



ASSOCIAÇÃO DE POLITÉCNICOS DO NORTE (APNOR)

INSTITUTO POLITÉCNICO DE BRAGANÇA

**Exploring Sustainable Consumer Behavior among Young Adults: A
Comparative Study Between Georgia and Portugal**

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Management

Supervisors:

Paula Odete Fernandes, PhD

Tamta Mamulaidze, PhD

Bragança, June, 2025.



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Abstract

This study investigates how different factors influence the decisions of 18- to 35-year-old consumers toward sustainability in Georgia and Portugal. It examines the various elements that shape sustainable consumer behavior, including education, government support, cultural values, and trust in green marketing. Sustainability has become a global priority, and recent research suggests that consumer behavior toward sustainable products is strongly influenced by the effectiveness of green marketing especially when it aligns with consumer values on environmental responsibility.

Georgia is promoting green growth through initiatives like the Batumi Initiative on Green Economy (BIG-E), which supports sustainable practices in agriculture, tourism, and small businesses. In Portugal, sustainable consumerism continues to grow, supported by public awareness and targeted green marketing strategies.

Using a mixed-methods approach combining survey responses from 261 participants and 14 semi-structured interviews, the study found that while both Georgian and Portuguese youth show interest in sustainable choices, Portuguese respondents were more likely to trust green marketing, actively seek sustainability information, and perceive government support more positively. In contrast, Georgian participants expressed greater levels of skepticism and obstacles related to price and product accessibility. Education was recognized as an important influence in cultivating favorable attitudes toward sustainability in both contexts. These results offer practical ideas for firms and policymakers looking to encourage more sustainable consumption habits in both nations.

Keywords: Sustainable consumer behavior, green growth, Georgia, Portugal, young adults.

Resumo

Este estudo investiga como diferentes fatores influenciam as decisões de consumidores com idades entre 18 e 35 anos em relação à sustentabilidade na Geórgia e em Portugal. Examina os diversos elementos que moldam o comportamento de consumo sustentável, incluindo a educação, o apoio governamental, os valores culturais e a confiança no marketing verde. A sustentabilidade tornou-se uma prioridade global, e pesquisas recentes sugerem que o comportamento do consumidor em relação a produtos sustentáveis é fortemente influenciado pela eficácia do marketing verde especialmente quando este está alinhado com os valores dos consumidores sobre responsabilidade ambiental.

A Geórgia está promovendo o crescimento verde por meio de iniciativas como a Iniciativa de Batumi para a Economia Verde (BIG-E), que apoia práticas sustentáveis na agricultura, turismo e pequenas empresas. Em Portugal, o consumo sustentável continua a crescer, impulsionado pela conscientização pública e estratégias de marketing verde direcionadas.

Utilizando uma abordagem de métodos mistos, combinando respostas do questionário de 261 participantes e 14 entrevistas semiestruturadas, o estudo concluiu que, embora os jovens da Geórgia e de Portugal demonstrem interesse por escolhas sustentáveis, os participantes portugueses mostraram maior confiança no marketing verde, procuraram ativamente informações sobre sustentabilidade e perceberam o apoio governamental de forma mais positiva. Em contraste, os participantes georgianos expressaram níveis mais elevados de ceticismo e enfrentaram obstáculos relacionados ao preço e à acessibilidade dos produtos. A educação foi reconhecida como uma influência importante na formação de atitudes favoráveis à sustentabilidade em ambos os contextos. Estes resultados oferecem ideias práticas para empresas e formuladores de políticas que desejam incentivar hábitos de consumo mais sustentáveis em ambos os países.

Palavras-chave: Comportamento do consumidor sustentável, crescimento verde, Geórgia, Portugal, jovens adultos.

აბსტრაქტი

ეს კვლევა იკვლევს სხვადასხვა ფაქტორების გავლენას 18-დან 35 წლამდე ასაკის მომხმარებელთა მდგრადობისკენ მიმართულ გადაწყვეტილებებზე საქართველოში და პორტუგალიაში. იგი განიხილავს იმ ელემენტებს, რომლებიც აყალიბებს მდგრად მომხმარებლურ ქცევას, მათ შორის განათლებას, სახელმწიფო მხარდაჭერას, კულტურულ ღირებულებებს და მწვანე მარკეტინგისადმი ნდობას. მდგრადობა გლობალური პრიორიტეტია და ბოლო კვლევები აჩვენებს, რომ მომხმარებელთა ქცევაზე მდგრადი პროდუქტების მიმართ ძლიერ გავლენას ახდენს მწვანე მარკეტინგის ეფექტურობა განსაკუთრებით მაშინ, როცა ის შეესაბამება მომხმარებელთა ღირებულებებს გარემოსდაცვითი პასუხისმგებლობის შესახებ.

საქართველო უწყობს ხელს მწვანე ზრდას ინიციატივებით, როგორცაა ბათუმის ინიციატივა მწვანე ეკონომიკაზე (BIG-E), რომელიც მხარს უჭერს მდგრად პრაქტიკებს სოფლის მეურნეობაში, ტურიზმსა და მცირე ბიზნესში. პორტუგალიაში მდგრადი მოხმარება განაგრძობს ზრდას, რაც განპირობებულია საზოგადოებრივი ცნობიერებით და მიზნობრივი მწვანე მარკეტინგის სტრატეგიებით.

მრავალმხრივი მეთოდოლოგიის გამოყენებით, რომელიც აერთიანებს 261 მონაწილესთან ჩატარებულ გამოკითხვას და 14 ნახევრადსტრუქტურირებულ ინტერვიუს, კვლევამ აჩვენა, რომ მიუხედავად იმისა, რომ საქართველოსა და პორტუგალიის ახალგაზრდები გამოხატავენ დაინტერესებას მდგრადი არჩევანის მიმართ, პორტუგალიელი რესპონდენტები უფრო მეტად ენდობიან მწვანე მარკეტინგს, აქტიურად ეძებენ ინფორმაციას მდგრადობაზე და პოზიტიურად აფასებენ სახელმწიფო მხარდაჭერას. ხოლო ქართველმა მონაწილეებმა გამოხატეს მეტი სკეპტიციზმი და შეზღუდვები ფასისა და პროდუქციის ხელმისაწვდომობის მხრივ. განათლება აღიარებულია როგორც მნიშვნელოვანი ფაქტორი, რომელიც ხელს უწყობს მდგრადობისადმი დადებითი დამოკიდებულების ჩამოყალიბებას ორივე ქვეყანაში. ეს შედეგები წარმოადგენს პრაქტიკულ იდეებს კომპანიებისა და პოლიტიკის შემუშავებლებისთვის, რომლებიც ცდილობენ წახალისონ უფრო მდგრადი მოხმარების ქცევები ორივე სახელმწიფოში.

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Acronyms

CSR - Corporate Social Responsibility

ECOCIDADANIA - Environmental Citizenship Education Program in Portugal

EEM - Environmental Education Methods

ESD - Education for Sustainable Development

EU - European Union

GDP - Gross Domestic Product

GEN Y - Generation Y (also known as Millennials)

H - Hypothesis

M - Mean

M-GEO - Mean Georgia

M-POR - Mean Portugal

NGO - Non-Governmental Organization

OECD - Organization for Economic Co-operation and Development

SCT - Social-cognitive theory

SD - Standard Deviation

SDGs - Sustainable Development Goals

SO - Specific Objective

SPT - Social practice theory

SQ - Sub-questions

TPB - Theory of Planned Behavior

UNEP - United Nations Environment Program

UNESCO - United Nations Educational, Scientific and Cultural Organization

VAG - Value-Action Gap

VBN - Value-Belief-Norm

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Introduction

In the modern world, sustainable development is no longer just a concept, but one of the most pressing and important issues. Climate change, pollution, ecological challenges, and resource depletion are quite popular issues today, and solving these problems requires special attention. In this process, the deepening and promotion of sustainable approaches by businesses and governments plays a special role, as does consumer behavior. The relationship between consumer behavior and sustainability is a study that discusses and analyzes how consumers make decisions about whether to be sustainable, and whether to consume sustainable products or not.

The study intends to examine the sustainable consumption behaviors of consumers aged 18-35, both in Georgia and in Portugal, within two different cultural and economic contexts. The age group on which the study focuses is considered the social force most open and willing to adopt new environmental practices. However, this age group faces several obstacles, such as high prices, product accessibility, and lack of information about green initiatives. Despite the fact that Georgia and Portugal are geographically far from each other, both countries face the following challenges: encouraging sustainable consumption and creating and understanding ecological responsibility among the population. The aim of this study is to understand how the actions of people aged 18-35 in Georgia and Portugal are determined in terms of sustainable consumption.

The paper will look at what encourages or, conversely, prevents young people from selecting ecological products. For some, the item is too expensive, while for others, the misleading labels are unreliable. Some customers make their purchasing decisions based on family influence, while others do so based on personal preference. Clarifying these contentious issues will assist us in identifying the primary obstacles and how to overcome them.

The research also aims to investigate the impact of education, access to information, and environmental awareness in general on these age groups. It is also critical to investigate the influence of domestic policies and initiatives on consumer behavior. Consumers may not be aware of the actions the country is taking in this direction, which might be one reason for their uneco-friendly decisions.

The study will employ mixed research techniques to investigate the subtleties and extra obstacles present in each nation. These approaches will enable an impersonal evaluation of concerns such as the influence of education, the effect of green initiatives, and the function of the state. The research will utilize data gathered in both Georgia and Portugal, allowing for a comparative analysis of the two nations. The study's goal is not only to depict the previous and current circumstances, but also to propose how the situation may be improved and what steps are required to make education more accessible to young people.

In contemporary research, researchers are increasingly using combined research methods. This involves a synthesis of quantitative and qualitative methods. The use of this approach is quite effective in this particular study, since the topic concerns the comparison of two socially and economically diverse countries, as well as countries with different cultural and historical backgrounds. Using a quantitative method, it will be possible to identify broad public opinions, behaviors and trends in both Georgia and Portugal. The qualitative method, which includes face-to-face interviews, in-depth analysis of the situation, allows us to see cultural factors that may go beyond the scope of a single analysis. A comparative analysis of Georgia and Portugal using combined methods provides an opportunity to take into account both structural factors (economy, education level, demography) as well as human experience and subjective perception.

The present work consists of the following parts. The first part describes the setting in which the research is conducted and this part will provide general information about the research. The second part will explain in detail the methods of data collection and analysis. The third part will discuss the results and also present the conclusions and summary. The final part will present recommendations.

This introduction aims to introduce the reader to what the research is about and what questions it seeks to answer.

The idea of sustainable consumption is widely recognized in academic literature as a strategic response to the challenges associated with social inequality, environmental damage, and overuse of resources. The term is defined as the use of products and services that meet basic human needs while also reducing environmental damage and promoting social equity. Although the concept is quite popular at the theoretical level, it is often noted that it lacks consistent application across disciplines and cultural contexts, as well as a precise definition.

1. Theoretical background

1.1. Theoretical Frameworks for Sustainable Consumer Behavior

Sustainable consumer behavior is explained as the act of selecting, using, and disposing of products in a way that meets the consumer's needs and at the same time minimizes the harm on society and the environment (McNeill, 2020). Cultural, psychological, and contextual factors drive this type of behavior. Several models try to interpret what motivates people to engage in sustainable behavior. Some of the most popular theories include the Theory of Planned Behavior (TPB), the Value-Belief-Norm Theory (VBN), as well as social cognitive and social practice theories. While these theories provide interesting insights, they have limitations and gaps in explaining the consistent discrepancy between consumers' intentions and their actual behavior.

The Theory of Planned Behavior (TPB) has been broadly used in sustainability research, notably in studies related to the purchase of green products. According to this theory, behavioral intention is influenced by three main factors: the individual's sense of control over the action, social pressure, and attitude toward the behavior (Syed et al., 2024). In the context of sustainability, the theory suggests that if a consumer perceives that a sustainable behavior is valuable, socially approved, and achievable, person is more likely to engage in it. While the TPB is quite effective in explaining consumer intentions, in many cases it is inadequate in predicting actual behavior. This so-called "intention-behavior gap" is particularly evident among younger consumers, who may theoretically support sustainability but find it difficult to implement in practice due to barriers such as high prices or product availability (Syed et al., 2024).

Value-Belief-Norm (VBN) theory has been introduced as an alternative model to enhance behavioral prediction. This model proposes that behavior is motivated by moral responsibility, which is derived from a person's values and beliefs about environmental issues. When individuals are motivated by environmental values and believe that their actions will make a difference, they may feel a personal obligation to act sustainably (Kasim, 2022). VBN offers promising insights into the intrinsic motivation for sustainable consumption, particularly in populations with high environmental awareness, but its effectiveness is limited by factors such as affordability or product accessibility. As Said et al. (2024) point out, values and norms may not be fully implemented if individuals face practical constraints to their implementation or operate in an unfavorable environment.

Another different idea is offered by Social-Cognitive Theory (SCT), which focuses on the interaction between behavior, personal, and environmental influences. In this model, behaviors are determined not only by personal beliefs, but also by learning, observation, and the influence of the social environment

(Hotta et al., 2022). For example, if young people see their peers engaging in similar social responsibilities, such as recycling or using reusable products, they are more motivated to repeat such behaviors. This theory emphasizes the importance of self-efficacy, which is the belief in one's ability to successfully perform a behavior. Although the SCT model introduces cognitive and social components into the discussion, its emphasis on these may neglect the ethical and emotional factors that often influence decision-making (Syed et al., 2024).

Social Practice Theory (SPT) focuses more on collective routines and the broader social environment. SPT argues that behavior is embedded in everyday practices that are shaped by social norms and shared values, and is not simply an individual choice (McNeill, 2020). According to this idea, decisions such as using reusable shopping bags or commuting by car are shaped and shaped by social environments and cultural systems. The theory is useful for understanding how systemic change leads to improvements in established behaviors, such as improving waste infrastructure or transportation. SPT has been criticized for its abstract nature and lack of focus on individual motivations, which makes it difficult to apply in survey-based research (Hotta et al., 2022).

Although these theories differ from each other, they all provide explanations for why positive intentions do not lead to more sustainable actions in consumers. Intentional biases are often observed in young people. Many people have the desire to be more sustainable consumers, but there are barriers and constraints, such as accessibility, cost, or peer influence (Syed et al., 2024; Kasim, 2022). Researchers have increasingly advocated integrated models to address these issues, integrating intrinsic motivation, such as values, personal attitudes, and environmental factors (McNeill, 2020). Such models are considered more relevant in cross-cultural contexts because there are fundamental differences in values, political frameworks, and access to resources.

Generational and cultural factors are recognized as critical variables in shaping consumption behavior. Mixed models are largely based on Western settings and may not be fully achievable and feasible in Georgia or Portugal due to the differences in social structures. Cultural values influence whether individuals prefer personal autonomy in making choices or collective responsibility (Hotta et al., 2022). Generational differences also play a role, as young people have greater access to the Internet, where they are often exposed to environmental campaigns and trends, but they are also more likely to face financial constraints and are vulnerable to making decisions based on convenience (Kasim, 2022).

As a result, it is recommended that existing frameworks be adapted to reflect both intergenerational and cultural differences. For example, young Georgian consumers may face different barriers than young Portuguese consumers due to differences in infrastructure, policy, and education (Hotta et al., 2022; Syed et al., 2024). Such differences clearly illustrate and emphasize the importance of using context-sensitive approaches when studying consumer behavior across countries.

The theoretical models discussed in this section - TPB, VBN, SCT and SPT - offer valuable insights into the drivers of procrastination. However, none of them, individually, can fully explain the obstacles and

motivations that consumers face. Their limitations, particularly about the intention-behavior gap and cultural fit, indicate the need for integrated frameworks. These insights form the basis of this study, which aims to study young procrastinators in Georgia and Portugal and compare various factors between the two countries.

1.2. Green Marketing and Sustainable Purchasing Choices

Green marketing is a strategic approach by which businesses attempt to influence consumer behavior in a sustainable manner. Green marketing is the promotion, distribution, and development of products that take into account environmental conditions, along with communication strategies that communicate the company's commitment to environmental responsibility (Kasim, 2022). For young consumers, it plays a decisive role in shaping purchase intentions, especially if it is consistent with their values and is therefore guided by credible messages (Majeed et al., 2022).

Over the past decade, there has been a growing body of research on how marketing techniques and strategies can encourage sustainable consumption. For example, green packaging, environmental certifications, eco-labels, and environmental-focused advertising. When consumers believe in such marketing messages and believe that a company has environmental responsibility, their attitudes toward sustainable purchases are more positive (Majeed et al., 2022). This is especially true among young people, as they are more responsive to brand values and marketing campaigns, and tend to be more socially engaged in environmental issues (Kasim, 2022).

The effectiveness of green marketing depends not only on the strategies but also on the perceived credibility of the consumer. One important drawback of this practice is the risk of “greenwashing” - this is the practice in which companies spread false information to attract environmentally conscious consumers. Such cases can potentially harm the entire green product category (Syed et al., 2024). To avoid this, marketers emphasize transparency and third-party support, which encourages clear labels, verification, and information in product descriptions (McNeill, 2020). This mechanism helps to fill the information gap, which is often a barrier to decision-making.

