Consumer Satisfaction towards Green Products: Empirical Insights from Romania

Elena-Simina Lakatos, Ligia-Maria Nan, Laura Bacali, George Ciobanu, Andreea-Maria Ciobanu and Lucian-Ionel Cioca

Abstract: The current model of linear economy is causing accelerated consumption and an extensive use of natural resources that accentuates the effects of the current global environmental crisis. In this context, green products are becoming a key element in the transition to a sustainable consumption and production model. The main goal of this paper is to identify the factors predicting youth consumer satisfaction towards green products and to analyze the public perception of green brand products in Romania. Considering these goals, a questionnaire was developed and applied to 268 participants. The results show that a positive attitude towards green products and the level of information held by the consumers about them are significant predictors of green product satisfaction. Moreover, the importance of products being green significantly predicts the purchase of such products. Further implications and research directions are discussed towards the end.

Keywords: sustainable consumption; green products; green marketing; green perception; consumer satisfaction

1. Introduction

The transition to a circular economy can be started and completed successfully only by developing a new model of economic progress that goes beyond the classic linear model of production and consumption. The linear model leads to accelerated consumption and extensive use of natural resources which, in turn, leads to increased waste, environmental pollution and accelerated climate change. Through these effects, the linear model limits growth, depletes renewable resources and is negatively affecting human welfare and ecosystems.

In addition, the impact of the linear model is exacerbated by current consumption habits, characterized by high product replacement rates, even before their useful life cycle is exhausted. Considering the last decades, satisfying the market demands has created a heavy burden on the environment through overexploitation. Although there are various ways to address these concerns, one safe and efficient way of switching to a circular model of the economy is through the production and consumption of green products [1].

In this context, green products can play a key role in shifting towards a sustainable model of production and consumption, but only if the general population is aware of the benefits and the significantly reduced impact they have on natural resources. Many of those concerned with the study of green consumption are interested in the underlying consumer satisfaction gained from the shift towards green products. Thus, questions...
such as “who”, “why”, “how many” and “which” green products consumers prefer are still of high interest and vary widely in their responses. In the last decades, Romanian consumers have also become increasingly interested in the social and ethical considerations of their consumption patterns. This concern, among the many initiatives of social corporate responsibility taken by corporations, has led to significant growth in the global market for environmentally friendly products. This trend is often referred to as ethical consumerism or green consumption and it is significant as it is based on consumers’ sensitivity to social and environmentally safe products, which represents an emerging consumer orientation that can contribute to a higher exposure of and to green products [2–4]. If assimilated, sheer exposure of and to green products can enable approaches pertinent to social responsibility and ethical conduct which can induce uptake of corresponding behaviors.

Therefore, the main objectives of this paper are to identify the factors predicting consumer satisfaction towards green products and to analyze the public perception of green brand products in Romania. In order to achieve this, we aim to validate a predictive model of consumer satisfaction towards these products by taking into consideration the level of information consumers have about green products and their attitude as predictors. To achieve this, the next section details the context of green products, the public perception and behavior towards green products and their circular paradigm, followed by the materials and methods used. The section afterwards describes the results retrieved and then the interpretation of results in the form of “Discussion”. The paper ends with the presentation of the final conclusions as the last section.

2. Literature Review
2.1. Green Products: Core Aspects

The green product is defined as a product in which the design and/or its attributes (and/or production and/or strategy) are based on recycled resources, bring environmental benefits or reduce toxic environmental damage throughout the product’s life cycle and in the process of obtaining it. Thus, the use of non-renewable resources is minimized, toxic materials are avoided, and renewable resources are used according to their renewal rate [5].

In the process of designing and manufacturing green products, manufacturers make a commitment to a thorough and long-term assessment of the impact of their activities and how they influence issues such as people’s well-being or the economic growth of communities [6–8]. Nevertheless, organizations must take into account the fact that green products are not only environmentally friendly and contribute to sustainable development, but they are an important source of competitive advantage as well. Green product innovation is, in fact, a business opportunity for companies in the face of the threatening environmental problems [9–11]. For example, green product innovation involves products that use less resources or less energy throughout their life cycle [12]. These overall reductions help organizations to optimize their resource utilization intake, increase opportunities to enter new markets and obtain a first-mover advantage in the process of the whole life of products [9,13].

