Green Marketing’s Roles in Sustainability and Ecopreneurship. Case Study: Green Packaging’s Impact on Romanian Young Consumers’ Environmental Responsibility

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Abstract: In contemporary society, which is preoccupied with sustainability issues, green marketing highlights a new dimension of the economic, social, and environmental responsibilities of businesses. This article aims to provide an integrative vision on green marketing roles in informing, raising awareness, educating, and changing consumer behaviour towards sustainability and ecopreneurship and to highlight the results of research regarding PlantBottle® green packaging’s impact on the environmental responsibility of young consumers. The research was conducted based on a survey, and data were processed with statistical methods. The research results validate a set of hypotheses regarding: Romanian consumers’ lack of information leading to environmental responsibility; the impact of environmental information and awareness on green responsible behaviour; and the need to intensify efforts towards environmental responsibility. By the novelty of the research, which was conducted in a country that has rather recently become preoccupied with sustainability issues, the paper fills in a gap in a relatively limited research area: countries where green culture is developing and can become a landmark with implications for managers, educators, and the scientific community.

Keywords: green marketing; environmental responsibility; sustainability; ecopreneurship; PlantBottle® green packaging; consumer awareness and education; green culture; sustainable development; Romanian young consumers

1. Introduction

Over the last few decades, society has become more and more concerned with sustainable development issues, opening up new directions for the debates on the roles and responsibilities of businesses in society. As a response, companies worldwide have modified their behaviour to better address the new challenges, incorporating different aspects of sustainability into their activities.

In this context, green marketing (also known as ecological marketing/eco-marketing) highlights a new dimension of businesses, not only as suppliers of sustainable products in profitable conditions, but also as social actors with responsibilities to support sustainable development.

Within this framework, this article has two objectives:

(1) to offer an integrative vision on green marketing roles in supporting sustainable development, and to inform, raise awareness, educate, and change consumer behaviour towards sustainability and
ecopreneurship. This integrative approach is developed by following landmarks and different perspectives in the literature regarding the concept of green marketing so that it meets the increasingly challenging issues of sustainable development; and

(2) to highlight the results of research regarding PlantBottle® green packaging’s impact on the environmental responsibility of young consumers in Romania and to test a set of four hypotheses developed according to literature references.

The article is structured into seven sections. After the introduction, Section 2 presents the reviewed literature regarding the conceptual evolution of green marketing in facing sustainability challenges and green marketing roles in supporting ecopreneurship and sustainable development. In this section, the related hypotheses are also developed. Section 3 presents the methodology and data collection issues. The results are then presented in Section 4 and discussed in Section 5. The paper ends with Section 6, which, in conclusion, summarizes the main findings and also refers to the research’s limitations and implications.

By the novelty of the research, which was conducted in a country where green culture is developing, the paper can constitute a reference with implications for managers, educators, and the scientific community.

2. Literature Review

2.1. Conceptual Evolution of Green Marketing in Facing Sustainability Challenges

The beginning of green marketing dates back to the 1970s, when the ecological perspective of marketing was developed [1], and mainly addressed the theory of responsible consumption and the ecological imperative by proposing a very targeted micro-level-oriented ecological approach as a reactive response of businesses interested in connecting particular features of products to environmental concerns, whether expressed by customers or by legislative pressures [2]. The late 1980s and the 1990s witnessed the emergence of intensive debates on marketing’s role in society, generating the new concept of green marketing [3–6], which is also referred to as environmental marketing [7,8], sustainable marketing [9,10], or enviropreneurial marketing [11]. These contributions, belonging to the era of sustainable green marketing [12,13], mainly approach the subject of greening the marketing mix: green products, green packaging, green logistics, green pricing, and green promotion [2,14,15]. Furthermore, a large number of studies focus on green marketing’s role in responding to sustainable development challenges [14,16–19], which is considered a solution for companies in exploring and maintaining a competitive advantage and analyzing the green marketing strategies that companies need to adopt in response to the challenge of simultaneously advancing economic development and environmental protection [17,20,21].