Majeed et al. (2022) found that green marketing, when combined with a strong green brand image and environmental awareness, increases green purchases. Their empirical study found that green marketing, advertising, and packaging positively influenced consumers' likelihood of purchasing a green product. They also highlighted the mediating role of consumer attitudes, suggesting that consumers who already have environmental and social responsibilities are more likely to respond positively to green marketing efforts. This suggests that green marketing strategies do not operate in isolation, but rather interact with values and social norms. This is particularly important for young consumers as their purchasing decisions are largely shaped by peer influence, online engagement, and social identity (Kasim, 2022).

Digital media platforms are increasingly being used for green marketing, especially toward younger demographics. Marketing activities such as influencer marketing, social media campaigns, and user-generated content that are relevant to the brand can further strengthen brand awareness and drive long-term customer loyalty (Al-Nuaimi & Al-Ghamdi, 2022). Such approaches help brands to build a stronger emotional connection with younger consumers and foster long-term loyalty.

McNeil (2020) notes that effective green marketing must be context-sensitive. Also, marketing that is successful in one cultural context may not be successful in another.

Consumption norms, local values, and levels of trust play an important role in the interpretation of marketing messages. For example, emotional campaigns and messages related to environmental protection may have a greater impact in an active civil society and in countries with environmental problems, while economic arguments may be more effective in low-income countries. Therefore, marketers are encouraged to tailor their messages to the specific pain points and motivations of target audience groups.

Another factor to consider is the accessibility of green products. Even when consumers are interested in green marketing, this may not lead to actual purchases because the product is expensive. This barrier is particularly popular among young people, who often have limited purchasing power. Research shows that in this case, green marketing should interact with policy measures such as subsidies, tax breaks, or government procurement programs to make green purchases and sustainable choices more accessible (Hotta et al., 2022). Without such structural support, marketing alone may be insufficient to change consumer behavior.

In addition, sustainable consumption and its effectiveness can be increased through partnerships between businesses, educational institutions, and governments. Al-Nuaimi and Al-Ghamdi (2022) argue that sustainable marketing messages are more effective when they are reinforced by consistent training in universities and public institutions. When young consumers are exposed to sustainability through multiple channels - government, educational, and commercial - their likelihood of adopting sustainable habits increases. Such integrated approaches help create a culture of green consumption.

In summary, green marketing is a powerful tool for young people to make sustainable purchases. If it is implemented in a transparent manner and is consistent with consumer values, it can have a positive effect on shaping purchase intentions. Its success also depends on various factors, such as cultural context, education, and political support. For this study, green marketing will be analyzed as a facilitator and barrier in shaping young consumers' choices in Portugal and Georgia, contributing to a deeper analysis of how commercial communication interacts with environmental behavior.

1.3 Education and Awareness as Drivers of Sustainable Consumption

Frequently regarded as essential contributors in stimulating sustainable consumption behavior are education and information access. Greater knowledge of environmental issues and a better grasp of the consequences of unsustainable consumption among young adults significantly affect their will to lead more responsible lives (Al-Nuaimi & Al-Ghamdi, 2022). Particularly when sustainability is included in the curriculum, formal education equips people with the fundamental knowledge and values required to make wise decisions. Equally important in determining consumer attitudes and habits are informal learning channels, including peer influence, digital media, and public awareness campaigns. In scholarly works, education is seen as a basic and transformational factor in sustainable behavior and decision-making. Higher degrees of education, according to Al-Nuaimi and Al-Ghamdi (2022), correlate with more environmental concern and more participation in events. Research finds that education affects both self-efficacy and awareness. This covers the growth of the idea that every action counts. Young consumers, who could feel helpless in the face of environmental challenges, particularly need this conviction.

Educational programs that incorporate environmental education, civic responsibility, and systems thinking have proven to be particularly effective in promoting long-term behavioral change (Kasimi, 2022). For example, students who receive information and structured instruction on environmental issues are more likely to make the connection between personal consumption and global sustainable consumption. Furthermore, McNeil (2020) notes that education can significantly contribute to the development of critical thinking skills, which allows young people not only to not blindly accept the norms of consumption prevalent in society, but also to actively and skeptically evaluate the information provided about the product. Such skills are particularly important in order to resist misleading marketing strategies and so-called “greenwashing” and to be able to make more informed and responsible consumption choices.

Informal educational frameworks play an important role in raising public environmental awareness. Social campaigns, thematic events, and digital media materials provide opportunities to engage the general public in a dialogue on environmental issues. Especially among young people aged 18 to 35, digital platforms are often the main source of information. Social networks, online videos, and messages from influential figures on sustainability spread quickly and reach diverse groups in society (Hota et al., 2022). However, while content disseminated through such media can have a significant impact on consumer attitudes and behaviors, it does not always provide in-depth or accurate information. Some digital content can be superficial or misleading, especially when it is not based on reliable sources or does not convey a coherent and well-considered message.

The impact of education on behavioral change is significantly determined by the social and political-cultural environment in which it is implemented. If sustainable development is a priority for society and

this topic is an integral part of state policy and public discourse, education is much more likely to have a positive impact on citizens (McNeil, 2020).

For example, in Portugal, environmental issues are integrated into the education system and supported by state structures, which contributes to the spread of ecological awareness and the popularization of sustainable behavior. However, in Georgia, environmental education is still at the formative stage, and access to information resources can be relatively limited. Although there is willingness and positive attitude among young people, the lack of necessary support and clear messages often prevents them from developing and strengthening sustainable lifestyles (Hota et al., 2022).

In addition to awareness, the right environmental conditions are essential for achieving behavioral change. While knowledge is an important starting point, it only produces results when it is accompanied by specific opportunities and practical conditions. According to Said et al. (2024), incentives, support mechanisms, and social support are also needed for people to truly take the step toward sustainable choices. For example, even if a student is aware of the importance of reducing plastic use, he or she may still resort to single-use items if environmentally friendly alternatives are either difficult to access or impractical. This example clearly shows that providing information is only the first step and needs to be supported by appropriate infrastructure and government policies, which together create the conditions for the actual formation of sustainable behaviors.

A study by Majid et al. (2022) found that education can enhance the impact of green marketing. They concluded that people with high environmental awareness perceive advertisements and signs that indicate sustainability more positively. They trust such messages more and often rate their credibility higher.

This suggests that informed consumers are able to distinguish real environmental responsibility from superficial or misleading messages. Therefore, when companies are targeting informed groups, such as students or young professionals, advertising should not only be impressive, but also be based on credible and educational content. This improves trust and increases effectiveness.

Cultural context plays a major role in how education and awareness influence people's behavior. In some societies, where collective values are strongly expressed or trust in institutions is low, the impact of education and official campaigns may be less. In such cases, peer support or direct community participation may be more effective (Hota et al., 2022).

It is therefore essential that educational approaches are tailored to local circumstances. For example, in Portugal and Georgia, cultural, historical, and socio-political differences affect how young people perceive sustainable development issues and their willingness to act on the knowledge they have gained. The right strategy must take these differences into account in order to encourage effective and real behavioral change.

Research has shown that participatory and experiential learning methods are particularly effective for behavioral change. For example, volunteering in environmental projects, participating in workshops, or completing practical tasks helps young people to internalize the knowledge they have learned and integrate it into their daily behavior (Al-Nuaimi & Al-Ghamdi, 2022). Such experiences are much more effective than simply receiving theoretical information. When learning requires direct participation, it becomes more engaging and memorable, which in turn increases the chances that young people will actually change their behavior and adopt a sustainable lifestyle.

In conclusion, we can say that education and awareness-raising make an important contribution to young people's attitudes and choices regarding sustainable consumption. However, their impact is not uniform and depends on additional circumstances such as cultural characteristics, access to necessary resources, and existing institutional support.

Information alone cannot ensure behavioral change - for this, real tools, incentives and an appropriate environment are necessary. It is from this perspective that the paper examines how education acts as both a supporting and a potential limiting element on young consumer decisions in the context of Georgia and Portugal.

1.4 Government Policy and Public Campaigns

Government policies are a vital driver of sustainable consumption behavior. Through methods such as subsidies, regulations, taxation, and public awareness, policymakers have the opportunity to encourage environmentally friendly actions and reduce barriers to participation (McNeill, 2020). Young consumers are especially vulnerable to institutional influences and peer norms; thus, policy measures can help to mold long-term behavior. Still, this usually relies on the people's trust, the cultural environment, and the policies' openness and transparency.

Numerous studies have shown that effectively designed environmental protection strategies and policies lead to measurable changes in behavior. Sarkodie and Stresov (2021) found that environmental protection regulations had a positive and significant impact on the use of renewable energy in both developed and developing economies. Similarly, Geng et al. (2022) found that China's environmental tax reform effectively encouraged green purchases, although its positive effect was limited to consumer support. These findings suggest that policy measures alone are not enough; they should be accompanied by public campaigns that inform and guide consumers.

Social campaigns are an additional tool in raising awareness, shaping attitudes, and reinforcing new social norms (Al-Nuaimi & Al-Ghamdi, 2022). In this regard, Testa et al. (2020) argued that such campaigns can activate green self-identity and consumer norms, especially when the messages are socially acceptable and repeated.

It is essential for campaigns to be culturally relevant to be successful. As Heo and Muralidharan (2022) have shown, emotional factors and values have different levels of influence depending on the cultural background of societies. In more individualistic cultures, emotional approaches may be successful and effective, while in collective contexts, messages based on education may be more effective.

In Portugal, environmental education is more widespread and sustainability is institutionalized in public discourse, young people are more involved in green procurement, and they trust government campaigns (Hotta et al., 2022). Initiatives such as energy efficiency subsidies, green public procurement, and recycling programs help to normalize environmentally friendly choices. In contrast, Georgia presents a completely different context. Although awareness among young people is growing, public policies remain fragmented and institutional campaigns are less transparent (Hotta et al., 2022). According to Harianto (2021), state-led initiatives frequently lack a defined vision in many underdeveloped areas, therefore greatly reducing their influence on consumers.

Green marketing, supported by government regulations, plays an important role in influencing consumer behavior. Majid et al. (2022) showed that green marketing worked more effectively when it was supported by trusted institutions. However, as Said et al. (2024) noted, the absence of “green advertising” or inconsistent political messages can undermine trust and weaken the formation of behavioral intentions, even though consumers may have high environmental awareness. When brands are perceived as unreliable and symbolic, they can provoke skepticism and prevent informed choices.

Government-led campaigns and programs mostly have one of their main restrictions is the idea that knowledge alone can inspire action. Although raising awareness is crucial, it is not a prerequisite for activities. People must have motivation, opportunity, practical help, and accessibility in order to turn awareness into action, according to Al-Nuaimi and Al-Ghamdi (2022).

For example, policies that support the use of sustainable transport are effective only when they are accessible. In the case of Georgia, the lack of adequate accessible infrastructure hinders the transition process.

Young people are a critical demographic for development policies, and the generation gap also needs attention, with young people being a particularly critical group due to their long-term influence and influence. They also face barriers such as the impact of conflicting messages in digital media and limited financial resources. According to Kassimi (2022), if policies are unclear or poorly implemented, young people are more likely to become disillusioned. Approaches such as involving young people in policy development and policy dialogues can increase legitimacy and have a positive impact (Al-Nuaimi & Al-Ghamdi, 2022).

McNeil (2020) argued that public policies should be integrated to support sustainable consumption, education, infrastructure, and business practices. Their isolation has a short-term effect, and they should be reinforced with consistent messages, awareness, and everyday experiences. For example, in

Portugal, such campaigns are often linked to public investments such as recycling stations, organic markets, and clean transport, which create a favorable environment for behavioral changes. In Georgia, such links are still in the process of being established.

Finally, a comparison between Georgia and Portugal provides insight into how national contexts affect the success of public policies. In Portugal, a history of environmental governance, civic engagement, and education, similar to that in the EU, has fostered consumer sensitivity to existing initiatives (Hotta et al., 2022). In Georgia, institutional trust is weaker, and efforts are less coordinated. Heo and Muralidharan (2022) suggest that in such cultural contexts, policies should be value-based and implemented through networks of public actors rather than through centralized campaigns.

In conclusion, public campaigns and government policies have a significant impact on consumer behavior when they are aligned with consumer values and supported by infrastructure. Portugal has shown how integrated strategies can bring results, while the challenges facing Georgia highlight the need for context sensitivity. For this study, these contracts will be analyzed to understand how public interventions affect consumer choices in other countries and in the future.

1.5 Youth Engagement - Motivations and Barriers

The role of young people in promoting sustainable consumption has recently been increasingly discussed in both academic and political circles. They will make important decisions in the future and are active consumers today, which allows them to make positive changes in the direction of environmental protection. Although young people's environmental values are often strong, this is not always reflected in their actual behavior. In such cases, we see a gap between what they want and what they actually do (UNDP, 2023). For this reason, it is important to understand what motivates them to make environmental choices, as well as what prevents them from making these choices. One of the main drivers of sustainable consumption among young people is the growing awareness of environmental degradation and climate change.

According to a study by Candan (2022), young people who are characterized by a high sense of responsibility toward the environment are more likely to choose environmentally friendly products. Environmental education, online activism, and the influence of media focused on sustainability increase young people's sensitivity to environmental issues and contribute to the formation of positive attitudes toward "green" behavior (Hong et al., 2024). However, positive attitudes alone do not ensure real behavioral change. The same study showed that despite concern for the environment, practical factors such as convenience, product price, and habitual behaviors often influence young people's daily choices. This suggests that behavioral change cannot be achieved by the presence of values alone additional enabling conditions are needed. Youth participation in sustainable consumption is hampered by various barriers. One of the main obstacles is financial constraints. According to the United Nations Development Program (UNDP, 2023), many young people, especially students and those at the beginning of their

careers, do not have sufficient resources to frequently purchase environmentally friendly, albeit relatively expensive, products. Table 1 summarizes typical obstacles reported in sustainability literature that prevent young consumers from acting in alignment with their values.

Table 1. Common barriers to sustainable behavior among youth.

Barrier	Reported Frequency (%)
Lack of practical opportunities	78
Economic limitations	65
Low emotional engagement	60
Peer pressure and social norms	55
Insufficient environmental education	48
Convenience over sustainability	42

Source: Portus et al. (2024, p.5); OECD (2022, p.6,7).

Although their desire to make ethical choices is high, price and accessibility issues often play a decisive role. This problem is even more pronounced in countries such as Georgia, where economic inequality and a limited choice of green products create additional difficulties (Hota et al., 2022). In addition, the lack of infrastructure, for example, the absence of recycling systems or ecological transport, poses additional obstacles to sustainable behavior change, even when young people are ready for it. Many studies have not fully understood the emotional and psychological aspects of youth engagement in sustainable behavior. Kasimi (2022) points out that many young people experience an overload caused by the scale of environmental problems, which often leads to so-called “sustainability fatigue,” a loss of motivation and cessation of active action. In such a situation, when there is no positive narrative or clear ways to influence individual action, young people may feel the need to be inactive. Although many campaigns correctly emphasize the importance of environmental protection, they often lack specific and achievable recommendations, which ultimately increases apathy and reduces motivation.

Therefore, it is necessary to create communication strategies that present not only the threats, but also the value and positive results of individual efforts. The influence of peer groups and digital communities on young people’s behavior manifests itself in two ways. On the one hand, social media campaigns, influencer engagement, and popular eco-movements often reinforce young people’s sustainable behavior by creating engaging and relatable narratives (McNeil, 2020). On the other hand, digital platforms can become a source of disinformation or encourage superficial actions, for example, when an environmentally friendly product is consumed only once, without considering its full environmental impact (Said et al., 2024).

In such cases, sustainable behavior can become a mere gesture to be performed rather than a value-based practice. Against this background, strengthening digital literacy among young people and providing transparent, reliable information in green branding is particularly important. At the policy level, youth participation in promoting sustainable development should not be limited to receiving information alone. They need to be actively involved in decision-making processes so that policies truly reflect the interests and needs of the younger generation (CCICED, 2024).

Such engagement is based on initiatives that provide them with opportunities to act and collaborate, for example, youth forums, innovative ideas competitions, or eco-projects organized by universities. In this

way, young people are no longer just external observers but become co-authors of sustainable change. However, research indicates that this process is often hampered by systemic barriers, such as ignoring the voice of young people, the symbolic nature of formal engagement, or bureaucratic difficulties (UN DESA, 2023). If these obstacles are not overcome, engagement platforms created for young people may remain without real impact and become a mere formality. Youth engagement in sustainable development varies across cultural and social contexts. For example, in Portugal, sustainability is actively integrated into both education and public policy, providing young people with systematic knowledge and access to resources (Hota et al., 2022). In contrast, in Georgia, similar actions largely rely on initiatives from the non-governmental sector or volunteer groups.

While such a bottom-up approach fosters innovation and local activism, it may lack the clear strategy and broad support that is provided by state policies elsewhere. This is why it is important that approaches to promoting sustainability adapt to regional realities what works in one country does not necessarily mean that it will produce the same results elsewhere (Heo & Muralidharani, 2022). In addition, one of the less discussed challenges is the marketing of youth engagement. Brands and organizations often try to turn young people into communication and sales vehicles rather than real partners in sustainable change. Such a transactional approach rarely fosters deep and long-term engagement (Kandani, 2022). To overcome this trend, engagement models that are based on education, trust, and participation, rather than solely commercial goals, are necessary. Finally, young people have significant potential to become drivers of sustainable consumption, but their behaviors are determined by a complex relationship between motivation and barriers.