A closely related concept, green branding, involves communicating the unique attributes, benefits and the reduced environmental impact of a product to the potential buyers so that green products are perceived as sustainable ones [14]. In this regard, we recall the results of a study [15] which, based on a thorough review of the literature, outlined a classification of the image positioning of sustainable brands.

The major differences in the description of the characteristics of each type of sustainable brand image are related to the aspects of credibility of sustainability, environmental impact, energy and resource efficiency, stakeholder consideration and philosophy. When studying the influence of different forms of brand communication on the perceived brand equity, in the case of organic products existing in the food and fashion industry, there is evidence proving that ecological claims offer credibility and knowledge to green brands which increase consumer confidence [16].
However, one crucial aspect in any type of purchasing, including green products, relies on consumer satisfaction, where satisfaction is a cognitive analysis of a service’s gratifying fulfillment while consuming a certain product [17,18]. Consumers embody cognitive elements and emotional considerations individually or at the same time in order to achieve high satisfaction levels from products or services. This can later lead to loyalty to specific brands, delight and bring behavioral change shifts towards sustainable alternatives [17,19]. As consumer behavior highly depends on antecedents, consumer satisfaction is a key element which can substantially contribute towards the wider use of green products.

2.2. Public Perception and Behaviors towards Green Products

Behavioral intentions represent a significant predictor of actual purchase behavior [20], but the intentions to perform a behavior should not be confused with attitudes. This confusion resides in the strong correlation between attitude and intention: The stronger one’s attitude is toward an object, the greater the intention to perform a certain behavior related to it. Measurement of purchase intentions has often been used to identify niches and potentialities for products because the greater the intent is, the greater the likelihood of purchasing will be [21]. This is why it is important to study purchase intentions of green products and explore ways in which the purchase intention can be reinforced and transformed in actual behavior.

However, having a positive attitude toward green products does not offer the guarantee that the individual will actually engage in buying green products. Consumer behavior can be conceptualized as the sum of actions taken by consumers who identify a need or want and satisfy it by searching for information, buying the product or service or providing feedback on the products or services purchased [22]. Therefore, although consumers can express their concern for the environment, this does not necessarily imply green purchasing as a significant proportion of consumers continue to use the products offered by the traditional model [23].

In the opposite sense, however, there is a competing current of skepticism about the green products themselves and the publicity given to them. This skepticism encompasses the cognitive part of the consumer’s attitude, being rather a cynicism manifested through misleading or exaggerated ecological advertising and their tendency not to believe the claims about environmental benefits made in advertising campaigns [24–26]. Studies show that a consumer will change their choice, moving to another brand if the message is distorted [24,27]. Previous studies have also confirmed that consumers’ skepticism about organic advertising is negatively linked to their attitude towards organic products [28,29].

Another important aspect related to green products that captured the attention of many researchers is the consumer perception of remanufactured products and the importance given by the consumer to the fact that the product is labeled as green. Consumers who have a tendency to engage in green behaviors tend to prefer products that contain recycled materials [30]. For example, if we closely analyze the motivation of the decision to buy organic packaging, we can observe that consumers consider that green packaging is perceived as the most environmentally friendly [31].

However, some of the characteristics that can influence the attitude of consumers towards green brands are the quality offered as the reason that determines the act of acquisition, the level of differentiation or positioning from competitors’ brands and price, availability from different sales channels. Quality can be measured as perceived quality, leadership or popularity [32–34]. At least two of the basic functions of a brand have a direct influence on the purchasing decision and bring benefits. The function of the identification brand refers to being seen and being easily recognized as it helps buyers in making the purchase decision. The second one, functionality, refers to practical issues such as helping the buyer saving time in order to create loyalty [35]. Overall, satisfaction can exhibit all of these characteristics. In addition, as consumer satisfaction is in the heart of marketing due to its high degree of awareness for consumers, the development of a green image of a product can enhance the consumers’ intention to choose the product and can also improve
the corporate image of the company [20,36–39]. Additionally, green loyalty is another benefit which can come hand in hand with consumer satisfaction [40].