More and more companies are choosing to develop products using innovative clean solutions, and significant progress has been made in the production of green products to reduce their environmental impact [22]. Also, green packaging is at the core of many companies’ marketing efforts, as discarded packaging accounts for a large proportion of waste in industrialized economies as well as the negative impact on the environment [23]. Some businesses are looking towards gaining an edge by repackaging their products into environmentally friendly packages, cutting down on extras and wasted materials [24], and using eco-labels, which are considered to be an effective method to market greener products [25–29]. Green promotion has been one of the most controversial areas, and is frequently criticized for presenting oversimplified solutions to complex environmental problems or even revealing unfounded and misleading claims [30]; however, its role in bringing into the market information about environmental sustainability must be acknowledged. Green marketing, by integrating environmental issues into marketing activities and strategies, improves life quality [31].

Studies refer to the different ways in which marketers have responded to the green agenda. Mostly, at the beginning of green marketing, companies adopted a reactive attitude toward customers who were more aware of sustainability issues and toward social pressures, while, more recently, studies
have pledged for a proactive role of businesses in approaching sustainability [9,11,32]. Businesses need to be aware that sustainability is no longer an option, but it has rather become a requirement [33], and environmentalism must be seen not only as compliance with increasing environmental pressures but as a market opportunity to help sustainable development [34,35]. They need to take a step beyond their primary objective of gaining profit to express green marketing in terms of corporate social responsibility priorities [36], which also reinforces a company’s image as one that is responsive to society’s needs [37]. They have to acknowledge their ethical, social, environmental, and economic position in society [38,39], thus confirming marketing’s macro-role in society: societal marketing [40].

More emphasis needs to be placed on sustainability, environmental responsibility, and corporate social responsibility, proving marketing’s commitment to social change, and providing the framework for transformative/transformational marketing [41], a powerful tool for changing people’s attitudes and value systems with the aim of reducing harmful environmental and social impacts [42].

2.2. Green Marketing Roles in Supporting Ecopreneurship and Sustainable Development: To Inform, Raise Awareness, Educate, and Change Consumer Behaviour

Current trends in the conceptual development of green marketing emphasize its important role in responding to social challenges [18] and acting as a catalyst for strengthening a culture of environmental responsibility and sustainability in business and society. Also, there is a strong connection between environmental concerns, a green market, ecopreneurship, and sustainable development [43]. Zuboff and Maxmin [44] use the term “deep support” to denote a new stage in reconsidering marketing’s purposes in consistence with the need for sustainability. Businesses, by all their commitments, are dependent on their social environment. In addition, the holistic nature of sustainable development calls for the teaming up of all stakeholders in strategic partnerships to pool their skills, capabilities, and resources [14,16,17,19,45]. In this context, green marketing acts, in a shared responsibility, as a bridge connecting businesses, consumers, the general public, educators, and government.

Starting from different approaches in the literature regarding marketing’s role, we consider, in an integrative vision, that green marketing’s roles in supporting ecopreneurship and sustainable development are to inform, raise awareness, educate and change consumers’ behaviour towards environmental responsibility and sustainability. As listed, these roles describe a gradual process in which each step forward takes us closer to all what we strive for: to put sustainable development principles into practice.

The starting point of green marketing in supporting sustainable development is to offer information and generate knowledge. Green marketing helps consumers to overcome “the greatest environmental hazard”; that is, a lack of environmental information [2]. Consumer interest towards green products has increased in the past several years [46], and there are various studies that indicate that consumers from more developed countries, including the U.S. and Western Europe, are better informed about environmental responsibility [24]. However, we have to acknowledge that the level of knowledge and awareness differs substantially among countries and, generally speaking, consumers still lack a strong green culture [14,24,47], especially in economies that have rather recently become preoccupied with sustainability issues. This is also the case for Romanian consumers, who lack an “ecological culture” [48–51]. Considering these opinions, the first hypothesis of this research is formulated as follows:

**Hypothesis 1 (H₁).** Romanian young consumers lack information leading to environmental responsibility.

In this situation, green marketing’s role is even more important in marketing information on environmental responsibility. Some studies consider that a high level of environmental knowledge has a significant positive effect on the consumers’ green purchasing behaviour [23,49] and on environmentally responsible behaviour [52]. Therefore, the second hypothesis of this research is formulated as follows:
Hypothesis 2 (H$_2$). A large amount of environmental information has a positive impact on green purchasing behaviour and on environmentally responsible behaviour.

Further, green marketing needs to contribute to raising awareness regarding environmental responsibility. Awareness has both a cognitive, knowledge-based component and an affective, perception-based component. Kaufmann et al. [53] formulated a hypothesis that considered that environmental awareness is positively associated with green purchasing behaviour. The same aspects were also emphasized by Panni [54]: the more consumers are aware of societal and environmental issues, the more they are involved in pro-social and pro-environmental behaviour. These aspects underlie the formulation of the third hypothesis:

Hypothesis 3 (H$_3$). A high level of environmental awareness has a positive impact on green purchasing behaviour and on environmentally responsible behaviour.

Another role of green marketing is its responsibility to educate the masses [14,16,24]. Consumers must be informed, educated, trained, and instructed with the aim of enabling them to choose discerningly and to contribute to a wiser and more rational environmental attitude [55]. Education and training also means empowering consumers, offering them opportunities to take part in positive environmental actions, and helping them to realize that their personal and collective decisions and actions can make a difference [56,57].

The ultimate purpose of green marketing is to change behaviour. There are various literature references on green marketing’s relation to consumer behaviour; i.e., investigating the relation between different consumer attributes and the concept of green marketing [24], the effect of green marketing on customers’ purchasing behaviours [38], companies’ relationship to the consumer of the 21st century [39], and the factors that affect consumers’ green purchasing behaviour [49]. As its main responsibility, green marketing aims to change consumers purchasing behaviour; however, we also have to widen the perspective and consider green marketing as a tool with a catalytic role in the process of revising consumers’ consciousness and attitudes in all social activity, which is a concept that is also referred to as the ecologisation of consumer behaviour [58]. An individual’s attitudes and perceptions are important in influencing their level of propensity to sustainable entrepreneurship [59], and a change in consumer behaviour towards green products promises the creation of ecopreneurship [60], which is a resilient type of entrepreneurship that has an important role in sustainability [61].

Considering that green marketing is the primary segment of social marketing, as it protects the necessary values for the survival, existence, and development of mankind and reflects the practical support for implementing a sustainable development philosophy [61], and recognizing its special importance in terms of education for sustainability (to induce in society targeted behaviours, e.g., environmentally responsible behaviours [42]), green marketing must assume a leadership role in supporting sustainable development by intensifying efforts to inform, raise awareness, and educate by using the marketing mix [48]. Considering these aspects, which emphasize the latest research, the fourth hypothesis is formulated as follows:

Hypothesis 4 (H$_4$). Intensified efforts to inform, raise awareness, and educate on environmental responsibility have a positive impact on ecopreneurship initiatives.

Following fundamental virtues, e.g., integrity, prudence, patience, perseverance, and responsibility [42], green marketing’s role is to market environmental responsibility concepts and to be a model of the day-to-day practice of sustainability for consumers.