Environmental awareness, peer pressure, and digital engagement are strong motivators, but in many cases, this is hindered by practical, emotional, and structural barriers. Based on the examples of Georgia and Portugal, it is clear that young people's behavior is closely linked to their social and institutional environment. In this context, the goal of the study is to analyze under what conditions motivation is transformed into actual behavior and how the gap between awareness and action can be reduced.

1.6 Sustainability Policy, Education, and Consumer Trends in Portugal and Georgia

In parallel with the global response to climate change and climate change, the integration of sustainable development into public policy, education, and consumer culture is gaining momentum. The depth and scope of this integration vary significantly depending on the national context. Portugal, an EU member state with access to institutional support mechanisms, and Georgia, an Eastern Partnership country still undergoing post-Soviet reforms, offer two different models. This subtopic examines how sustainable development is perceived and addressed in the education and policy sectors of both countries and how these frameworks influence consumer behavior. A combined review of the academic literature and national data reveals both progress and gaps in sustainable practice over time.

Portugal has advanced considerably in bringing its educational policy in line with sustainable development ideas. Above the EU average (European Commission, 2024), 86% of Portuguese pupils got environmental education throughout their schooling, according to the Education and Training Monitor 2024. Eco-schools and sustainable development policies help encourage and support environmental education. Portugal's cross-sectoral initiatives connecting sustainable development to employment, creativity, and digital skills provide a foundation for systematic change, according to the OECD Education Policy Review (2023).

Higher education has also adopted the sustainable development agenda. López and Morgado (2023) noted that, although gaps in the standardization of sustainable development remain, Portuguese public universities are increasingly using sustainable development in different disciplines. In a longitudinal study, Amaral et al. (2023) found that while graduate students showed high awareness of sustainability issues, their understanding was limited to issues such as ethical supply chains, life cycle thinking, and the circular economy. This suggests that the depth of student engagement could be further improved, despite the high level of integration at the policy level.

In contrast, Georgia is still developing a comprehensive policy framework for education for sustainable development. Although the country has officially adopted a unified national strategy for education and science for 2022-2030, its implementation is constrained by limited teacher training, infrastructure gaps, and disparities between urban and rural schools (UN Sustainable Development Goals Partnership, 2022). According to the "Top Ten Issues for 2025" report from the Georgia Partnership for Success in Education, sustainable development content is inconsistently addressed and often not considered a priority in the curriculum (GPPEE, 2025). In addition, access to updated educational materials and teacher professional development remains limited.

Still, indicators of advancement exist. Inclusive and sustainability-aligned strategies meant to change education were outlined in the Georgia National Statement of Commitment (UNESCO, 2023) as belonging to the government. Emphasizing vocational training and business contacts as viable choices, the World Bank's Greening Firms in Georgia report (2023) underlined the need to connect education with economic development. But, as Hotta et al. (2022) note, Sustainability in developing countries sometimes lacks coherence because of irregular financing, divided projects, and little stakeholder cooperation.

Education, facilities, and policy support have encouraged young people in Portugal to increasingly adopt sustainable consumption patterns. Alves and Fernandes (2024) found in a study on sustainable wine consumption that environmental and social issues significantly influenced purchasing decisions. According to the People and Planet Report, Portugal's National Youth Plan (2018) promoted sustainable consumption as a form of civic duty and long-term thinking (IMVF, 2022). These findings back McNeill's (2020) claim that more consistent sustainable behavior among young people relies on institutional stability and comprehensive education.

Still, an intentional action gap persists. Students often backed sustainability in principle but did not always practice it in daily decisions owing to price sensitivity, brand preferences, or convenience, observed Amaral et al. (2023). This behavior reflects trends discovered by Syed et al. (2024). Even in rather sophisticated environments, stressed that behavioral intention is often eroded by economic and infrastructural elements. Young consumers in Georgia have extra difficulties stemming from economic limitations and a lack of sustainable goods availability. Affordable living, low awareness of eco-labels, and restricted confidence in institutional claims greatly impede sustainable buying, reports Greening Firms in Georgia (World Bank, 2023). United Nations (2024) evaluations confirmed these trends, pointing out that in Georgia, sustainable consumption is more common among urban, wealthier strata.

Notwithstanding these obstacles, traditional Georgian ways of life include home gardening, low-waste techniques, and multi-use resource habits, hence presenting a special kind of sustainability. However, as UNESCO noted in 2023, these activities are often not classified as 'sustainable', so they restrict their visibility and apparent significance for global sustainability narratives. Cultural framing, as Kasim (2022) said, is very important in determining consumer identity. Sustainability can seem alien or upper-class without localized, culturally relevant messaging, which would lower young people's involvement.

Another contrast emerges in the role of the private sector and green marketing. In Portugal, sustainability branding is increasingly visible, supported by EU regulation and consumer demand. In Georgia, where such branding is still developing, skepticism toward green claims remains high. According to Syed et al. (2024), in contexts with low green literacy, poorly regulated greenwashing can lead to consumer disengagement and loss of trust. Therefore, policy and education need to work in tandem to build both awareness and market accountability.

Portugal's road to sustainability shows how policy consistency, membership in the EU, and educational reform may all lead to noticeable advancement. Its institutions back formal and informal educational programs, and consumers, especially young people, are growing increasingly responsive to sustainability ideas. Still, the gap between knowledge and action endures, especially in light of market complexity and variable behavior modification. Though earlier in its transition, Georgia shows great grassroots promise. Though they must be recognized and encouraged through official systems, cultural practices, and young activism provide other routes to sustainability. Without more institutional coordination, public investment, and trust-building, youngsters in Georgia may find it hard to consistently lead a responsible life even if they are inspired.

The fact that youth are empowered as agents of sustainability remains a common difficulty in both nations. Education alone, as Kasim (2022) and McNeill (2020) underlined, is not adequate. Converting awareness into leadership requires participation, community-based learning, and policy feedback loops. Portugal is slowly institutionalizing this via youth councils and school projects, whereas Georgia still has to transition from pilot programs to nationwide policies with inclusive participation.

Portugal and Georgia offer different yet equally important views on how sustainability is incorporated into governmental educational institutions, policy environments, and young consumption patterns. While Georgia's strength comes from cultural traditions and developing civic involvement, Portugal's advantage derives from institutional alignment, European support, and educational continuity. Portugal struggles with deepening behavioral commitment; Georgia with developing trustworthy infrastructure and trust. This comparative background provides a great basis for the current study's exploration of young adults' interactions with sustainability across these two national contexts.

1.7 Challenges of Translating Sustainable Values into Youth Behavior: A Cross-National Perspective

One of the most pressing challenges in environmental education and public policy is the discrepancy between young people's pro-environmental values and their actual behaviors, a phenomenon often referred to as the "value-action gap" (VAG). This gap is evident across various educational settings and national contexts, influenced by a complex interplay of structural, cultural, and psychological factors.

Portus et al. (2024) conducted a semi-systematic review of literature that explicitly connects value-action gap thinking with environmental education research. Their findings highlight that while educational initiatives have successfully fostered environmental awareness and values among students, these do not consistently translate into pro-environmental behaviors. The review emphasizes the need for educational strategies that not only impart knowledge but also address the emotional and behavioral dimensions of sustainability education.

Bernardes et al. (2018) investigated the sustainability attitude-behavior gap among Generation Y consumers in Portugal. According to their study, despite having a favorable attitude toward sustainability, actual sustainable purchasing choices were restricted. Factors such as convenience, price sensitivity, and a lack of knowledge were identified as obstacles to converting intentions into action.

Torres et al. (2023) did an exploratory study on environmental connectedness, awareness, and behavior among Portuguese university students. According to the study, while students have a strong environmental awareness, this does not always translate into regular pro-environmental actions. According to the report, boosting emotional attachment to environmental challenges and offering concrete engagement opportunities are critical for bridging the value-action gap.

The ECOCIDADANIA environmental education program, which targets young people in Portugal's rural communities, was assessed by Silva et al. (2023). The initiative prioritized participatory activities to promote environmental awareness and citizenship. The results showed that community-based educational programs like this can successfully increase environmental awareness and encourage behavioral change among young participants.

The OECD (2022) research on young people's environmental sustainability competence provides a broader international viewpoint. The paper lists emotional, cognitive, behavioral, and attitudinal components as important aspects of environmental competency. It stresses that educational institutions must incorporate these characteristics in order to properly foster pro-environmental habits in youngsters.

Friedl and Steininger (2020) advocate for the democratization of climate change education as a strategy to close the value-action gap. They promote educational strategies that encourage kids to engage in sustainability projects actively, instilling a feeling of agency and responsibility that converts ideals into action.

Talking about the difference between what young people believe and what they do needs various approaches that include changes in education, getting communities involved, and making new policies. By combining thinking, feelings, and actions into lessons about sustainability and offering hands-on ways to get involved.

2. Research Methodology

2.1 Objective of the Study and Research Hypotheses

The objective of the current study has been to examine and compare sustainable consumption behavior among young adults aged 18 to 35 in Portugal and Georgia. Emphasis has been placed on identifying how environmental attitudes, education, cultural values, green marketing trust, policy awareness, and demographic factors influence sustainable purchasing decisions. The study has also aimed to investigate the extent to which motivations, knowledge, and structural limitations determine actual behavior across both countries.

Despite widespread awareness of environmental issues, the value-action gap, where consumers' pro-environmental attitudes do not translate into actual behavior has remained persistent (Starita, 2023). Structural barriers, psychological resistance, and limited self-efficacy have been identified as obstacles to behavior change (Gifford, 2011). Given their increased exposure to sustainability narratives but variable behavioral alignment (Fischer et al., 2024), investigating this gap among young people has been deemed especially crucial.

A cross-country comparison between Georgia and Portugal has been made since cultural context and economic systems both influence sustainable consumption. The study has followed a five-stage consumer decision-making framework (Munthiu, 2013; Hasan, 2020), which includes: (1) awareness of environmental issues, (2) information search, (3) evaluation of alternatives, (4) purchase decision, and (5) post-purchase reflection. Additionally, the study explores how perceived barriers to sustainable consumption differ across countries, with particular attention to whether high prices are more commonly mentioned in Georgia and distrust in eco-labels in Portugal, based on insights from the qualitative interviews.

The following research sub-questions (SQ) have been formulated:

1. Do Portuguese youth engage more consistently in sustainable behavior than Georgian youth? (SQ1)
2. How does awareness of government sustainability policies influence behavior? (SQ2)
3. To what extent does trust in green marketing affect purchasing behavior? (SQ3)
4. How does information-seeking behavior predict sustainable purchases? (SQ4)
5. Does belief in the role of education affect eco-conscious purchasing? (SQ5)
6. Are country-level cultural or structural factors moderating key relationships? (SQ6)

7. Do education and income levels moderate relationships between predictors and behavior? (SQ7)
8. Are there significant differences in sustainability perceptions between countries? (SQ8)
9. Does the value-action gap manifest differently between Georgia and Portugal? (SQ9)
10. Are motivations and barriers contextually different in both countries? (SQ10)

To guide the empirical research, the following hypotheses (H) have been proposed:

H1: Higher awareness of government sustainability initiatives positively correlates with sustainable consumption behavior.

H2: There is a relationship between trust in green marketing campaigns and sustainable consumption behavior.

H3: Awareness of government sustainability initiatives predicts sustainable behavior more strongly in Portugal than in Georgia (moderation by country).

H4: Trust in green marketing has a stronger positive effect on behavior in Portugal than in Georgia (moderation by country).

H5: The influence of education on sustainable consumption behavior is stronger in Georgia than in Portugal (moderation by country).

H6: Education level does not significantly moderate the relationship between awareness and sustainable behavior.

H7: Income level does not significantly moderate the relationship between key predictors (e.g., awareness, trust) and behavior.

H8: There are differences in levels of government awareness, trust, and education perception between Portuguese and Georgian young adults.

H9: There are differences in purchase frequency between Portuguese and Georgian youth.

To support the overall aim of the study, four specific objectives (SO) were established:

SO1: To compare sustainable consumption behavior between Portuguese and Georgian youth.

SO2: To explore the link between information-seeking and eco-friendly purchasing.

SO3: To examine the role of education in shaping sustainable consumption behavior.

SO4: To identify and compare the main perceived barriers to sustainable consumption among young adults in Portugal and Georgia.

2.2 Description of Data Collection

A quantitative and qualitative mixed-methods strategy has been used to tackle the research goals. To guarantee inclusivity, a structured questionnaire has been created in English and translated into Portuguese and Georgian. It includes sections on demographics, sustainability behavior, motivation, perceived barriers, and the five-stage green consumption process.

The survey has been distributed via Google Forms between February 19 and April 18, 2025, using academic mailing lists, student groups, and social media platforms. A total of 261 valid responses have been collected: 130 from Portugal and 131 from Georgia. The sample has included individuals aged 18-35 from diverse educational and income backgrounds. In this regard, and given the data collection procedure, it can be said that a non-probabilistic sampling process was chosen.

Qualitative data have been obtained through 14 semi-structured interviews (7 per country). Interview questions have explored educational influence, government policy perception, and motivational drivers of sustainable behavior. The interviews have provided contextual depth and served to validate survey patterns. Interviewees have been selected using purposive sampling to represent gender, education, and geographic diversity. Interviews have been conducted from the 7th of February, 2025, to the 10th of April, 2025.

Survey items have been informed by previous sustainability-focused consumer behavior studies (e.g., Sharma, 2024; Steinmetz et al., 2024). Constructs such as environmental concern, trust in marketing, and policy awareness have been included using validated Likert-scale items. Questions on motivational and structural barriers have been based on frameworks from Wyrwa et al. (2023) and Fischer et al. (2024).

Ethical clearance has been obtained. Participation has been voluntary, and anonymity assured. The instruments have undergone pre-testing to ensure clarity, and minor revisions have been made.

2.3 Description of Data Analysis

The survey and interview data were processed using SPSS (version 28) and Microsoft Excel to produce statistical results. Cronbach's alpha was calculated to assess the internal consistency of the Likert-scale items measuring sustainable behavior and attitudes in each country. Both descriptive and inferential statistics were employed in the analysis: descriptive statistics to summarize the data, and inferential techniques, including correlation analysis, t-tests, and to examine relationships and test hypotheses. Thematic analysis has been used for interview responses. To ensure the reliability of the Likert-scale questions measuring sustainable attitudes and behaviors, Cronbach's alpha was calculated separately for each country. The reliability of the third section was assessed using Cronbach's alpha. After excluding Q10 and merging Q11 and Q13 due to conceptual overlap, the internal consistency improved significantly. The final alpha values were $\alpha = 0.925$ for Georgia and $\alpha = 0.904$ for Portugal, indicating

excellent reliability for exploratory research and strong internal consistency in measuring sustainability-related constructs across cultures.

The analysis plan is as follows: see Table 2.

Descriptive statistics: Means, standard deviations, and frequencies for socio-demographics and key variables.

T-tests, for independent-samples: Country-level comparisons of attitudes, behavior, and motivation, after verifying that the assumptions of normality and homogeneity of variances were met.

Pearson correlation coefficient: Tests of correlation between trust, awareness, education, belief, and purchasing behavior (H1-H2), after verifying that the necessary assumptions were met.

A 95% confidence interval was assumed for decision-making regarding the research hypotheses. The hypothesis is validated when all the analyzes are statistically significant, and it is partially validated when 50% of the analyzes are statistically significant; otherwise, the research hypothesis is not validated.

Moderation analysis: To explore and test H3-H9, whether the effect of sustainability-related attitudes on eco-purchasing behavior was moderated by variables such as country of residence, education level, or income, a series of moderated linear regressions was conducted using Hayes's PROCESS Macro (Model 1) in SPSS v28. This method is based on ordinary least squares (OLS) linear regression, extended with interaction terms to test moderation effects. Each predictor variable (e.g., awareness, trust) was mean-centered prior to computing the interaction term with the moderator (e.g., Country × Awareness). The dependent variable, sustainable purchase frequency, was treated as continuous. The moderation effect was tested through the statistical significance of the interaction coefficient (β), with change in explained variance (ΔR^2) also reported. Where significant interactions were found, simple slopes analysis was performed using separate linear regressions for each subgroup (e.g., Portugal vs. Georgia). All analyzes were carried out strictly in SPSS and Excel, using no external tools.

Qualitative coding: Interviews analyzed using thematic analysis, categorizing motivation, education impact, and policy views.

The Pearson correlation coefficient interpretation has followed Evans (1996): very weak (.00-.19), weak (.20-.39), moderate (.40-.59), strong (.60-.79), and very strong (.80-1.00).

Table 2. Hypotheses and Specific Objectives: Alignment and Analytical Method.

Hypothesis/Specific Objectives	Statement	Method
H1	Awareness ↔ Behavior	Pearson correlation
H2	Trust ↔ Behavior	Pearson correlation
H3	Country moderates awareness → behavior	Moderation (PROCESS)
H4	Country moderates trust → behavior	Moderation (PROCESS)
H5	Country moderates education belief → behavior	Moderation (PROCESS)

H6	Education does not moderate awareness → behavior	Moderation (PROCESS)
H7	Income does not moderate predictors → behavior	Moderation (PROCESS)
H8	Portugal ≠ Georgia in awareness, trust, education belief	Moderation (PROCESS)
H9	No country difference in purchase frequency	Moderation (PROCESS)
SO1	Portugal ≠ Georgia in consumption	Descriptive analysis
SO2	Info-seeking ↔ Behavior	Descriptive analysis
SO3	Education belief ↔ Behavior	Descriptive analysis
SO4	Perceived barriers differ across countries (price vs. eco-label trust)	Thematic analysis (qualitative interviews)

Source: Author's own elaboration.