To sum up, firstly, a green consumer can be identified as a consumer who avoids purchasing any product that can harm any living organism, cause environmental damage during the manufacturing process or during the use process or consume a large amount of non-renewable energy [41,42]. Secondly, the increase in the public’s environmental awareness is proof that the trend of green consumption is moving into the market mainstream, as most people in developed countries consider environmental protection an important factor in purchase decisions [43]. All these translate into consumer satisfaction which should always be considered while discussing the public perception and behavior towards products and especially green products.

2.3. Products in the Circular Paradigm

By promoting innovation and a transition to the use of renewable energy resources, the circular economy model builds long-term economic, natural and social capital. In this circular sustainable development context, products are kept inside by maintaining their values even after the end of their life so that resources recirculate in the economic flow.

At the moment, the circular economy model is the only option that meets the condition of reducing the deficit of resources, the unpredictability of prices on international markets, but also the reduction of waste and pollution through RRR (recycle-reduce-reuse) activities by reintroducing secondary raw materials into the economy, thus closing the loop. The circular economy aims, in particular, to extend the life cycle of a product or parts thereof, while retaining its original function and allowing additional revenue to be obtained based on the extension of the life cycle and the use of products and goods. The value that would otherwise be lost can be maintained or improved by direct reuse or resale, repair and/or upgrade for resale, separating the products into parts for repair and/or repairing the product in an improved version for resale.

The product is also seen as a service. Namely, the aim of a circular design is to optimize the productivity of a resource or a product while maintaining the ownership of the product, which is an alternative to the traditional model of “purchase and ownership”. The focus is on performance and not on products, and ownership usually remains with the service provider. Through various service arrangements, including payment methods for use, leasing, rent or performance, the product is then used by one or more customers [44].

Therefore, regardless of the market in which they are located, green products are designed with the reason for saving natural resources, for example, by integrating recycled content or the recycling process itself into the production process [45]. Circular products are exactly an example of such a practice. The concept of a product’s circularity refers to the degree to which the materials from which it is designed (and their value) give the product the ability to be preserved as long as possible and circulate in the economic system, causing as little as or no waste as possible following the exhaustion of its life cycle [46,47].

Boosting circular consumption imposes a comprehensive satisfaction of social needs at the level of a decent life, without hindering the possibility for an increase in life quality in the future. Through circular design, quality of goods is enhanced and durability is expanded, at the same time ending the deterioration of the natural environment, with efficient energy and resource use while minimizing the waste generation. Circular economy can and should supply products of same quality or preferably of even extended quality, so the demand of green products increases while responding to the needs and future aspirations for improvement. Furthermore, setting green circular products on the market can enable a new way of thinking, change the demand patterns and significantly add to the global sustainability objectives and meet customer satisfaction at the same time [48–50].

In conclusion, better product design and expanding their usefulness are crucial for the development of a circular economy. However, the greatest political attention to date has been paid to improving the efficiency of materials and energy use and also to the recycling of different types of waste, plastic in particular. Reuse, repair, redistribution,
remanufacturing and reconditioning—the product-related inner circles of the circular economy have received less attention and strategies for the widespread introduction of these concepts are less mature. Therefore, it is important that both in theory and later in practice, behaviors related to the 10 Rs (refuse, reduce, reuse, repurpose, recycle, repair, rethink, redesign, refurbish, remanufacture) of the circular economy are enabled [47,51].

3. Materials and Methods

Due to its quantitative nature, this research involved data collection by distributing a questionnaire to Romanian consumers, with three major regions having the most respondents (Center Region 35.82%, North-East Region 18.28%, North-West Region 16.42% and the other five regions—South Muntenia, South-East Dobrogea, South-West Oltenia, West region and Bucharest-Ilfov—summing up for 29.48% altogether). The time span of the survey was from October 2018 to March 2019 and was available for filling online using eSurveys Pro software. The questionnaire was pre-tested in order to ensure the validity and reliability of the study on 10 sample respondents, following corrective measures which were taken to review and restructure the questions identified in the final questionnaire. The variables measured and studied in this paper are presented in Table 1.

