THE EFFECTS OF GREEN ADS ON CUSTOMERS’ PURCHASE DECISION: THE MODERATING ROLE OF GENERATIONS

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ABSTRACT
The rapid increase in environmental problems that threaten the ecological balance, global problems that threaten people's quality of life and the search for solutions have increased the importance of concepts such as social responsibility, green marketing and green advertising. Businesses have started to take this sensitivity into account in their products and advertisements to create competition and difference. In this study, the effect of green advertisements on the consumer purchasing decision process and the moderator role played by generations on this effect were investigated. Results attained in this research indicate that generations play a moderator role in the effect of green advertisements on purchasing decisions. Besides, the moderator role of generations is decreasing from generation X to generation Y and Z.

Keywords: Green Advertisements, Purchase Decision, Green Marketing, Generations

ÖZET
Ekolojik dengeyi tehdit etmeye alan çevreveler sorunların hızla artması, insanların yaşam kalitesini tehdit eden küresel sorunlar ve bunlara çözüm arayışı sosyal sorumluluk, yeşil pazarlama ve yeşil reklam gibi kavramların önemi artmıştır. İşletmeler reklaket ve farklılık oluşturmak için ürünlerinde ve reklamlarında bu hassasiyeti dikkate almaya başlamışlardır. Çalışmada yeşil reklamların tüketici satın alma sürecine etkisi ve bu etki üzerinde kuşakların oynadığı düzenleyici rol araştırılmıştır. Kuşakların etkisinde X kuşağından Y ve Z kuşağına doğru kuşakların düzenleyici rolü azalmaktadır.

Anahtar Kelimeler: Yeşil Reklamlar, Satın Alma, Yeşil Pazarlama, Kuşaklar

1. INTRODUCTION
In the world we live in, the fact that environmental problems are becoming more common day by day effects the policies of businesses as well as consumer behavior. By the increase in understanding on environmental issues and influences, businesses have embarked upon to unveil more social responsibility behaviors. On the other hand, a great majority of consumers express their concerns about the environmental effects of their consumption behaviors and exhibit environmentally- conscious tendencies. As a result of these changes, the importance of marketing activities developed to encourage and maintain consumers' environmental-friendly attitudes and behaviors has augmented profoundly.

Recently, besides the production of environmentally friendly products, eco-labeling, encouraging the use of recyclable packaging, environmental communication activities are also emphasized. In particular, green advertising activities have become more preferred to promote green products and create environmental awareness. In many academic studies, how green advertising affects consumer behavior has been discussed and it has been observed that businesses that want to gain competitive advantage in the market also focus on environmental advertising activities (Conolly and Prothero, 2003; Banerjee et.al., 1995; Carlson et.al., 1993).
In many stages of individual and social life, generations have different behaviors and tendencies. The experiences, generation history, lifestyles, values and demographic characteristics of each generation are unique (Williams and Page, 2011). Historical events and especially technological changes have caused X, Y and Z generations consumers to show different consumption behaviors. For example, it is observed that members of z generation change their preferred brands very quickly and frequently. In addition, they instantly share their positive or negative opinions and experiences about the products they use on social media platforms (Altun and Karataş, 2021). In this context, examining the purchasing motivations of generations is important for marketing activities (Kayabaş, Taşkın, & Kayık, 2016). In this respect, we think that it is important to consider the dynamics of the periodic processes in which individuals are involved while analyzing their purchasing behaviors.

The aim of this study is to analyze the moderator roles of generations in the effect of green advertising on purchase intention. As a result of the researches, it has been seen that there are a limited number of studies that analyze the regulatory roles of generations in the effect of green advertisements on purchase intention. In this direction, our study is based on whether generations have a regulatory role. It is thought that the study will both contribute to the studies on green marketing activities and will also provide useful information to practitioners who want to be successful in green advertising activities.