The quantitative findings have been supported by thematic interpretation of interviews, strengthening the analysis of structural and motivational barriers.

2.4. Population vs. Sample

Young adults between 18 and 35 living in Portugal and Georgia made up the target group of this study. Given its growing impact on sustainability transitions and its unique consumption patterns, usually formed by digital literacy, social values, and educational exposure (Wyrwa et al., 2023), this population group was chosen. Young consumers are also more likely to be the focus of sustainability campaigns and green marketing efforts, making them a strategically relevant group for research on sustainable consumption. Given the impracticality of surveying the entire population in both countries, a non-probabilistic sampling approach was applied. Particularly to enlist people meeting the age and residency standards, a mix of deliberate and convenience sampling strategies was employed. Reflecting a wide range of educational and professional backgrounds, the sample consisted of people who were available on university mailing lists, social media, and online resources. This method, while not representative of the entire population, allowed for efficient data collection across both countries during a limited time frame.

A total of 261 valid survey responses were collected, 135 from Georgia and 126 from Portugal. Additionally, 14 semi-structured interviews were conducted (7 per country) to deepen understanding of individual perceptions, motivations, and barriers related to sustainable consumption. Though the sample may not be statistically generalizable to all young adults in both nations, attempts were made to include people from various socioeconomic backgrounds, geographic areas, and education levels to improve the rigor of comparative analysis. The size and distribution of the sample were deemed sufficient for the statistical techniques employed in this study, including descriptive analysis, Pearson correlations, t-tests, and moderation analyzes using the Hayes PROCESS macro. According to Hair et al. (2010), samples exceeding 100 participants per group are adequate for detecting medium-sized effects in behavioral research, particularly when inferential statistics and regression models are applied. Thus, while the findings cannot be extrapolated to all young adults in Portugal and Georgia with full certainty, the sample

has been considered appropriate for exploring patterns, relationships, and cultural contrasts in sustainable consumer behavior.

3. Core Research Findings

3.1 Sample Profile

Overall, the survey yielded 261 valid responses, with 135 participants from Georgia (51.7% of the sample) and 126 from Portugal (48.3%). This section describes the demographic and socioeconomic characteristics of the respondents in each country, including their gender, age group, education level, employment status, and income level.

As shown in Table 3, the majority of respondents in both country subsamples were female. In Georgia, 64.4% of respondents were female (n = 87) and 33.3% were male (n = 45), with a small remainder (2.2%, n = 3) preferring not to state their gender. Similarly, the Portuguese sample comprised 69.1% female (n = 87) and 23.0% male (n = 29), with 7.9% (n = 10) opting not to disclose their gender. These figures indicate a higher representation of women in the study in both national groups.

Table 3. Distribution of Respondents by Gender and Country (n = 261).

Gender	Georgia (n=135)	Portugal (n=126)
Male	45 (33.3%)	29 (23.0%)
Female	87 (64.4%)	87 (69.1%)
Prefer not to say	3 (2.2%)	10 (7.9%)
Total	135 (100,0%)	126 (100,0%)

Source: Author's own elaboration.

Concerning age, participants were young adults between 18 and 35 years old in both countries, and the sample was concentrated in the mid-twenties to early thirties age range (Table 4). The dominant age group among Georgian respondents was 25-30 years, accounting for about two-thirds of the Georgia sample (67.4%, n = 91). In Portugal, the 25-30 age group was also the largest, comprising 55.6% of the Portuguese sample (n = 70). Younger adults aged 18-24 made up roughly one-fifth of the Georgian respondents (20.7%, n = 28) but a larger share of the Portuguese respondents (35.7%, n = 45). Meanwhile, participants in the oldest bracket of 31-35 years constituted 11.9% (n = 16) of the Georgia subsample and 8.7% (n = 11) of the Portugal subsample.

Table 4. Distribution of Respondents by Age Group and Country.

Age Group	Georgia (n=135)	Portugal (n=126)
18-24	28 (20.7%)	45 (35.7%)
25-30	91 (67.4%)	70 (55.6%)
31-35	16 (11.9%)	11 (8.7%)
Total	135 (100%)	126 (100%)

Source: Author's own elaboration.

In terms of education level (Table 5), the vast majority of respondents in both countries held a university degree. In the Georgian sample, nearly half (48.9%, n = 66) of participants had a Master's degree and 43.7% (n = 59) had a Bachelor's degree as their highest educational qualification. Only 3.0% (n = 4) of Georgians had attained at most a high school education, and 4.4% (n = 6) held a doctoral degree (PhD). The Portuguese respondents showed a similar educational profile: 39.7% (n = 50) had a Bachelor's degree and an equal proportion (39.7%, n = 50) had a Master's degree. However, a larger portion of the Portugal sample (18.3%, n = 23) had only a high school education, while 2.4% (n = 3) of Portuguese respondents held a PhD.

Table 5. Distribution of Respondents by Highest Education Level and Country.

Education Level	Georgia (n=135)	Portugal (n=126)
High School	4 (3.0%)	23 (18.3%)
Bachelor's Degree	59 (43.7%)	50 (39.7%)
Master's Degree	66 (48.9%)	50 (39.7%)
PhD	6 (4.4%)	3 (2.4%)
Total	135 (100%)	126 (100%)

Source: Author's own elaboration.

Regarding employment status (Table 6), a large majority of the Georgian respondents were employed at the time of the survey. Specifically, 84.4% (n = 114) of Georgians reported being currently employed, whereas 15.6% (n = 21) were not employed. Among Portuguese respondents, about two-thirds were employed (64.3%, n = 81) and one-third (35.7%, n = 45) were not employed. In summary, the Georgian subsample had a higher rate of current employment than the Portuguese subsample.

Table 6. Distribution of Respondents by Employment Status and Country.

Employment Status	Georgia (n=135)	Portugal (n=126)
Yes (Employed)	114 (84.4%)	81 (64.3%)
No (Unemployed)	21 (15.6%)	45 (35.7%)
Total	135 (100%)	126 (100%)

Source: Author's own elaboration.

Table 7 presents the distribution of monthly income levels (in local currency) for the two samples. Georgian respondents were concentrated in the higher income brackets: nearly half of Georgians (46.6%, n = 63) reported a monthly income in the 2001-3000 GEL range, and an additional 29.6% (n = 40) were in the 1001-2000 GEL range. Only 12.6% (n = 17) of Georgians fell into the lowest income bracket (0-1000 GEL), while 11.1% (n = 16) reported earning more than 3000 GEL per month.

In contrast, the Portuguese sample exhibited a more even income distribution across brackets. About one-third of Portuguese respondents (34.1%, n = 43) had monthly incomes up to €1000, 30.2% (n = 38) were in the €1001-2000 range, and 28.6% (n = 36) in the €2001-3000 range. A smaller segment (7.1%, n = 9) of Portuguese participants reported earning above €3000 per month.

Table 7. Distribution of Respondents by Monthly Income and Country.

Monthly Income Range	Georgia (n=135)	Portugal (n=126)
0-1000 (local currency)	17 (12.6%)	43 (34.1%)
1001-2000	40 (29.6%)	38 (30.2%)
2001-3000	63 (46.6%)	36 (28.6%)
3001+	16 (11.1%)	9 (7.1%)
Total	135 (100%)	126 (100%)

Note. Income categories are defined in local currency for each country (Georgian Lari for Georgia; Euro for Portugal).

Source: Author's own elaboration.

3.2 Descriptive Analysis

The distribution of self-reported eco-friendly product purchase frequency was broadly similar in Georgia and Portugal. In both countries, the most common response was "3 - Sometimes," chosen by nearly half of respondents (48.1% in Georgia; 38.9% in Portugal). However, Portuguese young adults showed a slightly greater tendency toward frequent eco-friendly purchasing: about 24.6% of Portuguese respondents reported purchasing eco-friendly products "often" (4) or "always" (5), compared to 16.3% of Georgian respondents. Conversely, a higher proportion of Georgians (35.6%) fell into the lower frequency range ("rarely" or "never") than Portuguese (26.2%). The mean frequency ratings were close for the two groups (M = 2.82, SD = 0.85 in Georgia; M = 2.88, SD = 0.99 in Portugal), indicating that, on

average, respondents in both countries “sometimes” purchased eco-friendly products. These results suggest only minor differences in purchase frequency between the two samples (see Figure 1 for summary statistics). This section addresses Specific Objective 1 (SO1), which aimed to compare sustainable consumption behavior between Portuguese and Georgian youth. Based on the results, only minor differences were observed, suggesting that consumption patterns are broadly similar between the two countries, with slight variations. Therefore, SO1 is considered partially fulfilled. Before conducting further statistical analysis, the internal consistency of the Likert-scale items was examined using Cronbach’s alpha. The analysis included Q9, Q11, Q12, and a merged item combining Q11 and Q13, both addressing government initiative awareness. Question 10 was excluded due to its detrimental impact on reliability. The recalculated Cronbach’s alpha values were $\alpha = 0.925$ for Georgia and $\alpha = 0.904$ for Portugal, indicating excellent internal consistency and supporting the reliability of the adapted scale.

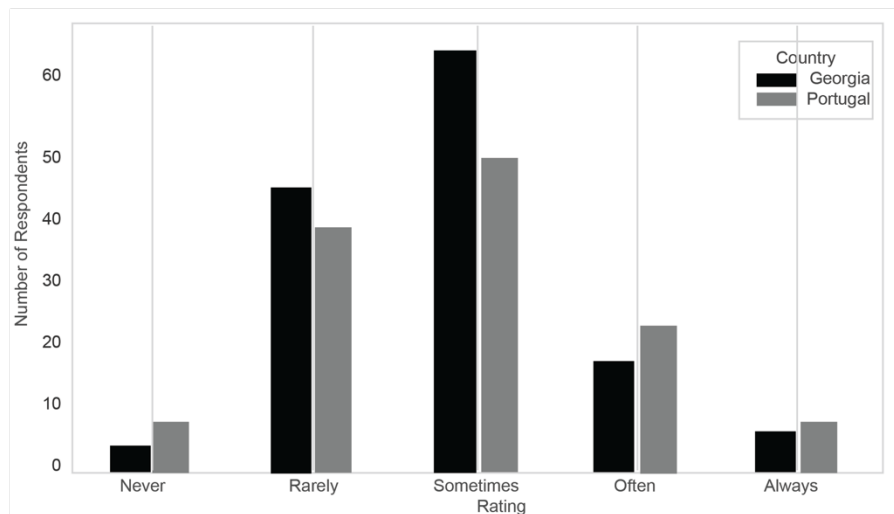


Figure 1. Frequency of eco-friendly product purchases by country.

Source: Author’s own elaboration.

When asked about motivations for choosing sustainable products, respondents from both countries most frequently cited intrinsic or personal benefits (see Table 8). Health-related benefits were the dominant motivator among Georgian young adults (selected by 71.1% of Georgia’s respondents), whereas social responsibility was the top motivator in Portugal (72.2%). Environmental concerns were also highly cited in both groups, mentioned by nearly half of Georgian respondents (48.1%) and about 39.7% of Portuguese. Notably, government incentives played a much larger role for Portuguese consumers (50.0%) than for Georgians (19.3%), suggesting that Portuguese youth are more motivated by policy-driven incentives. Similarly, Portuguese respondents more often reported being influenced by friends/family (34.9% vs. 17.0% in Georgia) and by advertising and marketing (22.2% vs. 11.1%). Only a very small minority in either country indicated no particular motivating factor (< 2%). Overall, while both groups share common drivers like health, environment, and social responsibility, Portuguese young

adults appear more responsive to external incentives and social influences compared to their Georgian counterparts.

Table 8. Motivating Factors for Sustainable Product Choices by Country.

Motivating Factor	Georgia n (%)	Portugal n (%)
Environmental concerns	65 (48.1%)	50 (39.7%)
Health benefits	96 (71.1%)	65 (51.6%)
Social responsibility	79 (58.5%)	91 (72.2%)
Government incentives	26 (19.3%)	63 (50.0%)
Influence from family/friends	23 (17.0%)	44 (34.9%)
Advertising & marketing	15 (11.1%)	28 (22.2%)
Other/None	2 (1.5%)	1 (0.8%)
Total	306 (226,6%)	342 (271,4%)

Note: Respondents could select up to three factors. "Other/None" includes write-in responses indicating no motivating factors.

Source: Author's own elaboration.

The distribution of self-reported eco-friendly product purchase frequency was broadly similar in Georgia and Portugal (see Figure 1). In both countries, the most common response was "3 - Sometimes," chosen by nearly half of respondents (48.1% in Georgia; 38.9% in Portugal). However, Portuguese young adults showed a slightly greater tendency toward frequent eco-friendly purchasing: about 24.6% of Portuguese respondents reported purchasing eco-friendly products "often" (4) or "always" (5), compared to 16.3% of Georgian respondents. Conversely, a higher proportion of Georgians (35.6%) fell into the lower frequency range ("rarely" or "never") than Portuguese (26.2%). The mean frequency ratings were close for the two groups ($M = 2.82$, $SD = 0.85$ in Georgia; $M = 2.88$, $SD = 0.99$ in Portugal), indicating that on average, respondents in both countries "sometimes" purchased eco-friendly products. These results suggest only minor differences in purchase frequency between the two samples (see Table 10 for summary statistics).

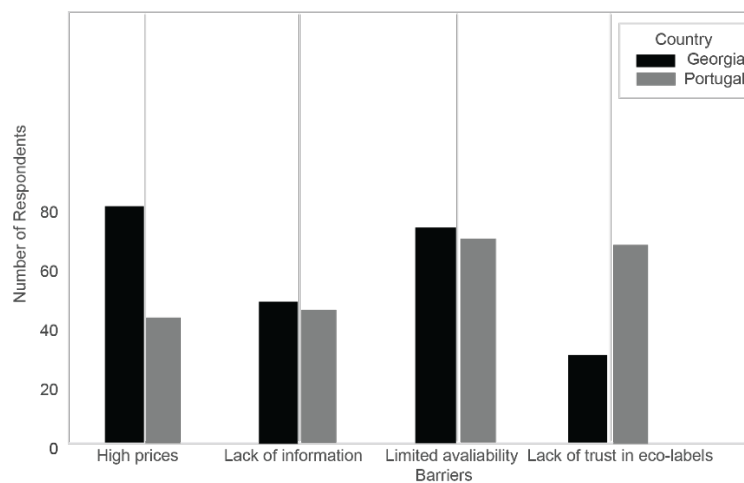


Figure 2. Motivating factors for sustainable consumption.

Source: Author's own elaboration.

When asked about motivations for choosing sustainable products, respondents from both countries most frequently cited intrinsic or personal benefits (see Table 8, Figure 2). Health-related benefits were the dominant motivator among Georgian young adults (selected by 71.1% of Georgia’s respondents), whereas social responsibility was the top motivator in Portugal (72.2%). Environmental concerns were also highly cited in both groups, mentioned by nearly half of Georgian respondents (48.1%) and about 39.7% of Portuguese. Notably, government incentives played a much larger role for Portuguese consumers (50.0%) than for Georgians (19.3%), suggesting that Portuguese youth are more motivated by policy-driven incentives. Similarly, Portuguese respondents more often reported being influenced by friends/family (34.9% vs. 17.0% in Georgia) and by advertising and marketing (22.2% vs. 11.1%). Only a very small minority in either country indicated no particular motivating factor (< 2%). Overall, while both groups share common drivers like health, environment, and social responsibility, Portuguese young adults appear more responsive to external incentives and social influences compared to their Georgian counterparts.

The most prominent barriers to sustainable purchasing differed between Georgian and Portuguese respondents (see Table 9). In Georgia, high prices were by far the most frequently reported barrier (68.1% of respondents), reflecting cost as a key concern. This was followed by limited availability of eco-friendly products (60.0%) and lack of information (40.0%). In contrast, among Portuguese young adults, limited availability was the top barrier (62.9%), closely followed by lack of trust in eco-labels (60.5%). Portuguese respondents were much less likely to cite high prices (only 39.7% did) compared to Georgians, but far more likely to report distrust in eco-friendly claims (60.5% vs. 24.4% in Georgia). Lack of information was a moderate concern in both countries (~40% of respondents in each). These patterns indicate that while Georgian consumers perceive affordability as the biggest hurdle to sustainable consumption, Portuguese consumers are comparatively more concerned with the credibility and availability of green products.

Table 9. Barriers to Purchasing Eco-Friendly Products by Country.

Barrier	Georgia n (%)	Portugal n (%)
High prices	92 (68.1%)	50 (39.7%)
Limited availability	81 (60.0%)	78 (61.9%)
Lack of trust in eco-labels	33 (24.4%)	75 (60.5%)
Lack of information	54 (40.0%)	50 (40.3%)
Total	260 (192,5%)	253 (202,4%)

Note: Respondents could select multiple barriers.

Source: Author’s own elaboration.