<table>
<thead>
<tr>
<th>Investigated Variables</th>
<th>Operationalization of Variables</th>
<th>Questions/Statements</th>
<th>Answer Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green product satisfaction</td>
<td>A pleasant level of fulfillment resulted from green product acquisition and consumption which shows that the specific ecological needs and environmental responsibilities are met.</td>
<td>I was satisfied with most of the green products I bought.</td>
<td>Likert Scale 1 = Totally disagree 5 = Totally agree</td>
</tr>
<tr>
<td>Level of information</td>
<td>The degree of information that the consumer has about the characteristics of green products and their impacts on the environment.</td>
<td>What is your level of information on green products?</td>
<td>Likert Scale 1 = Not at all informed 5 = Totally informed</td>
</tr>
<tr>
<td>Attitude towards green products</td>
<td>One’s general feeling towards green products impacting the tendency to obtain eco-friendly products.</td>
<td>To what extent do you agree with the following statements about green products: (1) They are well made; (2) They have reasonable prices; (3) They are as good as the rest of the products; (4) They are economical; (5) They are environmentally friendly; (6) They are healthier; (7) They have a better quality/performance; (8) I consider a green product being my first choice in a category.</td>
<td>Likert Scale 1 = Totally disagree 5 = Totally agree</td>
</tr>
<tr>
<td>Importance of product being green</td>
<td>The extent to which a consumer prioritizes the purchase of green products over ordinary products.</td>
<td>How important is it to you that a product is green?</td>
<td>Likert Scale 1 = Not important 5 = Very important</td>
</tr>
</tbody>
</table>
Table 1. Cont.

<table>
<thead>
<tr>
<th>Investigated Variables</th>
<th>Operationalization of Variables</th>
<th>Questions/Statements</th>
<th>Answer Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circular behavior</td>
<td>motivators</td>
<td>Facilities offered to citizens that enable and encourage recycling and reuse behaviors.</td>
<td>Would you start recycling certain products if . . . ? (1)Yes, if financial incentives were provided; (2)Yes, if there were drop-off recycling centers; (3)Yes, if more recycling options were available in my area; (4)Yes, if there was an awareness campaign about the dangers of not recycling.</td>
</tr>
</tbody>
</table>

The Literature Review also supports the criteria chosen: (1) green product satisfaction [52–56], (2) level of information [57–59], (3) attitude towards green products [54,55,58], (4) importance of products being green [60,61] and (5) circular behavior motivators [49,62,63]. Basically, the questionnaire was focused on respondents’ environmental perceptions, level of knowledge about green products and their intention of buying these products as well as the satisfaction reported towards them. There was also a section containing questions related to consumer demographics.

Based on accessibility criteria, the sample size of this study comprised 268 respondents from Romania. Most respondents were male students from the central area in Romania with a medium level of income, aged between 18 and 24 years old, as can be seen in Table 2.

Table 2. The sociodemographic composition of the sample.

<table>
<thead>
<tr>
<th>Sex</th>
<th>n (Number)</th>
<th>%</th>
<th>Age</th>
<th>n (Number)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>81</td>
<td>30.22%</td>
<td>18–24 years</td>
<td>227</td>
<td>84.70%</td>
</tr>
<tr>
<td>Male</td>
<td>187</td>
<td>69.78%</td>
<td>25–34 years</td>
<td>31</td>
<td>11.57%</td>
</tr>
<tr>
<td>Occupational status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>140</td>
<td>52.22%</td>
<td>45–54 years</td>
<td>4</td>
<td>1.49%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>57</td>
<td>21.26%</td>
<td>Over 55 years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Student</td>
<td>33</td>
<td>12.31%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>38</td>
<td>14.17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: 268</td>
<td></td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following hypotheses were considered before the process of data collection began:

**Hypothesis 1.** A positive attitude towards green products significantly predicts green product satisfaction.

**Hypothesis 2.** The level of knowledge about green products predicts a significant proportion of green product satisfaction when we control for the effect of the positive attitude.

**Hypothesis 3.** The importance of a product being green significantly predicts purchases of green products.

For Hypothesis 2, the control for the effect of the positive attitude was achieved due to the first assumption, which stated that a positive attitude towards green products significantly predicts green product satisfaction.
4. Results

4.1. Descriptive Analysis

First of all, we performed the descriptive analyses of the results obtained after questioning the 268 participants. Table 3 shows the means of the variables, the corresponding standard deviations and the Pearson correlation index. As it can be seen, all correlations are statistically significant, although at a low to medium level of intensity. The strongest correlation exists between green product satisfaction and the positive attitude towards green products, which provides an initial support for the first hypothesis of this study. This stipulates that a positive attitude of the consumer towards green products is a significant predictor of customer satisfaction.