2. CONCEPTUAL FRAMEWORK

2.1. Green Advertisements

The adversarial effects of environmental problems have brought about public concern all over the world. Advertising is one of the most widely used mechanisms to deliver a green message to consumers. Especially since the 1960s, the use of green messages in advertising has increased significantly (Easterling et all., 1996) inasmuch as scholars underline that environmental deprivation could deteriorate as long as ungreen consumption growth lasts (Gao, Wang, Li, & Li, 2017). In theory, green advertising is defined as advertising that suggests a positive relationship between a product and the environment, promotes a green lifestyle, and presents a positive corporate environmental image (Banerjee et al., 1995). In other definition, Zinkhan and Carlson (1995) defined green advertising as calls that try to meet the needs and desires of consumers regarding environmental concerns and health issues. Green advertising is of great importance as it helps differentiate a business from its competitors and is a motivating factor for consumers to create favorite perceptions about green products (Ghosh, 2011).

Green advertising activities focus on campaign activities that highlight environmental issues in order to strengthen the image of businesses as environmentally friendly companies (Herman et all., 2021). Although many green ads decently assert a company’s environmental consciousness, some companies use green advertising as a tool to overvalue or even mislead the environmental friendliness of their presents (de Freitas Netto et al., 2020). These effect consumer’s perception regarding the environmental consciousness negatively. Nevertheless, companies should be able to realize consumer behavior to adapt to the environmental approach. Because the message carried by marketers to consumers, must transmits to environmental concerns, and should be able to provide satisfying, convincing, believable, favorable, and good messages from the product or service advertised (D’Souza & Taghian 2005).

2.2. Purchase Decision

A purchase decision is a process in which consumers evaluate various alternative products and then select a needed product based on certain considerations. Purchase decisions are an important part of consumer behavior (Rachmawati and Suroso, 2020). The buying action of consumers is a forward-moving process. It begins before the actual purchase and ends after the purchase is made (Comegys et all., 2006). Marketers use the five-stage model of consumer purchasing decision to better understand consumers’ actions (Kotler and Keller, 2005). The five-stage consumer purchase decision model begins with need recognition, then ends with information search, evaluation of alternatives, purchase decision, and finally purchase decision (Comegys et all., 2006). The purchase decision refers to the act of choosing between two or more action plans. However, it should not be forgotten that there is not always the right decision among the available options. The purchasing decision will depend on many factors, and after all these factors affect the consumer’s mind, the consumer will decide whether to buy or not (Cordova et all., 2020).

Consumers value green products and brands that are reliable, affordable, healthy and beneficial to the environment. Expressing these values through green advertisements enables consumers to adopt an environmentalist approach in their purchasing tendencies (Richards, 2013). The way consumers react to green
advertising, and especially the attractiveness of these advertisements, are important determinants of consumers' intention to purchase green products. In addition, green advertising has a dominant role in the perception of green products (Picket-Baker and Ozaki, 2008).

Consumers' purchasing behavior is affected by variables such as audience attitudes, brand image, media, green education, reference group effect and perceived effectiveness of environmental behavior, which are the dimensions of green advertising (Khandelwal and Bajpai, 2011). In some studies conducted in the context of green branding, it has been observed that the communication of functional environmentally friendly brand attributes and related benefits to consumers through advertisements positively affects consumers' purchasing intentions (Hartmann and Apaolaza-Ibanez, 2012; Schmuck et al., 2017).

In the study, which examined the effect of green advertising, which is one of the green marketing activities, and environmental awareness on the decision to purchase green products, it was seen that there is a significant and positive relationship between green advertising and environmental awareness and purchasing behavior. In addition, it was concluded in the study that green advertisements are more effective on green product purchasing behavior than environmental awareness (Aydoğan and Dinar, 2019).

2.3. Generation X, Y, and Z

Generation X is the generation of individuals born from 1965 to 1980 and showing similar demographic characteristics (Kotler and Keller, 2005). They are the first generation to think globally under the influence of events happening around the world. Compared to previous generations, they are more confident and capable because they have grown up with less parental attention. Generation X, who learn to tolerate differences due to the changing world and gain more creativity as they grow up in more limited environments than the next generations, consists of people who can analyze the situations they encounter and find solutions easily (Berkup, 2017). Since they face some financial constraints in their lives, the purchasing behavior of consumers in this group is based on more sound decisions (Veiga-Neto et al., 2020).