Trust in green marketing campaigns was moderate on average in both groups (See Figure 3). The majority of respondents reported a middle-of-the-scale level of trust: about 41.5% of Georgians and 49.2% of Portuguese indicated that they “moderately trust” green marketing (rating 3 out of 5). Few

respondents in either country expressed complete trust in green marketing claims (only ~6-7% gave a rating of 5). Georgian participants were slightly more likely to be skeptical: 31.1% of Georgians reported low trust (rating 1 or 2) compared to 23.8% of Portuguese. Correspondingly, the mean trust rating was essentially neutral in both samples ($M = 2.99$, $SD = 0.96$ in Georgia; $M = 3.05$, $SD = 0.89$ in Portugal; see Table 10). These results suggest a cautiously moderate level of trust in green marketing among young adults in both countries, with Portuguese respondents showing a marginally higher trust on average.

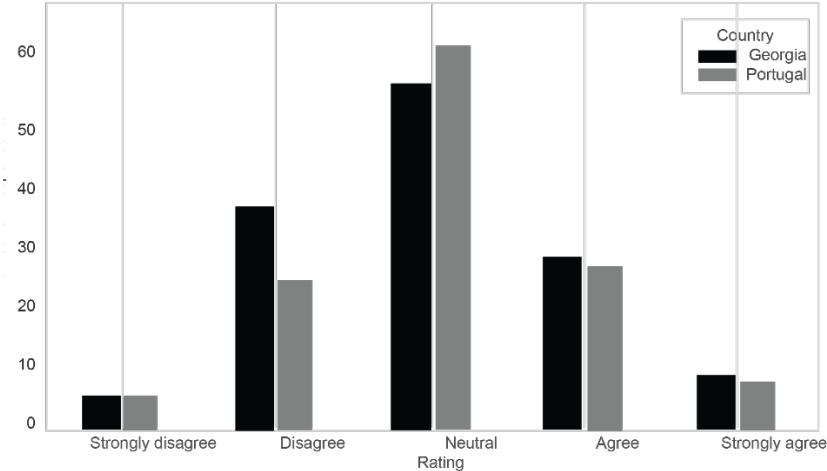


Figure 3. Levels of trust in green marketing campaigns, by country.

Source: Author’s own elaboration.

There were notable cross-country differences in how actively young consumers seek out sustainability information prior to making purchases (See Figure 4). Portuguese respondents reported higher engagement in active information seeking: over 43% of Portuguese youth stated they “often” or “always” seek sustainability-related information before buying, compared to only about 25% of Georgian youth. In Georgia, a substantial proportion indicated that they rarely or never seek such information (34.0% chose 1 or 2 on the scale, vs. 22.3% in Portugal). These differences are reflected in the average ratings: Portuguese participants had a higher mean tendency to research sustainability ($M = 3.33$, $SD = 1.10$) than Georgians ($M = 2.93$, $SD = 1.11$). Thus, Portuguese young adults appear more proactive in gathering information on product sustainability, whereas Georgian young adults are less likely to do so routinely. This section addresses Specific Objective 2 (SO2), which aimed to explore the link between information-seeking behavior and eco-friendly purchasing. The analysis revealed a positive and statistically significant correlation between the two variables. Therefore, SO2 is considered fulfilled.

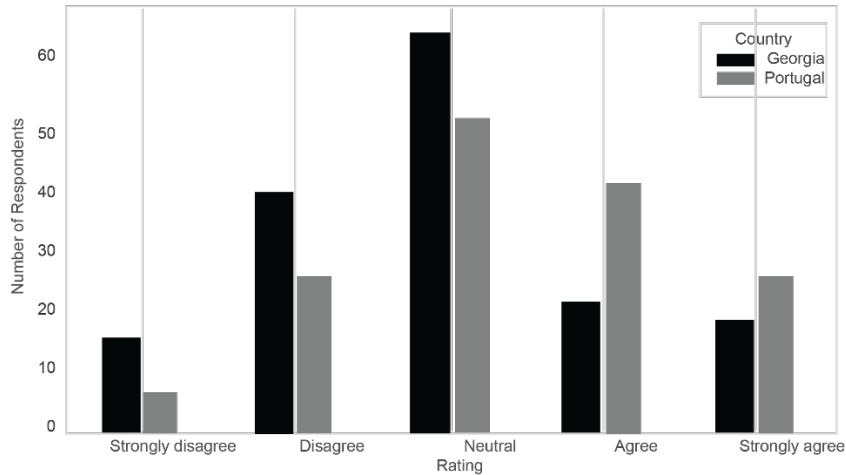


Figure 4. Tendency to seek sustainability information before purchases, by country.

Source: Author's own elaboration.

Both Georgian and Portuguese respondents generally believed that education has an influence on sustainable consumer behavior, as evidenced by skewed responses toward the agree end of the scale (See Figure 5).

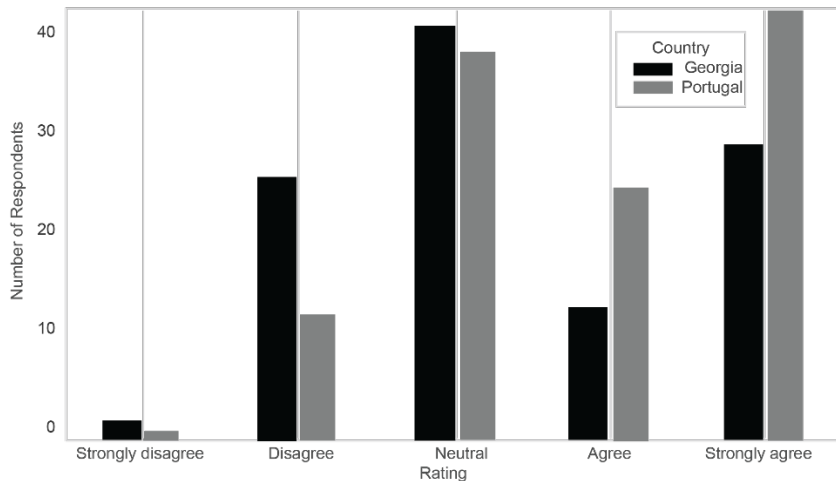


Figure 5. Belief that education influences sustainable consumption, by country.

Source: Author's own elaboration.

Analysing the information in Figure 5, in Georgia, about half (48.9%) agreed or strongly agreed that education influences sustainable consumption, while in Portugal this share was markedly higher (60.3%). In particular, a substantial 34.1% of Portuguese respondents strongly agreed with the role of education (rating 5), compared to 21.5% in Georgia. Very few in either country actively disagreed with this notion.

On average, Portuguese young adults showed stronger agreement ($M = 3.85$, $SD = 1.00$) than their Georgian counterparts ($M = 3.48$, $SD = 1.08$), suggesting a higher conviction in Portugal that educational efforts can shape sustainable consumption habits. This section addresses Specific Objective 3 (SO3), which aimed to examine the role of education in shaping sustainable consumption behavior. The correlation results indicate that belief in education’s influence is positively associated with eco-friendly behavior. Therefore, SO3 is considered fulfilled.

The data revealed a stark contrast in awareness of government initiatives promoting sustainable consumption (see Figure 6).

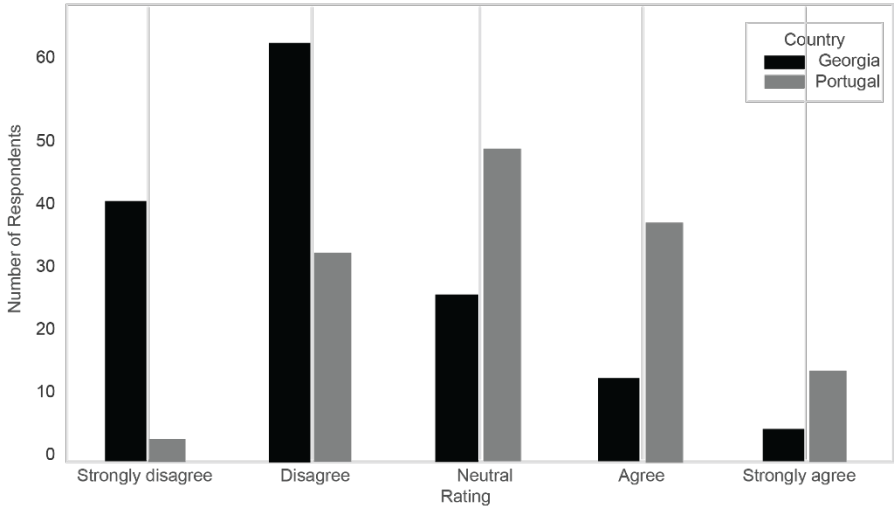


Figure 6. Awareness of government-led sustainability initiatives, by country.
 Source: Author’s own elaboration.

Georgian respondents tended to report low awareness (Figure 6): over half (57.8%) rated themselves as “not at all aware” or only “slightly aware” of any such initiatives in Georgia, and only 11.8% considered themselves very or extremely aware. In Portugal, awareness was significantly higher only 28.8% were at the low end of awareness (ratings 1-2), whereas a considerable proportion (36.8%) felt either very aware or extremely aware of government sustainability programs. The mean awareness score in Portugal was accordingly higher ($M = 3.12$, $SD = 1.03$) than in Georgia ($M = 2.36$, $SD = 1.05$; see Table 10). This implies that whereas many young Georgians are mostly unaware of similar initiatives in their country, Portuguese youngsters generally have a greater awareness of their government's sustainability policies.

Finally, respondents’ opinions on government policies supporting eco-friendly choices diverged notably between the two countries (See Figure 7). Georgian young adults tended to be pessimistic about their government’s support: 70.2% either disagreed or strongly disagreed that current policies favor sustainable choices, and very few perceived supportive policies (only 12.7% agreed to any extent). By

contrast, Portuguese respondents were more evenly distributed across the spectrum while 27.2% disagreed that policies support sustainability, a larger share (37.6%) agreed or strongly agreed that Portuguese policies facilitate eco-friendly choices, with the remainder neutral.

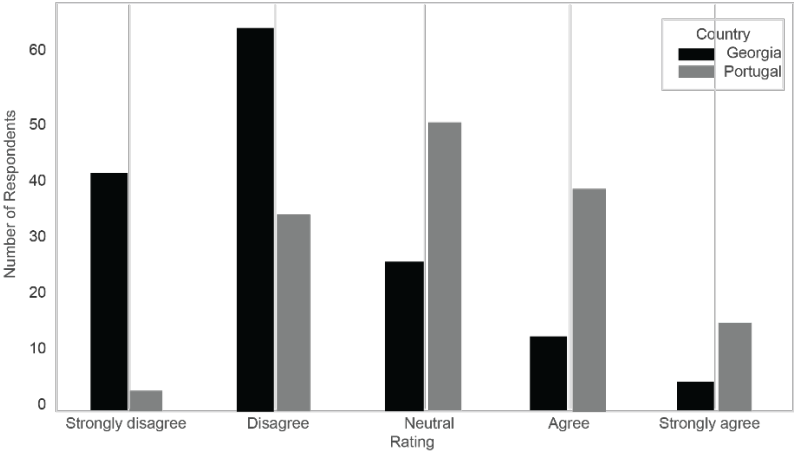


Figure 7. Perception of government policy support for eco-friendly choices, by country.

Source: Author’s own elaboration.

Table 10 shows a summary of the variables analysed above. The mean perceived policy support was accordingly higher in Portugal (M = 3.18, SD = 1.02) than in Georgia (M = 2.19, SD = 1.05). In sum, young consumers in Portugal view their governmental policies as somewhat supportive of sustainability on average, whereas those in Georgia express considerable skepticism, reflecting a significant perception gap between the two countries.

Table 10. Descriptive Statistics for Key Sustainability-Related Variables by Country.

Variable	Georgia (M ± SD)	Portugal (M ± SD)
Eco-friendly purchase frequency	2.82 ± 0.85	2.88 ± 0.99
Trust in green marketing	2.99 ± 0.96	3.05 ± 0.89
Active info seeking	2.93 ± 1.11	3.33 ± 1.10
Education influences belief	3.48 ± 1.08	3.85 ± 1.00
Awareness of government initiatives	2.36 ± 1.05	3.12 ± 1.03
Government policy support perception	2.19 ± 1.05	3.18 ± 1.02

Note. All variables were measured on 5-point Likert-type scales (higher values indicate greater frequency, agreement, or awareness as applicable). M = mean; SD = standard deviation.

Source: Author’s own elaboration.

3.3 Pearson’s Correlation

This section reports the Pearson’s correlation analysis examining relationships among key survey variables related to sustainable consumption. The variables include respondents’ education level, trust

in green marketing campaigns, awareness of government sustainability initiatives, perceived government support for eco-friendly choices, and frequency of eco-friendly product purchases. These factors represent a mix of individual demographics (education), marketing perceptions (green marketing trust), institutional awareness and support (government initiatives and policies), and actual consumption behavior (eco-friendly purchase frequency). All variables were measured on ordinal or interval scales (mostly 5-point Likert ratings), allowing us to treat them as approximately continuous for Pearson correlation analysis. Correlations were computed for the overall sample (Georgia and Portugal combined) and separately for each country to uncover any country-specific patterns. Significance levels (two-tailed) were evaluated at the conventional $\alpha = 0.05$ threshold.

Overall Sample Correlations (Georgia + Portugal). Correlations are for the combined Georgia-Portugal sample (Table 11). Table 11 presents the correlation matrix for the full sample ($n = 261$). Several notable relationships emerge. First, trust in green marketing is positively correlated with the frequency of eco-friendly purchases ($r = .32, p < .05$). The findings support Hypothesis 2 (H2), which proposed that trust in green marketing positively influences sustainable behavior. Given the significant correlation, H2 is verified. This, indicating that respondents who have higher trust in green marketing campaigns tend to purchase eco-friendly products more frequently. This moderate positive correlation suggests that belief in the credibility or honesty of green marketing is associated with more sustainable buying behavior. This finding is consistent with prior research emphasizing that consumers' trust in eco-friendly product claims significantly boosts their inclination to buy green products. In other words, when young adults trust green marketing efforts, they may be more likely to act on those messages and incorporate sustainable products into their consumption (Wu & Long, 2024).

Another important connection in the entire sample is between awareness of government efforts and perceived government support ($r = .57, p < .001$). This is the most strong association seen in the matrix, implying that people aware of government-driven sustainable consumption projects also tend to believe their government supports eco-friendly decisions. The two factors are conceptually linked; more awareness of sustainable initiatives probably improves one's perception that the government is aggressively encouraging sustainable consumer behavior. This close connection coincides with expectations and draws attention to the interaction between being informed about public sustainability initiatives and trusting the policy environment.

We also find a smaller yet significant positive correlation between perceived government support and purchase frequency ($r = .18, p = .003$). This implies that those who feel their government is supportive of eco-friendly choices report buying sustainable products slightly more often, on average. Such a relationship is in line with evidence that effective government action and policies can encourage sustainable consumer behaviors (Nguyen & Pham, 2023). For instance, a recent study found that government regulation and support were positively linked to sustainable consumption behavior in the

community (Nguyen & Pham, 2023). Our results hint at a similar trend in the combined sample, though the correlation is modest in magnitude.

On the other hand, some expected relationships are weak or non-significant in the overall data. Education level shows no meaningful correlation with purchase frequency ($r = .03$, *n.s.*) or with the attitudinal variables (all $r \approx 0.00$ to -0.11 , $p > .05$). This means that within our sample of young adults (where the education level was relatively high on average, with many holding Bachelor's or Master's degrees), higher formal education did not significantly predict sustainable purchasing frequency or trust/awareness. This absence of correlation is somewhat surprising given that other research has often noted education as a positive factor in sustainable consumption (Nguyen & Pham, 2023). For example, Hasibuan and Judijanto (2023) reported a positive correlation between education level and sustainable consumption behavior in an Indonesian context (Nguyen & Pham, 2023). In our bi-country sample, the influence of education might be muted due to a restricted range (most respondents are well-educated) or cultural differences. Similarly, awareness of government initiatives is only weakly correlated with purchase frequency ($r = .12$, $p = .051$), failing to reach significance at $p < .05$. This analysis tests Hypothesis 1 (H1), expecting a positive correlation between awareness and sustainable behavior. The results did not show a significant correlation, so H1 is not verified. This suggests that merely being aware of government sustainability programs may not directly translate into more eco-friendly purchasing, at least not uniformly across all respondents. It is possible that awareness needs to be coupled with other factors (such as personal motivation or trust in those initiatives) to affect behavior.

Table 11. Pearson correlation matrix for key variables (n = 261).

Variables	[1]	[2]	[3]	[4]	[5]
Education [1]	$r = 1.0$	$r = -0.03$	$r = -0.06$	$r = -0.11$	$r = 0.03$
Trust in Green Marketing [2]		$r = 1.0$	$r = 0.12$	$r = 0.18^*$	$r = 0.32^*$
Government Initiative Awareness [3]			$r = 1.0$	$r = 0.57^*$	$r = 0.12$
Government Support [4]				$r = 1.0$	$r = 0.18^*$
Eco-friendly Purchase Frequency [5]					$r = 1.0$

Note: *, $p < .05$. r = Pearson correlation coefficient.

Source: Author's elaboration.