Furthermore, the level of information about green products was compared with characteristics such as age, status, income and gender, by using the Mann–Whitney U-test analysis. The following assumptions regarding the Mann–Whitney test were fulfilled: (i) the scores were ordinal, (ii) the data are categorized by two independent groups and (iii) the observations were independent.

Table 3. Mean, standard deviations and correlations between variables.

<table>
<thead>
<tr>
<th>Variable Heading</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitude towards green products</td>
<td>268</td>
<td>3.74</td>
<td>0.57</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Level of information</td>
<td>268</td>
<td>2.48</td>
<td>0.93</td>
<td>0.12</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Green product satisfaction</td>
<td>268</td>
<td>3.80</td>
<td>0.83</td>
<td>0.46</td>
<td>**</td>
<td>0.18</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>4. Importance of product being green</td>
<td>268</td>
<td>4.01</td>
<td>0.80</td>
<td>0.40</td>
<td>**</td>
<td>−0.29</td>
<td>**</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Note: *p < 0.05 (significant), **p < 0.01 (highly significant).

The main Mann–Whitney results (Table 4) regarding the level of information on green brands show that those aged between 25 and 34 years old consider themselves more informed about green brands than those aged between 18 and 24 years old, although very few of them in both categories considered themselves ‘very informed’. Moreover, the results show no evidence to support the idea that there is a difference in self-assessment of the level of information about green brands between status (student/employee), income (small/medium) or gender. This indicates that it is possible that the concept of green products and brands is not very well known in this sample so that the variance of the level of information is manifested by different results from a statistical point of view.

Table 4. Level of information about green products vs. age, status, income, gender.

<table>
<thead>
<tr>
<th>Mann–Whitney Z (p-Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
</tr>
<tr>
<td>−3.279 (0.001)</td>
</tr>
<tr>
<td>Status</td>
</tr>
<tr>
<td>(0.227)</td>
</tr>
<tr>
<td>Income</td>
</tr>
<tr>
<td>(0.521)</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>(0.618)</td>
</tr>
</tbody>
</table>

4.2. Inferential Analysis

Attitude and Level of Information as Predictors for Green Product Satisfaction

As it can be seen in Table 5, the positive attitude and the level of information significantly predicts the green product satisfaction, having a statistically significant value. Furthermore, in Table 4 we can see the indicators specific to the regression analysis which prove that the two predictors explain a significant percentage of variance in the dependent variable.
### Table 5. Model summary of attitude towards green products and level of information as predictors for green product satisfaction.

<table>
<thead>
<tr>
<th>Source</th>
<th>R</th>
<th>R Square</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards green products</td>
<td>0.48</td>
<td>0.23</td>
<td>39.96</td>
<td>2</td>
<td>265</td>
<td>0.000</td>
</tr>
<tr>
<td>Level of information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

First, the positive attitude towards green products significantly predicts green product satisfaction. For every 1-unit increase in the attitude towards green products, the green product satisfaction increases by 0.44% ($\beta = 0.44, p < 0.01$). Therefore, Hypothesis 1 is confirmed. Regarding Hypothesis 2, we can also observe from Table 4 that when we control for the effect of the positive attitude towards green products, the level of information still significantly predicts the variance of the dependent variable. For every 1-unit increase in the level of information towards green products, the green product satisfaction increases by 0.11% ($\beta = 0.11, p < 0.01$) as can be seen in Table 6. Considering this, we can conclude that Hypothesis 2 is confirmed as well.

### Table 6. Estimates for the predictor variables.

<table>
<thead>
<tr>
<th>Source</th>
<th>Source B</th>
<th>SD</th>
<th>$\beta$</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards green products</td>
<td>0.62</td>
<td>0.07</td>
<td>0.44</td>
<td>259</td>
<td>0.00</td>
</tr>
<tr>
<td>Level of information</td>
<td>0.11</td>
<td>0.04</td>
<td>0.13</td>
<td>259</td>
<td>0.01</td>
</tr>
</tbody>
</table>

### 4.3. Circular Behaviors Motivators

One of the 3 Rs from the circular economy concept is recycling. The determining factors to engage in recycling behaviors mentioned were providing financial incentives, drop-off recycling centers, the availability of several recycling possibilities in the nearby areas and awareness campaigns about the dangers of not recycling.