Generation Y is defined as individuals born from 1980 to 1999 with nervous, city-oriented and idealistic features (Cummings-White and Diala, 2013). Millennials grew up in a fast-paced and technology-dominated society. In addition, they have characteristics that give importance to civic virtues, community values, cooperation and optimism (Martin and Ottemann, 2015).

Generation Z, born in the mid-1990s and late 2000s, is the generation of full technological users called “instantly online” (Levickaite, 2010). The most distinctive features of the generation Z are trust, freedom, individuality, technology addiction and speed. Generation Z, born and raised in the heart of technology, generally liberal, selective and entrepreneurial; In business life, it is the generation that has a weak organizational commitment, has an unlimited career understanding, likes to work independently in a place where mobility, flexibility, hierarchy is low and work-life balance is observed and prefers to boast about their work (Kaçar, 2019, p. 17). There are great differences in the use of technology between this generation and their parents from generation X. Generation Z, which tries to understand and grow in the rapidly changing world, is the generation of the future. However, the evaluations about the generation Z cannot go beyond assumptions because they are young, their personalities are immature, and it is not known what events will affect them in the coming years (Berkup, 2017).

3. THEORETICAL BACKGROUND AND HYPOTHESES

The concept of generation started to come to the forefront with the book titled “Generations: the History of America's Future” published by theoretical Strauss and Howe (1991), and this theory was named as “Strauss-Howe Generation Theory” by some researchers. According to the theory, it is claimed that individuals born and raised in certain periods and in the same age group display similar behavioral characteristics and these behavioral characteristics may change with each new generation (Moss, 2010).

According to this theory, many important historical events and social changes (such as enormous changes in resource distribution as a result of wars and economic depressions) in every society can affect the value judgments, attitudes, behaviors and tendencies of individuals belonging to that society. The shaping of individuals is completed not after the events, but during the years in which the events occurred. Thus, people born at a certain time and in the same age group may share a typical set of similar tendencies and cognitive behaviors. Moreover, it is assumed that these effects may persist over time (Moss, 2010). The theory suggests that individuals in the same generation exhibit similar behaviors and that behaviors may change as generations
change. Based on this theory, this study aims to reveal whether the effect of green advertisements on consumers' purchasing behavior changes according to generational difference.

It is important to reveal the relationship between green advertising and the consumption behaviors of individuals for generations, both in terms of contributing to the marketing discipline and showing a method to the practitioners. In this context, the research focused on how and in what way green advertisements affect the habits of Z generation consumers to use and prefer environmentally friendly products. As a result of a research, it has been seen that Z generation consumers attach importance to green practices in their purchasing behavior and are conscious about not purchasing products that harm the environment (Kartal and Tatlı, 2020). In another study dealing with the pro-environmental behavior of generation Z consumers, it was observed that the representatives of the Z generation were less inclined to pro-environmental behaviors than the people in the X and Y generation groups in the older age group (Parzonko et al., 2021).

Bautista (2019) discussed the environmentalist approaches of consumers that affect their green product purchasing behavior from the perspective of the differences between the X and Y generations. At the generation level, it was concluded that the X generation had higher average scores than the Y generation in terms of green values. Herman et al. (2020) also investigated the effect of green advertising mediated by green attitude awareness on green purchasing intentions in younger generations. The results of the research confirmed that green advertisements and awareness about green consumption affect the purchasing decisions of university students.

Nadanyiova et al. (2020) tried to analyze the differences between generations of Slovak consumers in the green marketing-oriented communication activities of socially responsible brands. In the study, the benefits of communication efforts of socially responsible brands focusing on consumer generations such as gaining competitive advantage, increasing brand value and developing brand loyalty are emphasized. In addition, it has been pointed out that the consumer groups in the Y and Z generations are sensitive to social responsibility efforts and environmentalist purchasing behaviors.

In a study conducted in China to investigate how green advertising affects consumers' intention to purchase green products, it was seen that the reliability of the claim in green advertising and consumer attitude towards green advertising significantly affect consumers' intention to purchase green products (Zhu, 2012). In their study where Veiga-Neto et al. (2020) analyzed the environmental trends of generations in Brazil, they concluded that millennial consumers have the highest average for environmental positivity and have concerns about environmental problems. By both theory and literature review, the model of the research were drawn as seen in Figure 1 and hypotheses are as follows:

![Figure 1: The model of the Research](image)

While the effect of green advertisements on the purchasing decision was carried out by regression analysis, process analysis was used to determine the regulatory effect of generations.