3. Methodology

In 2009, the Coca Cola Company introduced The PlantBottle™ Technology, the first-ever recyclable polyethylene terephthalate (PET) plastic bottle made from up to 30% plant material (according to the
The present research has two objectives: (1) to investigate the use of PlantBottle® green packaging as a green marketing tool with an impact on the environmental responsibility of young consumers in Romania; and (2) to test the set of hypotheses that was formulated according to some landmarks in the literature, mentioned in the literature review section, and synthesized in Table 1.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Scientific References</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Romanian young consumers lack information leading to environmental responsibility.</td>
<td>[48–51]</td>
</tr>
<tr>
<td>H2: a large amount of environmental information has a positive impact on green purchasing behaviour and on environmentally responsible behaviour.</td>
<td>[23,52,53]</td>
</tr>
<tr>
<td>H3: a high level of environmental awareness has a positive impact on green purchasing behaviour and on environmentally responsible behaviour.</td>
<td>[52,54]</td>
</tr>
<tr>
<td>H4: intensified efforts to inform, raise awareness, and educate on environmental responsibility has a positive impact on ecopreneurship initiatives.</td>
<td>[14,16,24,42,48,55,56,58,62]</td>
</tr>
</tbody>
</table>

The research was conducted based on a survey among the students of the actual University of Medicine, Pharmacy, Science and Technology of Tirgu Mures (former Petru Maior University of Tirgu Mures), Romania in January–February 2018 using probability sampling.

The self-administrated questionnaire was used as an instrument for data collection. The questions were established using the following types of measurement scales: the dichotomous scale, the Likert scale, and the importance scale. SPSS 17.0 Software (Statistical Package for Social Science) was used for data processing and analysis and for testing the validation of the research hypotheses. Both a horizontal analysis, using absolute and relative frequencies and simple and weighted arithmetic averages to calculate the mean scores of the statements based on the Likert scale and the importance scale, and a vertical analysis, using Pearson parametrical correlations and the bivariate chi-square ($\chi^2$) test, were used. The sample population (n) consisted of 142 students (with an average age of 21.3 years). The general population (N) consisted of 807 registered students in the academic year 2017/2018, with 628 students being Bachelor of Science students and 179 students being Master of Science students. The sample structure according to the socio-demographic characteristics of the respondents is presented in Table 2.

<table>
<thead>
<tr>
<th>Table 2. The sample structure.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Age</td>
<td>18–20 years</td>
</tr>
<tr>
<td></td>
<td>21–25 years</td>
</tr>
<tr>
<td></td>
<td>Over 25 years</td>
</tr>
<tr>
<td>Area of origin</td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
</tr>
<tr>
<td>Level of education</td>
<td>Bachelor of Science</td>
</tr>
<tr>
<td></td>
<td>Master</td>
</tr>
<tr>
<td>Form of education</td>
<td>Budget</td>
</tr>
<tr>
<td></td>
<td>Tuition</td>
</tr>
<tr>
<td>Active member in environmental campaigns</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

The sample represents a percentage of approximately 20% of the general population. The sample population is representative for the research subject given the role of young consumers as key change agents (future consumers, employees, and investors) in the development of an environmentally conscious population [57,63].
4. Results

To test the knowledge level of the Dorna brand, the dichotomous scale was used, with the result that all respondents know the brand. The dichotomous scale was also used to test the knowledge level of the promotional campaign for the Dorna brand referring to the green packaging that contained up to 30% plant material, with the result that only 57.4% of the respondents know this campaign. On the question of whether they know or do not know of the PlantBottle® concept, the result is that 50% of the respondents know this concept, and the main sources of information relating to it are: packaging (43.4%), telesivision advertisements (30.1%), friends (14.5%), and internet advertisements (6.0%). The following sources of information had very low percentages (less than 2%): written mass media, the Dorna brand’s website, The Coca-Cola Company’s website, and promoters of environmental protection.

The Likert scale was used to test the impact of PlantBottle® packaging on the respondents and its educational role in environmental responsibility, as well as the opportune educational level to start it, while the importance scale was used to test the importance of the environmental personal responsibility of the respondents and, from their perspective, the importance of businesses’ and consumers’ environmental responsibility. The results for the statements referring to these aspects in correspondence with Hypotheses H1–H4 are presented in Table 3.