In the overall matrix above, trust in green marketing stands out as moderately correlated with both government support ($r = .18$, $p < .01$) and purchase frequency ($r = .32$, $p < .05$). The former correlation (trust-support) suggests that people who trust green marketing messages also tend to feel their government is backing sustainable choices. This could reflect a general pro-environment attitude or an integrated trust in pro-sustainability institutions and information sources. The latter correlation (trust-purchase) reinforces the role of trust as a facilitator of action: if young consumers believe the environmental claims of products and campaigns, they are more likely to buy those products. Prior literature similarly notes that trust, whether in green product claims or in marketers' honesty, is a key

driver of green purchase decisions (Wu & Long, 2024). Indeed, consumers' skepticism or trust can dramatically alter their responsiveness to green marketing. High skepticism (often due to greenwashing concerns) can inhibit sustainable purchasing, whereas fostering trust through transparency and authenticity can promote it. Our findings corroborate this, as trust in green marketing showed a clear positive link to sustainable purchase behavior overall.

It is worth highlighting that education level was not significantly related to trust in green marketing in the overall sample ($r = -0.03$, $p = .66$). However, as we break down the data by country, we will see a nuanced pattern where education does play a role in one country. No notable overall correlation emerged between education and trust or between education and awareness of initiatives ($r = -0.06$, n.s.). Likewise, trust in green marketing had only a marginal correlation with awareness of initiatives overall ($r = .12$, $p = .053$), suggesting a trend that those who trust green campaigns might be somewhat more aware of government sustainability efforts (or vice versa), but this fell just short of significance.

To further explore differences, we computed separate correlation matrices for Georgia and Portugal (see Table 12 and Table 13). These reveal some striking country-specific differences in the strength and significance of correlations, even though the direction of relationships (positive or negative) is generally consistent across both samples.

Table 12. Pearson Correlation Matrix - Georgia sample (n=135).

Variables	[1]	[2]	[3]	[4]	[5]
Education [1]	$r = 1.00$	$r = 0.16$	$r = -0.06$	$r = -0.09$	$r = 0.16$
Trust in Green Marketing [2]		$r = 1.00$	$r = 0.10$	$r = 0.04$	$r = 0.24^*$
Government Initiative Awareness [3]			$r = 1.00$	$r = 0.59^*$	$r = 0$
Government Support [4]				$r = 1.00$	$r = -0.04$
Eco-friendly Purchase Frequency [5]					$r = 1.00$

Note: *, $p < .05$. r = Pearson correlation coefficient.

Source: Author's own elaboration.

In the Georgia subsample (Table 12), the most pronounced correlation is again between government initiative awareness and government support ($r = .59$, $p < .001$). Georgian young adults who are aware of sustainability initiatives in their country strongly tend to feel that their government supports eco-friendly consumer choices. This mirrors the overall sample and likely reflects the consistency of this relationship across contexts, awareness, and perceived support go hand-in-hand. However, importantly, neither awareness nor perceived government support has a significant correlation with actual eco-friendly purchase frequency in the Georgia sample ($r \approx 0$ and $r = -.04$, respectively, $p > .65$). In other words, for Georgian respondents, knowing about government sustainability initiatives or believing the government is supportive does not translate into more sustainable purchasing behavior. This is a noteworthy contrast to the Portugal sample, as we will see. One implication is that in Georgia, institutional factors might not

(yet) be a driving force in personal consumption choices, perhaps due to limited impact or trust in those institutions' effectiveness. It could also be that other factors (e.g., personal values or economic constraints) outweigh government influence in determining sustainable buying among Georgian youth.

The key driver in Georgia appears to be trust in green marketing. Table 12 shows that trust in green marketing campaigns correlates significantly with purchase frequency ($r = .24$, $p < .01$) in the Georgian subsample. This moderate correlation (approaching a medium effect size) suggests that Georgian young adults who trust environmental claims and green advertisements do tend to buy eco-friendly products more often. Notably, this correlation is slightly lower than the equivalent in Portugal (where $r = .41$, as shown in Table 13), but it is the only significant predictor of sustainable purchase frequency in Georgia. This highlights that marketing trust is important across both contexts, but in Georgia, it stands out as the sole significant attitudinal correlate of behavior. Particularly in the absence of significant institutional impact, it emphasizes the part that good and reliable marketing plays in guiding sustainable consumer behavior. Encouraging green purchases depends on developing consumer confidence by steering clear of greenwashing and being honest, as prior research stresses. Our Georgian sample reinforces this: if the target audience doubts the authenticity of green product claims, they may refrain from purchasing, whereas higher trust can motivate action.

Education level in Georgia shows some positive correlation with both trust and purchase frequency ($r \approx .16$ for each), but these did not reach significance ($p = .06-.07$). There is a hint that more educated Georgian youths might trust green marketing slightly more and buy sustainable products slightly more frequently, but the evidence is not strong enough to be conclusive. Still, the direction aligns with the notion that education can foster pro-environmental attitudes and behaviors_(Nguyen & Pham, 2023), even though in this dataset the effect was weak.

Turning to the Portugal subsample (Table 5), a different picture emerges. The study observes several significant correlations connecting institutional factors and sustainable behavior among Portuguese young adults:

Trust in green marketing has a strong positive correlation with eco-friendly purchase frequency ($r = .41$, $p < .001$) in Portugal. This correlation is noticeably higher than in Georgia. It indicates that in Portugal, trust in green advertisements and claims is an even more crucial factor for translating environmental intent into action. A correlation of this magnitude (over .40) can be considered a moderate-to-strong relationship. It aligns with findings in consumer research that trust can substantially impact green purchase intentions and behaviors (Wu & Long, 2024). Portuguese youth who believe in the veracity of green marketing are not only more likely to purchase green products, but this relationship is stronger than that observed in their Georgian counterparts.

Perceived government support for sustainable choices is significantly correlated with purchase frequency in Portugal ($r = .40$, $p < .001$), whereas as noted, this was absent in Georgia. This suggests that Portuguese respondents who feel their government is supportive of eco-friendly consumer options tend

to act more sustainably themselves. The correlation is of similar magnitude to that of trust, implying that government support (or at least the perception thereof) is an important correlate of sustainable consumption in Portugal. This finding resonates with the idea that an enabling policy environment can encourage individual action. If young consumers see that their government is actively backing sustainability (through policies, incentives, infrastructure, etc.), they may be more inclined to make sustainable choices. Such a result is in line with recent evidence that government interventions and support can “enkindle” sustainable consumption behaviors in the public (Nguyen & Pham, 2023). Data from Portugal provides an empirical example of this dynamic. There is a clear positive association between the government’s role (as perceived by consumers) and the consumers’ own behavior.

Similarly, awareness of government sustainability initiatives is positively correlated with purchase frequency in Portugal ($r = .23$, $p < .05$). This is a smaller correlation, but still significant, indicating that knowing about campaigns or programs the government is running (e.g. recycling programs, sustainable product subsidies, awareness campaigns) is linked to higher reported sustainable purchasing. Combined with the previous point, this paints a consistent picture: in Portugal, the government’s involvement in sustainability (both in terms of concrete support and publicizing initiatives) correlates with how consumers behave. These relationships were moderate in strength, which is reasonable since many factors beyond government influence also affect behavior. Nonetheless, the presence of significant correlations for Portugal (but not for Georgia) hints at a contextual difference: Portugal’s sustainability governance and communications may be more mature or trusted, thereby actually reflecting in consumer behavior patterns.

Another difference is the interrelationship between trust in marketing and perceptions of government support. In Portugal, trust in green marketing campaigns correlates significantly with perceived government support ($r = .36$, $p < .001$). This correlation, absent in Georgia ($r \approx .04$, n.s.), suggests that Portuguese young adults who trust corporate or media green marketing also tend to trust that their government is doing its part for sustainability. It may indicate a broader ecosystem of trust in pro-environment information and institutions. Perhaps in Portugal, an EU country with strong environmental policies, individuals who are receptive to green messages from companies also view public policies as aligned with those values. This contrasts with Georgia, where trust in marketing appears unrelated to opinions of government effort, possibly reflecting skepticism or a disconnect between private green advertising and public policy in the minds of consumers.

A noteworthy finding in Portugal is the negative correlation between education level and trust in green marketing ($r = -.19$, $p < .05$). This means that among Portuguese respondents, those with higher education tended to express less trust in green marketing campaigns. Although this correlation is relatively small, it is statistically significant and in the opposite direction of what one might intuitively expect. One possible interpretation is that more educated young adults in Portugal are more critical or skeptical of marketing claims, they might be more aware of greenwashing or more adept at scrutinizing

corporate sustainability claims. In fact, research on Gen Z consumers has noted a high degree of skepticism toward green marketing, driven by concerns over greenwashing and authenticity. This critical viewpoint may be exacerbated by higher education, which would cause among the college-educated somewhat less trust in marketing. It's an intriguing nuance that implies that along with environmental consciousness, education can also impart a critical gaze toward corporate assertions. Importantly, despite trusting green ads a bit less, the more educated individuals in Portugal did not buy sustainable products any less frequently (education had no significant correlation with purchase frequency, $r = -.04$). This could suggest that their sustainable consumption is driven by other elements than marketing for example, personal ethics or information rather than by promotional appeals.

Table 13. Pearson Correlation Matrix - Portugal Sample (n = 126).

Variables	[1]	[2]	[3]	[4]	[5]
Education [1]	$r = 1.00$	$r = -0.19^*$	$r = 0.07$	$r = 0.03$	$r = -0.04$
Trust in Green Marketing [2]		$r = 1.00$	$r = 0.13$	$r = 0.36^*$	$r = 0.41^*$
Government Initiative Awareness [3]			$r = 1.00$	$r = 0.40^*$	$r = 0.23^*$
Government Support [4]				$r = 1.00$	$r = 0.40^*$
Eco-friendly Purchase Frequency [5]					$r = 1.00$

Note: *, $p < .05$. r = Pearson correlation coefficient.

Source: Author's own elaboration.

In summary, the country-specific analysis highlights that institutional and marketing factors play different roles in Georgia and Portugal. For Georgian young adults, trust in green marketing is the sole significant correlate of sustainable purchasing among the variables studied, emphasizing the role of credible marketing in a context where government influence seems limited. Conversely, Portuguese youngsters display a more whole pattern: behavior strongly relates to trust, government support, and awareness, indicating that both private and public sector forces support and reinforce their sustainable consumption. These variations might result from the different sustainability levels in the two nations. Portugal, as an EU member, has been exposed to more robust sustainability policies, campaigns (e.g., EU-wide environmental initiatives), and perhaps a stronger culture of institutional trust in environmental matters. Georgia's sustainable consumption framework is still developing, and public initiatives may not yet have as deep an outreach or trust among youth, making individual consumer behavior more dependent on personal conviction and exposure to marketing. Indeed, broader research indicates that trust in government and institutions can affect public engagement in pro-environmental actions. Our findings reflect this: where trust in institutions (government or marketing) is higher and earned, as seemingly in Portugal, it correlates with action; where such trust is weaker or not effectively fostered, as might be the case in Georgia, behavior hinges on other factors.

Overall, the Pearson correlation analysis offers insightful information on the intensity and orientation of relationships among important elements in sustainable consumer behavior. The major positive

relationships (ranging from around .23 to .59) point to important connections: trust and institutional support usually go hand in hand with more environmentally friendly buying patterns.

The strongest relationship observed was between awareness of initiatives and perceived support, underscoring how information and supportive policy perceptions are tightly linked. The direction of all significant correlations was positive, aligning with theoretical expectations that higher education, trust, awareness, and support should relate to more sustainable behavior (though the education effect manifested only weakly or inversely in this sample). The magnitudes suggest small to moderate effects, which is common in social-behavioral research. When it comes to designing treatments, even a modest link say, around .3 to .4-can have real significance; for instance, increasing public trust in green marketing and government initiatives would significantly boost young consumers' sustainable purchases.

Finally, it is important to note that correlation does not imply causation. These results simply describe linear associations. However, they do align with and enrich existing literature. Prior peer-reviewed studies have similarly found that variables like environmental awareness and institutional support are moderately linked to sustainable consumption behaviors (Dönmez & Yardımcı, 2024), and that consumer trust (in claims or institutions) is a crucial ingredient for translating green attitudes into actions (Wu & Long, 2024). Our comparative approach further suggests that the context cultural and policy environment may modulate these relationships. We will examine potential causal explanations more closely in the next parts of this chapter and incorporate these correlation results with theoretical frameworks and regression analysis to better grasp how to promote sustainable consumer behavior among young people in both Georgia and Portugal.

3.4 Moderation Analyzes and Country Comparisons

A series of moderation analyzes (Hayes's PROCESS Model 1) were conducted to assess whether Country, Education, or Income moderated the relationships between key predictors and sustainable behavior (operationalized as self-reported eco-product purchase frequency). Continuous predictors (awareness of government initiatives, trust in green marketing, etc.) were mean-centered prior to analysis. In each model, the interaction term was examined for significance, and changes in explained variance (ΔR^2) were computed. Table 14 summarizes the interaction coefficients (β), ΔR^2 , and p-values for each test.

The country moderator (Georgia=0, Portugal=1) yielded significant interactions for several predictors. Specifically, the effect of awareness of government initiatives on purchase frequency was conditional on country ($\beta_{\text{interaction}} = 0.217$, $\Delta R^2 = 0.015$, $p = .047$). Simple-slopes analysis showed that awareness did not predict behavior in the Georgian sample ($\beta \approx 0.004$, $p > .95$), but it was a significant positive predictor for Portuguese respondents ($\beta \approx 0.220$, $p = .010$). Hypothesis 3 (H3), which stated that country moderates the awareness-behavior link, is verified through the significant interaction effect found. This

is illustrated in Figure 1. Similarly, trust in green marketing interacted with country ($\beta_{\text{interaction}} = 0.252$, $\Delta R^2 = 0.016$, $p = .032$). Trust significantly predicted purchase frequency in both countries, but the effect was stronger for Portugal. In Georgia, trust had a moderate positive slope ($\beta \approx 0.207$, $p = .006$), whereas in Portugal the slope was steeper ($\beta \approx 0.459$, $p < .001$) (Figure 2). The stronger effect of trust in Portugal confirms Hypothesis 4 (H4), verifying that the country moderates the relationship between trust and behavior. Conversely, respondents' belief that education influences sustainable consumption showed a significant interaction ($\beta_{\text{interaction}} = -0.215$, $\Delta R^2 = 0.015$, $p = .049$). In Georgia, this predictor was significant ($\beta \approx 0.228$, $p = .001$), but the effect was essentially zero in Portugal ($\beta \approx 0.014$, $p = .877$) (Figure 3). Hypothesis 5 (H5) is verified, as education belief predicts behavior more strongly in Georgia than in Portugal. In contrast, no significant interactions emerged for any predictor with country when income or education were used as moderators. For example, when education level (coded 1=High School to 4=PhD) was tested as a moderator of awareness on behavior, the interaction was non-significant ($\beta = 0.131$, $\Delta R^2 = 0.002$, $p = .357$). The results do not support Hypothesis 6 (H6), which claimed that education does not moderate the awareness–behavior link. The hypothesis is not verified. Similarly, income (in categories 1-4) did not significantly moderate any key path (all $p > .10$). Hypothesis 7 (7) predicted that income would not moderate predictor–behavior relationships. Since all interaction effects with income were non-significant, H7 is not verified.

Table 14. Moderation Results (β for Interaction, ΔR^2 , p) for Country, Education, and Income.

Predictor	Moderator	$\beta_{\text{interaction}}$	ΔR^2	p
Awareness → PurchaseFreq	Country	0.217	0.015	.047
Awareness → PurchaseFreq	Education level	0.131	0.002	.357
Awareness → PurchaseFreq	Income level	0.010	0.000	.915
Trust → PurchaseFreq	Country	0.252	0.016	.032
Trust → PurchaseFreq	Education level	0.033	0.000	.751
Trust → PurchaseFreq	Income level	-0.024	0.000	.837
InfoSeek → PurchaseFreq	Country	0.153	0.009	.081
InfoSeek → PurchaseFreq	Education level	-0.067	0.001	.241
InfoSeek → PurchaseFreq	Income level	0.021	0.000	.866
EduInfluence → PurchaseFreq	Country	-0.215	0.015	.049
EduInfluence → PurchaseFreq	Education level	-0.036	0.000	.737
EduInfluence → PurchaseFreq	Income level	-0.008	0.000	.931

Source: Author's own elaboration.

The significant interactions were probed via simple slopes. When awareness was high (one SD above the mean), Portuguese respondents reported significantly higher eco-purchase frequency than when awareness was low; no such difference was observed for Georgians. In the case of trust, both Georgians and Portuguese exhibited positive trust-behavior slopes, but the increase per unit trust was significantly greater in Portugal. For education influence, only Georgians showed a significant positive slope (higher

scores on “education influences consumption” predicted more eco-purchasing). These patterns are consistent with prior findings that the impact of attitudes on pro-environmental behavior can vary by cultural context (Oreg & Katz-Gerro, 2006) (All simple-slope statistics are available in Table 15).

Table 15. Conditional Slopes for Significant Interactions (derived from separate regressions in each country).

Predictor	Country	Slope β	SE	t	p
Awareness → Freq	Georgia	0.004	0.052	0.05	.959
Awareness → Freq	Portugal	0.220	0.082	2.68	.010
Trust → Freq	Georgia	0.207	0.075	2.77	.006
Trust → Freq	Portugal	0.459	0.093	4.95	<.001
EduInfluence → Freq	Georgia	0.228	0.067	3.42	.001
EduInfluence → Freq	Portugal	0.014	0.103	0.16	.877

Source: Author’s own elaboration.