Hypotheses:

H$_1$: Green Ads effect customers' purchase decision

H$_2$: Generations have moderation effects on the relation of green ads and customer purchase decision

H$_{2a}$: Generation X has a moderating role on the relation of green ads and customer purchase decision

H$_{2b}$: Generation Y has a moderating role on the relation of green ads and customer purchase decision

H$_{2c}$: Generation Z has a moderating role on the relation of green ads and customer purchase decision

4. METHODOLOGY

The population of the research consists of consumers from each age ranges in line with generations. The study sample consists of 939 consumers who reside in eastern and southeastern Anatolia region. In the research, the
survey technique, one of the quantitative research methods, was chosen as the data collection method. The questionnaire form was applied by online form between March and June, 2021. The convenience sampling method was used in the choice of the people to contribute to the study.

As seen in Table 1, approximately 62% of the participants are female, and 38% are male. When age ranges of participants are scoped, about 35% of the participants are at the age of 21 and below, and at the age between 41-59. Group that is at the age of between 22-40 is 30%. Approximately 58% of participants have bachelors, master, and doctorate degree and 78% of them are single. As working status are viewed, participants who say yes account for 36% and 23% of participants aren’t working. When income statements are clarified, participants having love income comprise 51% and average income is viewed as 44%. The level of high income is low as %5.

4.1. Findings and Results

In this section the Process macro created by Hayes (2013) was loaded into the SPSS program (www.processmacro.org) to test the hypothesis in line with revealing the relationship between green advertisement and purchase decision and suggesting that generations have a moderator role. Hayes has developed macro (template models) software for 92 different models that help calculate moderation and mediation effects (Hayes, 2018).

In line with the main hypotheses of the research, conceptual relations were examined within the framework of the data obtained. In order to reveal the effect in the research, regression analysis was performed first, and the results of the analysis are presented in Table 3.
Table 3: Linear Regression Analysis for the Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA » PD</td>
<td>362.1</td>
<td>.528</td>
<td>.279</td>
<td>.528</td>
<td>19.03</td>
<td>.000*</td>
</tr>
</tbody>
</table>

Regression analysis was used to test H₁. As seen in Table X, there is a significant and positive cause-effect relationship (β=0.52) between green advertisements and purchase decision. With this result, H₁ was accepted.

The moderator effect of generation and differences in H₂ and sub-hypotheses in the research model proposal between green advertisements and purchasing decisions is examined. Process Macro statistical program developed by Hayes (2013) was used for analysis. Model 1 was selected in the Process Macro statistical program for moderator effect measurement. In moderator effect measurement, X(GA) represents the independent variable, Y(PD) represents the dependent variable and W(GN, XGN, YGN, ZGN) represents the moderator variable for each generation.

Table 4: Moderating Effect of Generation

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Interactions</th>
<th>β</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>r²</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂= GA » GN » PD</td>
<td>GA » PD</td>
<td>.549</td>
<td>.0275</td>
<td>19.25</td>
<td>.00</td>
<td>.4754</td>
<td>.5834</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GN » PD</td>
<td>.327</td>
<td>.0274</td>
<td>4.55</td>
<td>.00</td>
<td>.1785</td>
<td>.0710</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GN » GA</td>
<td>.295</td>
<td>.0277</td>
<td>3.14</td>
<td>.017</td>
<td>.0328</td>
<td>.1414</td>
<td></td>
</tr>
</tbody>
</table>

In testing the hypotheses, the moderating effect values were examined. When the H₂ hypothesis is examined, it is included in the analysis as independent variable (Xgreen advertisement), moderator variable (Wpurchase decision) and independent variable (Ygenerations). When the moderating effect results were examined, it was found that the moderator variable (Wpurchase decision) was in low and high confidence intervals (LLCI=-.0328 ULCI=.01414) and had a moderating effect between independent and dependent variables (β=.295; p=.017). Accordingly, the H₂ hypothesis was accepted.