As it shows in Table 7, the motivations to recycle certain products do not differ between the demographic categories and are not influenced by the selected criteria.

### Table 7. Chi-square values for circular behavior motivators.

<table>
<thead>
<tr>
<th>Factors Enabling Recycling Behavior</th>
<th>Age</th>
<th>Chi-Square X (p-Value)</th>
<th>Status</th>
<th>Income</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial incentives</td>
<td>0.290</td>
<td>0.381</td>
<td>0.080</td>
<td>0.913</td>
<td></td>
</tr>
<tr>
<td>Drop-off recycling centers</td>
<td>0.505</td>
<td>0.996</td>
<td>0.373</td>
<td>0.672</td>
<td></td>
</tr>
<tr>
<td>Proximity of recycling facilities</td>
<td>0.787</td>
<td>0.942</td>
<td>0.872</td>
<td>0.651</td>
<td></td>
</tr>
<tr>
<td>Awareness campaigns about recycling</td>
<td>0.070</td>
<td>0.272</td>
<td>0.736</td>
<td>0.699</td>
<td></td>
</tr>
</tbody>
</table>

### 4.4. A Linear Regression Model of Green Product Purchased in the Last 3 Months and the Importance of a Brand Being Green

By performing this analysis, we wanted to find out if consumers who give more importance to the fact that a brand is green are more likely to buy more green products. The figure (Figure 1) and table (Table 8) presented in this sub-section show that there is a slight influence on the importance given to green brands and the number of purchases in the last 3 months of green products. The best model for estimating the relationship between the two indicators is the linear equation, with a 96% probability of the parameters of the equation being correct. That is, for each 1 degree increase in importance given to green brands, there is a 0.992 increase in the acquisition score. Therefore, Hypothesis 3 receives empirical support as well.
The main objective was analyzing the consumer satisfaction towards green products in Romania. Thus, we must first discuss the assumptions made that were confirmed by the survey results. However, one should take into consideration that the respondents of the study belong to a convenience sample based on accessibility criteria and should regard as such to the statistical data. This is the main limitation of our research.

The satisfaction offered by a green brand can be viewed as a pleasant level of fulfillment for youth consumers. This satisfaction also meets specific ecological needs and environmental responsibilities. Knowing and tackling the predictors of this specific variable is essential as consumers who are satisfied tend to remember the name of the green brand and repurchase its products [64]. From the results obtained, we can observe that a positive attitude towards green products and the level of information of the consumer about these products are such predictors. Various studies have shown that there is a strong relation between customers’ satisfaction levels and the intention for purchase. If the sustainability of a product is the desired one, the satisfaction from purchasing it can be a grounding aspect for green loyalty which, in turn, will bring about new purchases of the same product or brand [40]. These results are consistent with previous empirical studies that found that attitudes to purchase green products are a significant predictor of intentions to actually purchase these kind of products [21]. When a green circular product

### Figure 1. The regression model of green products purchased and the perceived importance of the product being green.

### Table 8. Model summary and parameter estimates of the regression model.

<table>
<thead>
<tr>
<th>Equation</th>
<th>R Square</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
<th>Constant</th>
<th>b1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear</td>
<td>0.016</td>
<td>4.31</td>
<td>1</td>
<td>259</td>
<td>0.039</td>
<td>14.89</td>
<td>0.99</td>
</tr>
<tr>
<td>Logarithmic</td>
<td>0.014</td>
<td>3.72</td>
<td>1</td>
<td>259</td>
<td>0.055</td>
<td>14.59</td>
<td>3.13</td>
</tr>
<tr>
<td>Inverse</td>
<td>0.012</td>
<td>3.13</td>
<td>1</td>
<td>259</td>
<td>0.078</td>
<td>20.93</td>
<td>−7.77</td>
</tr>
</tbody>
</table>

5. Discussion

The main objective was analyzing the consumer satisfaction towards green products in Romania. Thus, we must first discuss the assumptions made that were confirmed by the survey results. However, one should take into consideration that the respondents of the study belong to a convenience sample based on accessibility criteria and should regard as such to the statistical data. This is the main limitation of our research.
is perceived by consumers as effective, the attitude towards behavior, intentions and green buying behavior can strengthen the demand of green products on the market [65].