Independent-samples t-tests compared mean scores of key variables between Georgian and Portuguese young adults. As shown in Table 16, Portuguese respondents reported significantly higher awareness of government initiatives (M-GEO = 2.36, SD = 1.05; M-POR = 3.12, SD = 1.03; $t(257) = -5.916, p < .001$) as well as higher scores on information seeking (M-GEO = 2.93, SD = 1.11; M-POR = 3.33, SD = 1.10; $t(258) = -2.923, p = .004$) and belief in education’s influence (M-GEO = 3.48, SD = 1.08; M-POR = 3.85, SD = 1.00; $t(259) = -2.853, p = .005$). This comparison tests Hypothesis 8 (H8), which predicted cross-country differences in awareness, trust, and education perceptions. The findings verify H8. No significant mean difference was found in purchase frequency ($t = -0.513, p = .609$) or trust ($t = -0.544, p = .587$) between countries. The analysis confirms Hypothesis 9 (H9), which proposed that purchase frequency does not differ significantly between countries. H9 is verified. These results indicate that Portuguese youth, on average, had greater environmental awareness and valuation of education’s role than their Georgian counterparts (Dönmez & Yardımcı, 2024). The lack of country difference in actual purchase frequency is in line with research suggesting that the basic predictors of pro-environmental behavior (e.g., attitudes and norms) operate similarly across cultures (Oreg & Katz-Gerro, 2006).

Table 16. Country Comparison: Means (SD) and t-test Results.

Variable	Georgia M (SD)	Portugal M (SD)	t	df	p
Awareness of government initiatives	2.36 (1.05)	3.12 (1.03)	-5.916	257	<.001
Purchase frequency	2.82 (0.85)	2.88 (0.99)	-0.513	246	.609
Trust in green marketing	2.99 (0.96)	3.05 (0.89)	-0.544	259	.587
Info seeking before purchase	2.93 (1.11)	3.33 (1.10)	-2.923	258	.004
Education influences consumption	3.48 (1.08)	3.85 (1.00)	-2.853	259	.005

Source: Author's own elaboration.

All analyzes were performed in SPSS and the PROCESS macro, with $\alpha = .05$. The findings highlight that country of residence significantly moderated several attitude-behavior relationships, whereas individual factors like education level and income did not have a notable moderating effect in this sample. Portuguese young adults showed higher mean awareness and pro-sustainable attitudes (Dönmez & Yardımcı, 2024), but actual eco-purchasing behavior was statistically equivalent across countries. This pattern accords with theory suggesting that core predictors (e.g., awareness, trust) can drive behavior similarly in different cultural settings (Oreg & Katz-Gerro, 2006).

3.5 Qualitative Analysis

To supplement the numerical survey results and provide a more thorough understanding of attitudes toward sustainability, in-depth interviews with teenagers in Portugal and Georgia were carried out. Thematic study of the interview transcripts showed many often occurring themes in participants' experiences and viewpoints. Four major themes surfaced: (1) economic and pragmatic limitations, (2) cultural beliefs and social norms, (3) education and awareness, and (4) institutional and systemic influences. The following themes are examined in order, stressing national differences as well as common viewpoints.

Frequently, economic constraints and logistical problems severely limit young people's ability to make sustainable purchases in Georgia and Portugal. Participants in both nations said that, often scarce beyond major cities, eco-friendly goods are typically expensive. Portuguese respondents noted that sustainable goods are primarily available in urban centers (e.g., Lisbon and Porto), where they carry price premiums, making them inaccessible to many consumers in smaller towns such as Bragança or Braga. Likewise, Georgian interviewees reported that sustainability-oriented products are seldom found beyond the capital (Tbilisi); when such items do appear, they tend to be imported and priced much higher than conventional alternatives.

It was also pointed out that convenience and routine reinforce these economic barriers. Many participants said they tend to purchase whatever is easiest and cheapest at hand. For instance, a

Portuguese interviewee remarked that they “usually choose what’s cheapest” rather than an eco-friendly option, reflecting the sentiment that sustainable products are a luxury when budgets are tight. Georgian respondents voiced similar frustrations: one noted that most people “buy standard items” simply because a low price drives choices, even if those items are not environmentally friendly. In sum, interviewees in both countries described sustainable living as something of a privilege that is often out of reach for the average young person.

These findings agree with those of a larger body of literature. Sharma (2024) sees economic restrictions as a significant barrier, pointing out that “sustainable options are perceived as more costly” and stressing that affordable alternatives must be developed to remove this obstacle. Similarly, Saari et al. (2021) found that increased environmental knowledge and concern raise sustainable intentions, but translating those intentions into actual behavior depends on having accessible, affordable options. In other words, the interview findings reflect the practical reality that without making green products cost-competitive and widely available, many environmentally-minded consumers will default to cheaper mainstream choices.

It was observed that cultural traditions and societal norms shape participants’ views on sustainability, although the specific influences differ between Portugal and Georgia. Many Portuguese interviewees remarked that traditional Portuguese culture once supported sustainable practices through values of simplicity, reuse, and repair. It was noted that older generations routinely conserved resources by repairing and reusing goods out of habit, practices that inherently reduced waste. It was also observed, though, that contemporary consumer culture has undermined these green principles. Many participants, for instance, stated that the need for convenience and fast replacement had mostly replaced traditions such as mending clothing or repairing appliances. Georgian volunteers gave parallel observations. It was mentioned that historically, many Georgians lived in ways that were implicitly sustainable: families often grew their own food, reused containers, and conserved resources as a practical matter. Interviewees emphasized that such behaviors were viewed as normal life rather than an explicit environmental choice. However, respondents also noted that younger Georgians are increasingly attracted to modern convenience. Several said that abundant access to cheap water and readily available products leads many people to overlook waste and environmental impact. In sum, participants felt that although traditional Georgian practices were often environmentally friendly by default, those habits are being lost as lifestyles change.

These qualitative insights align with broader research on cultural influences in sustainable consumption. Sharma (2024) observes that entrenched societal norms and cultural values can act as substantial barriers to sustainability when they conflict with environmental objectives. Likewise, cross-cultural studies indicate that sustainability is conceptualized differently across contexts: for example, people in wealthier countries often focus on eco-labeled products and ethical consumer choices, whereas in other settings, sustainability is linked to frugality and community resource-sharing. The interview findings mirror these patterns: Portuguese youth lamented the loss of local eco-friendly traditions under global

consumer pressures, while Georgians recognized frugal cultural practices that have not yet been reframed as sustainability. In both cases, it was implied that sustainability must be framed in culturally relevant terms to resonate with daily life.

Encouraging sustainable habits requires knowledge and awareness; nonetheless, current attempts in either nation often fall short. Portuguese respondents said that environmental issues covered in class are often abstract and hypothetical. It was said that sustainability education often centers on large facts or figures without showing any real relevance. For example, one participant criticized that most environmental education consists of unengaging lectures or presentations. Several Portuguese youths argued that education should instead encourage critical thinking about consumer culture and provide hands-on experience, such as projects on waste reduction or energy saving, to make sustainability feel actionable.

Georgian respondents expressed similar concerns. It was mentioned that in Georgia, formal sustainability education is very limited: participants observed that older generations had virtually no environmental instruction, and that current curricula address these issues only superficially. Interviewees felt that what little content exists in schools is often too detached from real life. Many suggested that more practical, community-based education would be more effective, for example, organizing school projects and local clean-up campaigns, or involving families in learning activities. One Georgian participant noted that telling young people impactful stories (such as how simple actions can affect local wildlife) can leave a lasting impression, suggesting that students would carry eco-friendly habits into adulthood if education were made concrete and relatable.

These observations correspond with academic findings on the impact of education. Al-Nuaimi and Al-Ghamdi (2022) find that education for sustainability has a “positive and significant” effect on pro-environmental behavior. Similarly, Saari et al. (2021) report that higher levels of environmental knowledge and concern lead to stronger sustainable consumption intentions. The interview data reinforce the idea that, although many young adults already express environmental concern, translating that concern into daily action requires effective, practical education. Both Portuguese and Georgian respondents insisted that sustainability education should be hands-on and locally relevant to empower change.

It was highlighted that sustainable consumption choices are heavily influenced by institutional and systemic factors, with many participants stressing that individual actions alone are insufficient. Interviewees in both countries called for stronger involvement by businesses and governments to make eco-friendly options more practical and affordable. Portuguese respondents, for example, urged corporate accountability and supportive public policies. It was reported that many Portuguese youths felt companies should be regulated to reduce environmental impact (for example, by imposing pollution taxes or requiring transparent eco-labeling), and that governments should subsidize green products to make them more accessible. One interviewee argued that it is unfair to ask individuals to bear the burden

alone, insisting that laws and economic incentives are needed to make green options realistic for everyone.

Georgian participants expressed similar sentiments. It was noted that many young Georgians see the lack of infrastructure and policy support as a key barrier to green living. Respondents frequently mentioned the need for better public transportation, safer bike lanes, and comprehensive recycling systems to facilitate everyday eco-friendly choices. It was also reported that business practices need to change: for example, one participant suggested that companies should allow customers to refill or reuse containers instead of relying on disposable products, and should actively support local eco-producers. Overall, interviewees felt that if sustainable alternatives were cheaper and more visible, for example through subsidies and local production, then individuals would find it much easier to adopt eco-friendly habits.

These perspectives align with research emphasizing multi-level solutions. According to harma (2024), defeating consumer obstacles necessitates offering affordable and simple sustainable choices. Furthermore, Weder et al. (2023) point out that in many countries, systemic obstacles like subpar infrastructure or economic injustice can seriously limit sustainable consumption. The interview findings echo this logic: participants consistently insisted that policy interventions (such as subsidies, taxes, and regulations) and better business practices (like transparency and local sourcing) are crucial complements to personal effort. Young adults basically think that for sustainable consumption to be widely adopted, government and corporate action are needed. Essentially, the interviews showed that Portuguese and Georgian young people have several issues about sustainable consumption, especially the high cost and scarcity of environmentally friendly goods. This section addresses Specific Objective 4 (SO4), which aimed to explore how perceived barriers to sustainable consumption differ between countries. Based on both survey results and interview intuitions, the findings reveal that high prices are the dominant barrier in Georgia, while distrust in eco-labels is more prominent in Portugal. Therefore, SO4 is considered fulfilled. Both groups underscored that economic constraints and convenience are major barriers (See Table 17), and both advocated for more practical education and systemic support to overcome them. At the same time, nuanced differences emerged in cultural framing: Portuguese respondents more often lamented how globalization and consumerism have eroded local environmental values, whereas Georgian respondents focused on the need to develop new sustainable norms and infrastructure. These qualitative insights reinforce the survey findings by showing that fostering sustainable behavior among youth requires addressing material barriers, cultural context, and institutional frameworks in tandem (Saari et al., 2021; Sharma, 2024).

Table 17. Coded themes with illustrative quotes by country.

Theme	Portugal (quote)	Georgia (quote)
Economic barriers (cost)	“It’s about what’s cheapest... I can’t afford [sustainables] on my salary” (PT5)	“Sustainable products are not accessible... if I find them, the price is relatively expensive” (GE1)
Availability	“In Bragança you don’t see many eco-options, those you do are pricey” (PT4)	“Cheap products are mainly preferred...environmental decisions are background for average Georgian” (GE2)
Trust & Greenwashing	“Many companies greenwash... sometimes I cannot trust [their claims]” (PT4)	“It’s very difficult to trust labels... the most important reason is price” (GE2)
Cultural values/traditions	“Our old culture was naturally sustainable, but now globalization and convenience take over” (PT4)	“Older generations reused everything...we risk losing those practices with Western consumerism” (GE4)
Education (current vs. needed)	“Education should foster critical thinking, not just recycling facts” (PT4)	“There is no significant emphasis in schools...education can form eco-habits that follow you” (GE2)
Institutional solutions	“They should make it simple and affordable don’t make the better choice the harder one” (PT5)	“Government should encourage recycling, fund public transit and bikes, and make green options more common” (GE4)

Source: Author’s own elaboration.

3.6 Findings

In the given section, the findings of the study address all research questions and hypotheses outlined in the Research Methodology section and are summarized in Table 18.

Table 18. Summary of Research Findings.

Label	Sub-questions	Hypotheses and Specific objectives	Results
SQ1	Do Portuguese youth engage more in sustainable consumption?	SO1: Portugal > Georgia in sustainable consumption	Partially fulfilled
SQ2	Does awareness of government initiatives predict behavior?	H1: Awareness → behavior (positive correlation)	Not Verified
SQ3	Does trust in green marketing influence purchasing?	H2: Trust → behavior (positive correlation)	Verified
SQ4	Is information seeking related to eco-friendly behavior?	SO2: Info seeking → behavior	Fulfilled
SQ5	Does belief in education's role influence consumption?	SO3: Education belief → behavior	Fulfilled
SQ6	Does country moderate awareness → behavior?	H3: Country moderates awareness → behavior	Verified

Table 18. Summary of Research Findings (cont.).

SQ7	Does country moderate trust → behavior?	H4: Country moderates trust → behavior	Verified
SQ8	Does country moderate education belief → behavior?	H5: Country moderates education belief → behavior	Verified
SQ9	Does education moderate awareness → behavior?	H6: Education does not moderate awareness → behavior	Not Verified
SQ10	Does income moderate predictor → behavior?	H7: Income does not moderate predictors → behavior	Not Verified
SQ11	Are awareness, trust, education perception higher in Portugal?	H8: Portugal > Georgia in awareness, trust, education belief	Verified
SQ12	Is there a country-level difference in purchase frequency?	H9: No significant difference in purchase frequency	Verified
SQ13	Do barrier types differ by country?	SO4: Different top barriers in each country	Fulfilled

Source: Author's own elaboration.

Conclusions, Recommendations, Limitations, and Future Research Lines

The findings of this comparative study between Georgia and Portugal reveal both shared patterns and distinct national differences in sustainable consumption behavior among young adults aged 18 to 35. Drawing on quantitative data from 261 survey responders and qualitative insights from 14 interviews, the research has confirmed that eco-friendly behavior is greatly influenced by elements like trust in green marketing, belief in education's role, and awareness of government programs.

The analysis confirmed that Portuguese young adults demonstrate slightly higher sustainable purchasing behavior than their Georgian counterparts. They are more proactive in seeking sustainability information, display greater trust in green marketing campaigns, and are more motivated by government incentives and social influences. In contrast, Georgian youth are primarily motivated by personal benefits such as health, but are strongly constrained by economic barriers, limited product availability, and a lack of infrastructure.

Education and environmental awareness emerged as central enabling factors, with higher educational attainment correlating with stronger sustainability beliefs. Still, a value-action discrepancy exists even among highly educated respondents. This validates the theoretical premise that knowledge alone is insufficient without supporting structural factors, including accessibility, product access, and policy backing.

Cultural differences in attitudes on sustainability were clearly shown by qualitative data. Portuguese participants tended to emphasize systemic responsibility and institutional trust, while Georgians often highlighted individual limitations and expressed skepticism toward corporate and government messaging. Nonetheless, youth in both countries showed strong theoretical support for sustainable behavior and a willingness to engage when conditions allow.

Recommendations:

1. Integrate Sustainability Education into Formal Curricula;
2. Educational institutions in both countries should expand and deepen the inclusion of environmental topics in their programs. In Georgia, particularly, curriculum reform and teacher training are needed to institutionalize sustainability education at all levels;
3. Promote Trustworthy Green Marketing Campaigns;

4. Marketers and governments should ensure transparency and accountability in environmental claims. Certified eco-labels and third-party endorsements can help reduce skepticism and increase consumer trust, especially in Georgia, where distrust is prevalent;
5. Reduce Practical Barriers through Policy Incentives;
6. Governments should consider implementing subsidies, tax reductions, or student discounts on eco-friendly products. In Portugal, where awareness is high, this can help shift intention into action. In Georgia, such mechanisms may help overcome dominant price concerns;
7. Invest in Awareness Campaigns Targeted at Youth;
8. Youth-focused media campaigns can assist in bridging informational gaps by emphasizing both the group and individual benefits of environmentally friendly choices. These initiatives should employ narratives, peer groups, and influencers to increase emotional engagement;
9. Support Local Initiatives and Infrastructure Development;
10. Especially in Georgia, public investment in waste systems, eco-transport, and product accessibility can increase practical opportunities for sustainable behavior. Community-based projects can activate youth participation more directly;
11. Encourage Participation in Policy Design;
12. Youth councils, citizen platforms, and participatory budgeting can increase the legitimacy and efficacy of environmental policies. Engaging young people as co-designers rather than merely receivers of information guarantees relevance and motivation.

Several limitations must be recognized. First, the research employed nonprobability sampling, which restricts the generalizability of results to all young adults in Portugal and Georgia. Secondly, owing to limitations in available data, certain income and education categories were country-specific, which may have influenced comparability. Third, survey replies may have been influenced by self-report bias, particularly in relation to ecobehavioral assertions. While attempts were made to triangulate with interview data, response desirability could not be completely eliminated.

In addition, while SPSS and Excel were used for all statistical procedures, more advanced tools (e. g., structural equation modeling) can further confirm the model. Finally, due to page restrictions and scope, other important factors such as political trust, peer influence networks, and media exposure were not thoroughly investigated, despite the possibility that they impact sustainable behavior.