Table 5: Moderating Effect of each Generation

<table>
<thead>
<tr>
<th>Sub-hypotheses</th>
<th>Generations</th>
<th>β</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂a= GA » ZGN » PD</td>
<td>Z(1)</td>
<td>.426</td>
<td>.040</td>
<td>10.47</td>
<td>.00</td>
<td>.3462</td>
<td>.5059</td>
</tr>
<tr>
<td>H₂b= GA » YGN » PD</td>
<td>Y(2)</td>
<td>.529</td>
<td>.027</td>
<td>19.25</td>
<td>.00</td>
<td>.4759</td>
<td>.5840</td>
</tr>
<tr>
<td>H₂c= GA » XGN » PD</td>
<td>X(3)</td>
<td>.633</td>
<td>.045</td>
<td>14.03</td>
<td>.00</td>
<td>.5452</td>
<td>.7225</td>
</tr>
</tbody>
</table>

According to the process analysis carried out in order to determine whether each generation has a moderation role in the effect of green advertisements on the purchasing decision, it is seen that the effect of green advertisements on the purchasing decision of consumers increases as the generation X approaches (βx=.633). This effect decreases as the Z generation approaches (βy=.529; βz=.426). As a result, it is seen that generational differences have a moderating effect in all three cases. In order to determine the moderating effect, it is taken into account that the low (BootLLCI) and high (BootULCI) confidence intervals are not 0 (Hayes, 2013). In this case, with the result that the moderator variable (WgenerationX,Y,Z) is in low and high confidence intervals (LLCIx=.5452 ULCIx=.7225; LLCIy=.4759 ULCIy=.5840; LLCIz=.3462 ULCIz=.5059) sub-hypotheses (H₂a, H₂b, H₂c) were accepted.
Graph 1 was drawn with the results obtained and the data from the Process Macro Model 1 output file. As can be seen from the graph, when the level is 1 standard deviation below (-1 std. deviation) (generation Z); It is understood that the effect of green advertisement on the purchase decision is lower (β= .42). In case of average level (0 zero) (generation Y); It is understood that the effect of green advertisement on the purchase decision is gradually increasing (β= .52). When the level is 1 standard deviation above (+1 std. deviation) (generation X); It is understood that the effect of green advertisement on the purchase decision is at the highest level (β= .63). With this result, it is seen that the moderation role increases as the generation moves away (from Z to X) in the relationship between the green advertisement and the purchase decision.

5. CONCLUSION AND RECOMMENDATION

As with any type of advertising, an important determinant of the success of green advertising is consumers’ purchase decision towards green advertising and following behavior regarding the environmental issues. Furthermore, one of the most important results obtained in this research is that generations play a moderator role in the effect of green advertisements on purchasing decisions. Moreover, the moderator role is decreasing from generation X to generation Y and Z.

Considering the recall rate of the advertisements of the 1970s, while the generation x may remember some, today this rate covers a very low rate for generation y and especially z. Social values have a very important place in social life. Although the requirements of being a sensitive individual emerge as expressing feelings and emotions as a part of the social process to the positive or negative events experienced in new generations, it is seen that sensitivity does not correspond to the product preference on the basis of consumption.

When these results are evaluated together with the observation that the Y and Z generation do not glued to their smartphones and portable computers and being instantly aware of everything, it shows that having or following technology may affect the sensitivity to green advertisements and products in both professional and daily life, optimistic expectations may be unfounded. Today, the future of the green movement is very much dependent on the approaches and behavior of today’s youth, known as the Generation Y and Z.

It is important that all segments of the society become conscious about this issue and gain a common behavior and attitude in order for the purchasing activities carried out within the framework of non-deceptive, reliable and sensitive advertisements to be beneficial to individuals and to be sustainable. Educational planning that will raise awareness of green environment and products both in the family and at school will be very beneficial especially for the Z generation from the first education period.

REFERENCES

Altun, Ö., & Karataş, İ. (2021). Z Kuşağı ve İnternetten Alışveriş İlgilenimleri. İtobiad: Journal of the Human & Social Science Researches, 10(1).