Research findings have shown that the concern and presence of certain product attributes influence the type of purchase at the specific time of the acquisition. Moreover, a strong awareness about the benefits of using green products shows a stronger reasoning for re-buying them in the future due to moral obligation [49,66]. The 2014 Nielsen Global Online Environment and Sustainability study, which surveyed 30,000 respondents from 60 countries, found that 55% of respondents would be willing to pay more for products and services provided by companies that are committed to having a low negative impact on the environment [67]. Therefore, it is not surprising that many companies have started to offer options of ecological products in their ranges. However, despite the positive attitudes of youth consumers towards the need for sustainable development and their increased sensitivity to the environment, several studies have revealed an inconsistency between attitudes and ecological behavior [68,69]. Some youth consumers continue to buy environmentally hazardous products, in spite of their manifested concerns for greener alternatives [70].

Regardless, consumers are willing to solve environmental problems through the choice of their products and are willing to buy green products as long as the products meet the functionality criteria in comparison with the non-green products—here, quality, price, durability and ease of use are considered [49]. As the current research also shows, a product being green can predict the purchase of green products in a significant way. The conditional purchase, or sometimes accidental purchase, of green alternatives is desirable when betterment in terms of cost-effectiveness and energy efficiency is an underlying criterion, while meeting the quality, durability, brand and price satisfaction for the customer [49,71]. Thus, green product attributes should be referred to in the communication and promotion of products of such kind.

However, we must mention that, both in terms of theory and practice, a favorable attitude does not always translate into desirable behavior. In recent decades, numerous theories have been developed to explain the attitude-behavior discrepancy, but we still do not have strong argumentation in this direction [72]. The gap between consumers’ positive attitudes towards environmental issues and their inconsistent and often conflicting consumption behavior—called the “green gap”—remains a concern for social marketers and policy makers because current levels and consumption options are not environmentally sustainable [73]. One recent study looks into this matter from the perspective of compulsion and reactance, where reactance theory has been used to shed light on this paradox through the intersection of environmentalism, sustainability and green marketing [74]. Yet, Moraes and collaborators [75] stated that if we want to succeed in promoting responsible and ecological consumption, “we must recognize that sustainable development is a social proposal”, leaving room for further research in terms of closing the green gap.

Another future direction could regard the signaling theory. Many green products are costlier than their non-green analogues, thus a potential solution is to show the signaling benefit of green products. These benefits act as incentives for customers to pay a “green premium” that can even out the price disadvantage. Berger (2019) showed that student subjects exhibit a willingness to pay extra for green options when the purchase is public rather than private [76]. Green signalers are also viewed as more favorable in social interactions leading to a higher intent to be viewed so. Anyhow, the products have to clearly show green attributes and marketers should be cautious about not marketing everything as green [76].

Considering these results, we believe that it is essential that measures be taken urgently to encourage the purchase of green products at the level of the general population. Incentives, information and awareness campaigns can contribute to the growth of consumers of green products, thus indirectly contributing to facilitating the transition to the circular economy. Notably, the results have managerial implications for product development where stakeholders involved in the circular development to marketing and supply
chain management should target, in detail, the product’s attributes to achieve consumer satisfaction and offer a new way of thinking to the market. This can translate into showing capabilities and competence and can blend into marketing strategies and corporate social responsibility. Optimal advertising and pricing through the use of green advertising can be used as the focal point for holistic marketing strategies where the green traits of a product can be the central message to positively influence non-green consumers into changing their behaviors [49,77,78].

As for the public authorities, they have already taken steps in this direction. In 2016, Romania adopted a law dedicated to ecological public procurement [79]. Thus, a set of criteria was created for the purchase of organic products, as well as categories of services. The law offers (i) the guiding minimum criteria for the protection of the environment, goods and services, (ii) standard specifications and (iii) an annual action plan on green public procurement applied at the national level. Although many sectors, including public administration, have already begun to incorporate recycling practices that reduce the demand for new raw materials and contribute to the reduction of the ecological deficit, we are still far from being able to establish a circular consumption model.

6. Conclusions

As in many other European states, the current linear model of economy is causing accelerated consumption and an extensive use of natural resources [80]. Nevertheless, it can be easily observed that this model is becoming increasingly vulnerable to developments in global markets, so recognizing the importance of transitioning to a sustainable and circular economy is inevitable [81–83].

