green advertisements.</b>              |                                         |                                                        |                                      | 0,728                               |
| <b>Using eco-friendly products relieves the guilt of environmental destruction.</b> |                                         |                                                        |                                      | 0,709                               |

|                                                                                                 |  |  |  |       |
|-------------------------------------------------------------------------------------------------|--|--|--|-------|
| <b>I can make a substantial contribution to the environment by using eco-friendly products.</b> |  |  |  | 0,538 |
|-------------------------------------------------------------------------------------------------|--|--|--|-------|

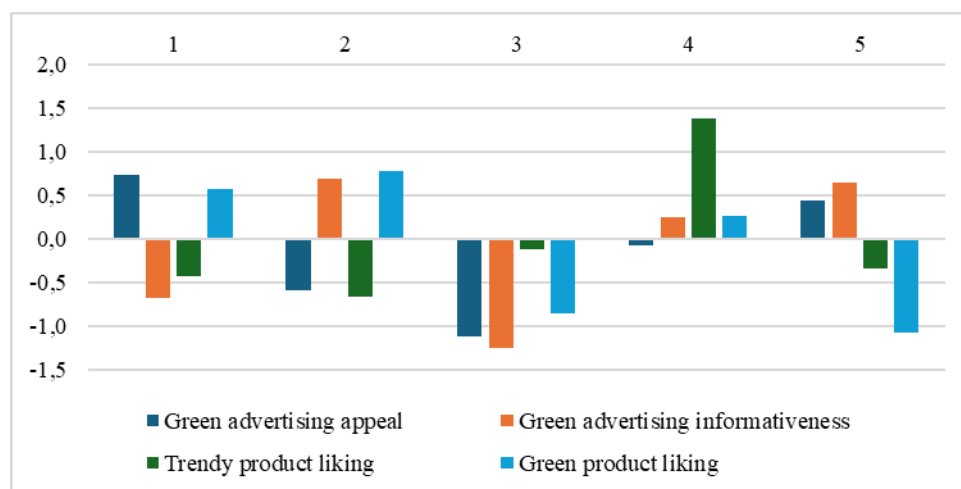
**Table 3: Green advertising attitude factors (N=306)**

Source: Authors' own editing, 2025.

Notes: Method: principal component analysis with Varimax Kaiser Normalization. KMO value = 0.933. Bartlett's test ( $\chi^2=5016.8$ ,  $df=231$ ,  $sig.<0.01$ ). Explained variance = 69%, Communalities: 0.519-0.869.

### 3.2. Clusters formed based on the green advertising attitude factors

A total of five clusters were identified based on the four green advertising attitude factors, as illustrated in *Figure 3*, with the aim of finding segments that could serve as a target market for green advertising and promoting sustainability.



**Figure 3: Clusters based on green advertising attitude factors (N=306)**

Source: Authors' own editing, 2025

The first cluster, “Subjective environmentalists,” accounted for 23.9% of the sample. They were characterized by values related to the factors “Green advertising appeal” and “Green product liking.” This group likes green advertising and finds it attractive and is likely to buy green products as a result. A very similar group to the previous one is “Objective environmentalists,” who account for 18.6% of the sample. This cluster is characterized by values for the factors “Green advertising informativeness” and “Green product liking.” Presumably, they are the ones who are attracted by the objective benefits of green products in advertisements and therefore buy and recommend them. The third cluster is made up of “Rejecters,” who represent 13.1% of the sample. They do not tend to agree with the values of any of the factors, rejecting both the characteristics associated with green advertising and products, and those associated with trend-following and trendy products. The fourth cluster is formed by the “Trend-following neutrals,” who account for 22.9% of the sample. They slightly agree with the set of values associated with the factors “Green advertising informativeness” and “Green product liking,” but most strongly agree with the statements associated with the factor “Trendy products liking.” They are likely to be the ones who are open to sustainable products because of their novelty value but tend to buy new, trendy products. The last cluster is the “Advertisement Lovers” group, which represents 21.6% of the total sample. Members of this cluster only perceive values related to the factors “Green advertising appeal” and “Green advertising informativeness.” Their members are probably open to green advertising, but this is not reflected in their purchasing

behavior. Clusters were not suitable to be further described according to demographic background variables in cross-tabulation analyses.

#### 4. DISCUSSION AND CONCLUSIONS

Although there is little literature on the empirical study of sustainable advertising, using Kim and Cha's (2021) propositional framework, the values associated with green advertising and consumer innovativeness have been differentiated in Hungary. Compared with the results from South Korea, it can be seen that in our case fewer factors, four, were separated. This difference is due to the fusion of the reliability and informativeness factors, which is a logical change considering that transparent information is the basis of trust for consumers.

The results show that negative attitudes towards traditional advertising remain high, but there is a significant level of openness to certain types of advertising. Green advertising is perceived as more reliable than traditional advertising and therefore may have a greater influence on consumer behavior.

Principal component analysis and cluster analysis have firmly separated the values associated with green advertising and the clusters along these values. Although the research is not representative, these values and segments may be detected in the broader population, and the research may allow easier selection of the right target group and the development of an appropriate marketing communication strategy for them. In terms of clusters, it is advisable to focus on and target the group of "Subjective environmentalists" and "Objective environmentalists," as members of these clusters are the ones who have expressed liking of, and willingness to buy and recommend green products. However, further and extensive research on the subject is definitely recommended in order to explore the field of green advertising in depth.

#### ACKNOWLEDGEMENTS

SUPPORTED BY THE EKÖP-24-2 UNIVERSITY RESEARCH SCHOLARSHIP PROGRAM OF THE MINISTRY FOR CULTURE AND INNOVATION FROM THE SOURCE OF THE NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION FUND.

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