Table 3. The horizontal analysis results.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score *</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 1. “PlantBottle® packaging really contains up to 30% plants.”</td>
<td>3.25</td>
</tr>
<tr>
<td>H1 2. “Since I found out about the PlantBottle® concept, I have consumed only Dorna brand water.”</td>
<td>2.53</td>
</tr>
<tr>
<td>H2 3. “We prove direct environmental responsibility by consuming products with green packaging.”</td>
<td>4.04</td>
</tr>
<tr>
<td>H2 4. “Companies using green technologies must advertise it more intensely in order to bring it into the attention of consumers.”</td>
<td>4.08</td>
</tr>
<tr>
<td>H3 5. Please rate the importance to you of environmental responsibility.</td>
<td>4.51</td>
</tr>
<tr>
<td>H3 6. Please rate the importance to you of using products with green packaging.</td>
<td>4.22</td>
</tr>
<tr>
<td>H3 7. Please rate the importance to you of companies’ environmental responsibility.</td>
<td>4.45</td>
</tr>
<tr>
<td>H3 8. Please rate the importance to you of consumers’ environmental responsibility.</td>
<td>4.56</td>
</tr>
<tr>
<td>H4 9. “Education on environmental responsibility must be acquired early in the family.”</td>
<td>4.49</td>
</tr>
<tr>
<td>H4 10. “Education on environmental responsibility must be acquired in school, starting with the first years.”</td>
<td>4.56</td>
</tr>
<tr>
<td>H4 11. “Universities must be directly involved in education on environmental responsibility through: curriculum, projects, eco-campus, etc.”</td>
<td>3.96</td>
</tr>
</tbody>
</table>

* Note: n = 142, Confidence interval for mean = 95%.

The respondents are neutral regarding the veracity of the advertising for PlantBottle® packaging of the Dorna brand, and they are also neutral regarding the consumption of water bottled in this type of packaging as a result of being informed about the existence of the concept. The respondents agree with both statements regarding direct personal environmental responsibility by consuming products with green packaging and regarding the necessity for companies using green technologies to intensify their efforts in promoting that. It is noticeable that the respondents consider the use of products with green packaging to be at least important and the issues referring to personal environmental responsibility and companies’ and consumers’ environmental responsibility to be very important. Also, the results prove the fact that education on environmental responsibility must be a combination of both education in the family and institutionalized education that starts at primary school and continues up to the university level.

The horizontal analysis was completed by the vertical analysis, using as methodology the bivariate chi-square ($\chi^2$) test and Pearson parametrical correlations. In Table 4 are structurally presented the results, for which a statistical significance level of at least 95% was recorded (except A5 and B1 with a statistical significance level of 92%).
Table 4. The vertical analysis results (bivariate chi-square ($\chi^2$) test).