The green product market can be a key element in the transition to a circular economy as their promotion and acquisition among the population can actively contribute to the transition to a sustainable consumption model. This is why people should be informed and aware of their consumption and of their habits that may slow down or, on the contrary, accelerate the transition to a circularity. Understanding how the general population relates to green products and brands can be a key enabler for the prolific development of the green product market. As it can be seen from the results, respondents who present a positive attitude towards green products significantly present a higher green product satisfaction as well, which is highly important in the purchasing process. This is strongly related to the level of knowledge regarding green products which in turn shows an impact if looking from the other way—the importance of a product being green predicts the purchase of green products.

Thus, in the near future, the scientific community should focus on reducing consumer cynicism towards green products, simultaneously with the implementation of an effective form of national regulation, as consumers want to ensure that green product claims are valid and the presence of green washing is not the case. Therefore, the role of policy makers becomes critical if changes are to be seen in the immediate future. Social norms and motivational factors are ultimately the determinants of our everyday behavior and both of them can be shaped over time by government intervention [84,85].

Information about public perception towards green products is useful for conducting efficient campaigns aiming to involve citizens in more eco-responsible activities [86,87] (e.g., selective collection, reuse of products, etc.), but also for implementing actions to promote environmental protection and further reduce natural resource consumption. This study contributed to the existing knowledge about the green market in Romania by assessing the perception of youth consumers regarding green brands as well as their attitude regarding the purchase of environmentally friendly products, products made from recyclable materials and the practice of recycling products.

Continuing research in this direction is important both for sustainable development and for the economic environment in order to facilitate the emergence of sustainable businesses. Further studies should take into account the impact of the green brands on the objectives of sustainable development from the perspective of the producers and of the
companies. Another research direction would be to develop a set of indicators in order to facilitate the process of evaluation, collection and interpretation of the data provided by the existing green brands.


**Funding:** This project is funded by the IRCEM on research and innovation programmer: G12018-02, Project No. 056/23.11.2018.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Not applicable.

**Acknowledgments:** This work was supported by the Erasmus+ Programme, SafeEngine project, contract no 2020-1-RO01-KA203-080085.

**Conflicts of Interest:** The authors declare no conflict of interest.

**References**

8. Saha, M.; Darnton, G. Green companies or green con-panies: Are companies really green, or are they pretending to be? *Bus. Soc. Rev.* 2005, 110, 117–157. [CrossRef]


27. do Paço, A.M.F.; Reis, R. Factors affecting skepticism toward green advertising. *J. Advert.* 2012, 41, 147–155. [CrossRef]


43. Wu, S.I.; Chen, Y.J. The impact of green marketing and perceived innovation on purchase intention for green products. *Int. J. Mark. Stud.* 2014, 6, 81. [CrossRef]


48. Roman, T.; Bostan, I.; Manolica, A.; Mitrica, I. Profile of green consumers in Romania in light of sustainability challenges and opportunities. *Sustainability* 2015, 7, 6394–6411. [CrossRef]


57. Mala, D.; Bencíková, D. Innovations of a green product. Ekon. Manaz. Spektrum 2018, 12, 64–74. [CrossRef]
63. Diddi, S.; Yan, R.N. Consumer perceptions related to clothing repair and community mending events: A circular economy perspective. Sustainability 2019, 11, 5306. [CrossRef]
65. Emekci, S. Green consumption behaviours of consumers within the scope of TPB. J. Consum. Mark. 2019, 36, 410–417. [CrossRef]
74. Hinsch, C.; Tang, Y.; Lund, D.J. Compulsion and reactance: Why do some green consumers fail to follow through with planned environmental behaviors? Psychol. Mark. 2021, 1–18. [CrossRef]


82. Lakatos, E.S.; Dan, V.; Cioca, L.I.; Bacali, L.; Ciobanu, A.M. How supportive are Romanian consumers of the circular economy concept: A survey. *Sustainability* **2016**, *8*, 789. [CrossRef]

83. Lakatos, E.S.; Cioca, L.I.; Dan, V.; Ciomos, A.O.; Crisan, O.A.; Barsan, G. Studies and investigation about the attitude towards sustainable production, consumption and waste generation in line with circular economy in Romania. *Sustainability* **2018**, *10*, 865. [CrossRef]