<table>
<thead>
<tr>
<th>Hypothesis of Bivariate Chi-Square ($\chi^2$) Test</th>
<th>$\chi^2$</th>
<th>df</th>
<th>Sig</th>
<th>$\chi^2$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistically, there are no significant differences depending on the level of education, referring to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1. The importance of using products with green packaging (H3)</td>
<td>8.89</td>
<td>3</td>
<td>0.031</td>
<td>9.35</td>
<td>H0 is accepted</td>
</tr>
<tr>
<td>A2. The importance of consumers’ environmental responsibility (H3)</td>
<td>5.68</td>
<td>2</td>
<td>0.059</td>
<td>5.99</td>
<td></td>
</tr>
<tr>
<td>A3. Education on environmental responsibility must be acquired in school, starting with the first years. (H4)</td>
<td>9.06</td>
<td>2</td>
<td>0.011</td>
<td>9.21</td>
<td></td>
</tr>
<tr>
<td>A4. Education on environmental responsibility must be acquired early in the family. (H4)</td>
<td>8.94</td>
<td>3</td>
<td>0.030</td>
<td>9.35</td>
<td></td>
</tr>
<tr>
<td>A5. We prove environmental responsibility by consuming products with green packaging. (H2)</td>
<td>8.11</td>
<td>4</td>
<td>0.088</td>
<td>7.78</td>
<td></td>
</tr>
<tr>
<td>A6. Universities must be directly involved in education on environmental responsibility through: curriculum, projects, etc. (H4)</td>
<td>10.86</td>
<td>4</td>
<td>0.028</td>
<td>11.14</td>
<td></td>
</tr>
<tr>
<td>Statistically, there are no significant differences depending on the position of being an active member in environmental campaigns, referring to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1. The importance of personal environmental responsibility (H3)</td>
<td>4.99</td>
<td>2</td>
<td>0.087</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>B2. The importance of companies’ environmental responsibility (H3)</td>
<td>10.39</td>
<td>3</td>
<td>0.016</td>
<td>9.35</td>
<td>H0 is rejected</td>
</tr>
<tr>
<td>B3. The importance of consumers’ environmental responsibility (H3)</td>
<td>7.21</td>
<td>2</td>
<td>0.027</td>
<td>7.38</td>
<td>H0 is accepted</td>
</tr>
<tr>
<td>B4. PlantBottle® packaging really contains up to 30% plants. (H1)</td>
<td>9.76</td>
<td>4</td>
<td>0.045</td>
<td>9.49</td>
<td>H0 is rejected</td>
</tr>
<tr>
<td>B5. We prove environmental responsibility by consuming products with green packaging. (H2)</td>
<td>11.38</td>
<td>4</td>
<td>0.023</td>
<td>11.14</td>
<td>H0 is rejected</td>
</tr>
<tr>
<td>B6. Universities must be directly involved in education on environmental responsibility through: curriculum, projects, etc. (H4)</td>
<td>14.41</td>
<td>4</td>
<td>0.006</td>
<td>18.47</td>
<td>H0 is accepted</td>
</tr>
<tr>
<td>Statistically, there are no significant differences depending on the specialization, referring to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1. Knowing the PlantBottle® concept (H1)</td>
<td>24.32</td>
<td>8</td>
<td>0.002</td>
<td>26.13</td>
<td>H0 is accepted</td>
</tr>
<tr>
<td>C2. PlantBottle® packaging really contains up to 30% plants. (H1)</td>
<td>64.21</td>
<td>32</td>
<td>0.001</td>
<td>62.49</td>
<td>H0 is rejected</td>
</tr>
<tr>
<td>Statistically, there are no significant differences depending on the form of education, referring to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1. The importance of consumers’ environmental responsibility (H3)</td>
<td>6.40</td>
<td>2</td>
<td>0.041</td>
<td>5.99</td>
<td>H0 is rejected</td>
</tr>
</tbody>
</table>
5. Discussion

These results highlight that:

- There are differences depending on the level of education, i.e., Bachelor of Science or Master of Science, referring to personal responsibility for using products with green packaging;
- The position of being an active member in environmental campaigns differs significantly referring to personal environmental responsibility, companies’ environmental responsibility, and the credibility of the advertisement stating that “PlantBottle® packaging really contains up to 30% plants.”;
- There are significant differences depending on the specialization of the respondents referring to the credibility of the PlantBottle® advertisement; and
- There are significant differences depending on the form of education referring to the importance of consumers’ environmental responsibility.

After testing the hypotheses, the Pearson parametrical values identify direct correlations of medium intensity between the following items from the questionnaire (being considered only those with a statistical significance level of at least 99%):

a. The importance of using products with green packaging and the importance of personal environmental responsibility = 0.521;
b. The importance of companies’ environmental responsibility and the importance of personal environmental responsibility = 0.450;
c. The importance of using products with green packaging and the importance of companies’ environmental responsibility = 0.470; and
d. The importance of companies’ environmental responsibility and the importance of consumers’ environmental responsibility = 0.463.

Hypothesis H$_1$ was tested on a segment of young consumers attending university, according to the sample structure. The result is that, for this type of consumer, the hypothesis is validated by the medium scores that prove the respondents’ neutrality for statements No.1 and 2 in Table 3. Testing this hypothesis by using the bivariate chi-square ($\chi^2$) test customizes the profile of the investigated consumer type for whom the hypothesis is validated: attends a specialization with a curriculum that lacks specific or related subjects to environmental responsibility; is in the first years of Bachelor of Science studies; attends a form of education with tuition; and is not an active member of environmental campaigns. The validation of H$_1$ confirms that the results are consistent with other recent studies that state that consumers still lack a strong green culture.

Referring to hypothesis H$_2$, the hypothesis is validated by both the medium scores that prove agreement with statements No. 3 and 4 in Table 3 and the direct correlations of medium intensity between the variables previously mentioned at the reference points b, c, and d.

Referring to hypothesis H$_3$, the hypothesis is validated by both the medium scores that prove agreement with statements No. 2, 5, 6, 7, and 8 in Table 3 and the direct correlations of medium intensity between the variables previously mentioned at the reference point a. Therefore, our results are in line with the findings of the considered scientific references: the causative relation between, on the one hand, a high level of education and awareness and, on the other hand, green purchasing and environmentally responsible behaviour.

Referring to hypothesis H$_4$, the hypothesis is validated by the medium scores that prove agreement with statements No. 4, 9, 10, and 11 in Table 3. The hypothesis is also validated by the horizontal analysis results: only 50% of the respondents know of the PlantBottle® concept, only 30% from TV advertisements and only 6% from internet ads, while the main source of information is the package itself (43.4%). Thus, our results are set in the same area of current studies that emphasize the need to intensify efforts to inform, raise awareness, and educate on environmental responsibility.
6. Conclusions

This article, which engages with current research trends of interest for both the scientific community and businesses, offers an integrative vision on green marketing’s roles in supporting sustainability by informing, raising awareness, educating, and changing consumer behaviour and highlights the results of research on the use of PlantBottle® green packaging as a green marketing tool with catalytic role in the environmental responsibility of young consumers in Romania.

The research, through the novelty of the subject investigated in a country that has only recently become preoccupied with sustainability issues, fills in a gap in a relatively limited research area regarding green marketing’s roles, especially in countries with a similar situation in terms of sustainable development, where green culture is still developing. The results of this research are in line with another survey conducted in Romania [51], which outlines that the advantages of ecological packaging should be communicated to change the attitude and behaviour of the consumer towards sustainability, considering the long-term impact that nonenvironmental packaging has on the environment and human health. An interesting insight reveals that green marketing factors that encourage entrepreneurial actions among young people differ from those that are pro-social towards society as a whole, as reflected in research conducted by Shepherd and Patzelt [64].

Another point is the representativeness of the respondents (students and young consumers) in terms of their role in society, as they are future key change agents towards generalized sustainable consumer behaviour.

One of the main limitations of this study is the sample, which calls for caution in assessing its replicability in larger samples of Romanian consumers.

We also consider the validation of the research hypotheses to be important. The research results must be considered while taking into account the limitations induced by the relatively small scale (regarding the size and the coverage of the sample and the tested variables) of the research’s design and implementation.

This paper, by its integrative vision and novelty, can become a landmark with major implications for:

- managers and ecopreneurs, to acknowledge the positive impact of green marketing and to use the green marketing mix with the aim of reaching business profitability objectives, but also to inform, raise awareness, educate, and change consumer behaviour, especially in countries that, similarly to Romania, have recently become preoccupied with sustainability;
- educators, to acknowledge the importance of education on environmental responsibility, and to adapt the educational system to the new requirements by introducing into the curriculum at all levels aspects regarding sustainability and environmental responsibility, both as related subjects and new subjects, and by developing educational projects in partnership with businesses and civil society (particularly, we consider important the implications for educators in marketing subjects); and
- researchers, to continue to deepen and widen the theoretical and applicative research directions that were opened by the present research by diversifying and extending the research tools for, and the different perspectives and approaches to, such a complex subject.

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