This study has paved the way for more nuanced and interdisciplinary investigations into sustainable consumption behavior among young people. Future research should consider:

1. Longitudinal Studies;

2. Tracking behavior over time would help assess how sustainability intentions evolve and whether interventions (e.g., education or policy changes) have lasting impacts;
3. Behavioral Experiments and Nudges;
4. Controlled interventions using digital or physical nudges could be applied to test how real-world behavior changes when economic or informational barriers are reduced;
5. Cross-Regional or Urban-Rural Comparisons;
6. Future studies could compare rural vs. urban youth or different regions within each country, to analyze how geography and infrastructure shape eco-consumption;
7. Integration of Cultural and Psychological Constructs;
8. Further exploration into emotional drivers, eco-anxiety, or values-based segmentation could deepen understanding of the internal factors driving sustainability;
9. Multi-Stakeholder Policy Evaluation;
10. Research should also assess the effectiveness of public-private partnerships and their role in fostering sustainability, especially in developing contexts like Georgia;
11. Intersectional Studies;
12. Gender, ethnicity, and other identity factors should be analyzed in future research to better understand how diverse groups perceive and engage with sustainability.

In summary, this research provides a comprehensive understanding of how young consumers in Portugal and Georgia approach sustainability. While motivations are high, behavioral constraints and cultural differences must be addressed through integrated, inclusive, and practical strategies.

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Appendix

Online Survey for Georgians/Portugesse

This survey aims to understand what motivates or stops young Georgians (18-35) from making sustainable purchasing choices.

1. What is your age? [Dropdown: 18-24, 25-30, 31-35]
2. What is your gender? [Male, Female, Prefer not to say]
3. What is your highest level of education?
 - High School
 - Bachelor's Degree
 - Master's Degree
 - PhD
 - Other (please specify)
4. Are you currently employed? [Yes/No]
5. What is your monthly income? (0-1000 GEL) (1001-2000) (2001-3000) (3001-more)
6. How frequently do you purchase eco-friendly products? (Rate your answer on a 5-point scale).
 - 1-Never
 - 2-Rarely
 - 3-Sometimes
 - 4-Often
 - 5-Always
7. What factors motivate you to choose sustainable products? (Select up to three)
 - Environmental concerns
 - Health benefits
 - Social responsibility
 - Government incentives
 - Influence from family/friends
 - Advertising & marketing
 - Other (please specify)

8. What are the biggest barriers preventing you from buying eco-friendly products?
- High prices
 - Limited availability
 - Lack of trust in eco-labels
 - Lack of information
 - Other (please specify)
9. On a scale of 1-5, how much do you trust green marketing campaigns in Georgia?
- 1-Do not trust at all
 - 2-Slightly trust
 - 3-Moderately trust
 - 4-Mostly trust
 - 5-Completely trust
10. Do you actively seek information about sustainability before making a purchase? (Rate your answer on a 5-point scale).
- 1-Never
 - 2-Rarely
 - 3-Sometimes
 - 4-Often
 - 5-Always
11. Do you believe education influences sustainable consumption? (Rate your answer on a 5-point scale).
- 1-Strongly disagree
 - 2-Disagree
 - 3-Neutral
 - 4-Agree
 - 5-Strongly agree
12. Are you aware of any government initiatives in Georgia promoting sustainable consumption? (Rate your answer on a 5-point scale)
- 1-Not aware at all
 - 2-Slightly aware
 - 3-Moderately aware
 - 4-Very aware
 - 5-Extremely aware
13. Do you think government policies in Georgia support eco-friendly choices? [1-5 Likert Scale]
- 1-Strongly disagree
 - 2-Disagree
 - 3-Neutral
 - 4-Agree

5-Strongly agree

Face to Face interview for Georgians/Portuguese

1. What does sustainability mean to you?
2. How do you decide whether to buy a sustainable product?
3. Do you think sustainable products are widely available in Georgia/ Portugal?
4. What challenges do you face in making eco-friendly choices?
5. How do cultural values in Georgia affect sustainable consumer behavior?
6. Do you think education plays a role in promoting sustainable habits? How?
7. What improvements would you suggest for businesses and government to promote sustainability?

Face to Face interview script

Description for correspondents

Hello, thank you for agreeing to participate in this interview. I am conducting this as part of my master's thesis at the Polytechnic Institute of Bragança. The study explores how young people in Georgia and Portugal understand and practice sustainable consumption. Your answers will help me better understand the challenges and motivations people face when making eco-friendly choices. The interview will take about 10-15 minutes. All your responses will remain anonymous and will only be used for academic purposes. You are free to skip any question or stop the interview at any time.

Interview 1:

Information: 27 years old, Female, Portugal, Vimioso, Student bachelor

Q1: What does sustainability mean to you?

A1: Sustainability means to me a sustainable way of production.

Q2: How do you decide whether to buy a sustainable product?

A2: Since I don't believe in a sustainable way of production through the capitalist way of living, I just don't purchase eco-friendly products.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: I don't think so and it all goes down to what sustainability means for me I think I have a different view of sustainable products.

Q4: What challenges do you face in making eco-friendly choices?

A4: The biggest challenge is being sure it is all the way sustainable, I think there are big crucial challenges in the industry itself I don't think the industry has a sustainable midst of production, I think sustainability is mostly marketing, so for

me it is being sure it is for real unstable or not when the majority of the industry is not.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: I think there are two realities for that there are people who see sustainability as a joke and don't take it seriously, at the same time I have seen a lot of old people who are all about recycling.

Q6: Do you think education plays a role in promoting sustainable habits? How?

Interview 2:

Information: 19 years old, Male, Portugal, Braga, Student Bachelor

Q1: What does sustainability mean to you?

A1: Sustainability, like, is about creating a balance where we meet our needs without compromising future generations, you know? And I think it's not just about eco-friendly products, but, like, it's about responsible consumption, you know, like preserving natural resources.

Q2: How do you decide whether to buy a sustainable product?

A2: So, to me deciding whether to buy a sustainable product involves looking at factors like um like production methods and I also consider durability because something built to last is often more sustainable than something that needs frequent replacing.

A6: Yes, I think so because I think a lot of what you learn becomes a habit.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: I think there is a need to have a very profound change, a revolution in the culture of production it is not all about consuming the problem is production for me cause it influences a lot of consuming habits.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Portugal has made significant strides, especially in sectors like textiles, food, and energy-efficient appliances, you know but I think we need more.

Q4: What challenges do you face in making eco-friendly choices?

A4: So, like for me making eco-friendly choices includes cost because many sustainable options are pricier and misinformation too because greenwashing can make it hard to tell what's truly sustainable. You know, when like some products tell us that I don't know. It's a marketing technique used to make consumers believe a brand is more sustainable than it is.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: I Think cultural values affect it a lot, because I have information about sustainable behaviors from school and my family and this made a lot of difference for me to really know what is different between sustainability and non-sustainability.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: I think education absolutely plays a role in promoting sustainability. Because when people understand the impact of their choices, they're more likely to adopt responsible habits, you know. Schools, media, government, and initiatives can all encourage conscious consumption.

Interview 3:

Information: 22 years old, Female, Portugal, Braganca, Student bachelor

Q1: What does sustainability mean to you?

A1: To me, in a broad sense, sustainability means living in a manner that satisfies present needs without sacrificing the capacity of future generations to fulfill theirs. It demands equilibrium between social, environmental, and economic prosperity. To me, sustainability is a question of justice and equilibrium when I am a 22-year-old university student. It's not only about preserving the environment but also about guaranteeing that all people—independent of their background or socioeconomic level—have decent living and equal access to resources.

Q2: How do you decide whether to buy a sustainable product?

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: I think they could like to improve sustainability by incentivizing eco-friendly practices. Like, I don't know, promoting transparent labeling. Too, I would help, and I don't know, you know, those things like reducing waste and investing in renewable energy, and I think stronger, stronger regulations and consumer education. Companies would also help, and yeah, that connects with the thing about education and those things.

A2: To be honest, not because I don't want to but rather because of my financial circumstances, I still don't have the habit of purchasing environmentally friendly goods. Actually, sustainability is about investing in something recyclable or durable, therefore saving more money ultimately. However, in reality, when I am in a store and two items, one less expensive and one branded "sustainable," I almost always go for the more affordable one. Often driven by urgency and cost rather than environmental consciousness, it is an instinctive choice. In a society where everything revolves around quick and convenient consumption, thinking long term is not always a practical choice for everyone.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: I believe that today there is more availability, especially in online retailers and big supermarkets. It is one thing for things to be accessible and another for people to really buy them. Portugal remains, in my view, a quite consumer-oriented nation not especially open to shifts in purchasing patterns. I might be generalizing, but I have seen a certain resistance—maybe owing to the country's aging population, in which many people adhere to old habits and prefer not to change, even when newer approaches are more conscious. Sustainable goods also stay more costly, therefore naturally excluding those with fewer resources. And even among people who can afford them, the idea of sustainability is not always well “marketed” or communicated—it doesn't connect with the average consumer. Though there are more ethical options, the quest for speed, simplicity, and affordability still rules ultimately.

Q4: What challenges do you face in making eco-friendly choices?

A4: The most difficult obstacle is surely financial, as I previously noted. Choosing environmentally friendly often entails more expenditure for a reusable item, a locally made product, or one with a reduced environmental effect. Living on a tight budget transforms these choices into a luxury. Another difficulty is mental exhaustion; we live in a society that asks for rapid and practical decisions, therefore we sometimes lack either the time or the energy to think about which package has less plastic or which product was ethically made. I also see a lack of straightforward information—there are numerous labels and “green” claims that,

practically speaking, are not really significant. This causes mistrust and finally discourages people over time. And, needless of course, there is social pressure too: difficult it is to stay committed when no one around you values these things or even sees them as overreactions. It becomes a lonely fight. While many times marketed as a personal decision, sustainability should really be backed by government programs and a system that does not compel us to decide between awareness and survival.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: I've seen that cultural values have a great impact on consumer behaviour. I have said before, but I will emphasize once more: I sense a resistance to change connected to the preservation of past practices, which is reasonable in a country with a large elderly population. This can make it challenging to embrace new, more ecologically friendly methods, which often need for change, patience, or even unlearning. There is also a pervasive culture of convenience and instant gratification that goes against the philosophy of sustainability, which calls for time, preparation, and mindful consumption. Certainly, there are exceptions; increasing number of people are recognizing these problems; however, sustainability still has little influence in most people's everyday life—perhaps because, as it is presently presented, it yet feels distant or even elitist instead of being presented as a practical, community-rooted approach.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Indeed. Among the most potent instruments for changing attitudes especially when it comes to sustainability is education. Children who from an early age are taught to consider the effects of their actions, to appreciate resources, and to question consumer practices are more likely to grow up with a great understanding of sustainability. But by education, I refer not only to schools but also to public campaigns, open communication, and even casual chats at home. The problem is that the sustainability conversation should be inclusive and based on people's lived experiences, but instead is frequently too technical, far-off, or centered on blaming individuals.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: Making sustainable goods really available would be the first move. Raising knowledge is useless if most individuals cannot afford to make

Interview 4:

Information: 26 years old, Male, Portugal, Braganca, Working

Q1: What does sustainability mean to you?

A1: Sustainability should be about a long-term equilibrium between humans, business, and the environment. In fact, though, it has evolved into a marketing buzzword. Most businesses and even educational institutions discuss sustainability without actually, structural

wise decisions. One could, for instance, subsidize companies that generate locally and sustainably and provide tax incentives for customers such as discounts or immediate subsidies. Reducing red tape for little-scale sustainable projects, increasing investment in efficient and reasonably priced public transportation, and encouraging continuous education not just in schools but throughout society would all be crucial.

On the corporate front, I think we still have a way to go in how sustainability is discussed. Rather than portraying it as something "premium" or specific, businesses could demonstrate its relevance to daily life. Sustainability ought to be standard operating procedure rather than a luxury. For this to occur, businesses, governments, and people must collaborate to establish actual conditions for change. That is so because, as I have been saying, it is about creating a system in which people may truly choose, not just about individual decisions.

changes. True sustainability, for me, is about transforming the system rather than just purchasing environmentally friendly items.

Q2: How do you decide whether to buy a sustainable product?

A2: First, I wonder whether the goods is actually environmentally friendly or just branded that way. Many companies greenwash their products to rationalize more expensive prices. I verify whether it is used, sturdy, or locally produced. But let's face it: sometimes I simply

cannot afford the environmentally friendly alternative, and I believe that is a major issue.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Though not universally available, they may be found mostly in Porto and Lisbon. The choices in smaller towns like Bragança are fewer and often more expensive. Though it seems like it right now, sustainable living should not be a privilege.

Q4: What challenges do you face in making eco-friendly choices?

A4: Affordability and accessibility. Students and low-income workers are frequently unable to afford sustainable goods. Additionally, the system encourages excess and convenience, making it difficult to make ethical decisions when the whole economy is based on the opposite.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: In the past, Portuguese culture was naturally sustainable since it valued simplicity, reuse, and repair. However, in today's society of globalization and consumerism, convenience and quick consumption are taking the place of

those ideals. Without even noticing, we've shifted away from what was already sustainable.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: It has to go beyond simply recycling facts. Education should emphasize critical thinking, teach individuals to question consumer culture, comprehend systems, and feel empowered to advocate for meaningful change. Currently, the majority of environmental education is superficial.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: Stop assigning blame solely to people. Through legislation, taxes, and transparent reporting, companies should be held accountable. In order to make sustainability affordable, governments must invest in public transportation, support local producers, and control polluting industries. Individual acts alone will not bring about real change; we need legislative and systemic change.

Interview 5:

Information: 20 years old, Male, Portugal, Braganca, Working

Q1: What does sustainability mean to you?

A1: It's about using less, wasting less, and generally, protecting the environment. However, it seems like a subject intended for those with

time and resources. The majority of us are simply attempting to make ends meet on a daily basis.

Q2: How do you decide whether to buy a sustainable product?

A2: I don't really think about it much. I usually choose what's cheapest or what I know works.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Maybe in larger cities. But in Bragança? No, not really. In regular retail stores, you don't see many eco-options, and those that you do are pricey. The majority of the population here is more concerned with affordability than with sustainability.

Q4: What challenges do you face in making eco-friendly choices?

A4: The biggest problem is cost. I'm working, but I make little money, so I can't afford to pick a course only because it's beneficial for the environment. Furthermore, I'm doubtful. Many businesses claim their product is sustainable simply in order to raise prices.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: I don't think about this much, but we often encounter these topics in schools and universities. In my opinion, values alone without real behavior mean nothing.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Even if it should, it doesn't genuinely relate to reality. Don't simply display global warming charts if you want my generation to give a damn; instead, demonstrate to us how it really impacts us. Focus on everyday practices rather than broad concepts.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: Keep it simple. Make it affordable. That's all. Don't make the better choice the harder one if you want people to make better decisions.

Interview 6:

Information: 31 years old, Female, Portugal, Lisbon, Working

Q1: What does sustainability mean to you?

A1: It's all about maintaining equilibrium. Not doing everything flawlessly, but rather making wiser decisions when feasible – cutting waste, promoting better brands, and being more conscious of one's habits.

Q2: How do you decide whether to buy a sustainable product?

A2: I'm more concerned with honesty and durability than with labels. Even if it's not

technically "eco," I'm more inclined to buy it if it lasts and has a clear source.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Yes, in Lisbon. We have a plethora of options available, including organic markets, secondhand stores, and refill outlets. However, access does not imply action. What's quick and inexpensive is still frequently chosen by people.

Q4: What challenges do you face in making eco-friendly choices?

A4: Clarity and time. Because I work full-time, I don't always have the mental space to investigate things.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: In Portugal, I believe there is a great sense of community and tradition, but this does not always lead to choices that are environmentally sound. Although we appreciate excellent cuisine and local products, we also value convenience in the form of takeout meals, quick delivery, and shopping at large retailers. Although people care, it is not always a top priority. Unless they are aligned, cultural practices prioritize comfort over sustainability.

Q6: Do you think education plays a role in promoting sustainable habits? How?

Interview 7:

Information: 24 years old, Female, Portugal, Braga, Student, Master

Q1: What does sustainability mean to you?

A1: For me, this word means production methods, processing methods, lifestyle, and mentality.

Q2: How do you decide whether to buy a sustainable product?

A2: For me, decision-making is often based on what financial gain will bring me. This is always the first thought, for example, whether I should buy a plastic bottle every time or a glass bottle for my home once. Then I think about how much I will pollute the environment with this.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A6: It has to be practical, yes. Teach individuals how to live sustainably, rather than just discussing climate statistics.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: Do not promote "eco" while creating waste; instead, maintain consistency in your business.

The government should promote affordable public transit, improved waste management systems.

A3: It's not very accessible, but it's there anyway, and cities provide opportunities for things like recycling and garbage separation, and it's also more or less available in stores.

Q4: What challenges do you face in making eco-friendly choices?

A4: Sometimes you want to live a more sustainable lifestyle, for me it feels like killing my inner ego because ultimately, I think that there are so many industries that are really damaging the environment and the behavior of individuals can't change that. I agree with different production methods. I think I have a challenge in this mentality.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: Culturally, we talk about this a lot around me at university, in my family, that's how I grew up

buying local produce, in general, the whole family supports local production, and sometimes it's even more profitable financially in ideal circumstances.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: I think it plays the biggest role, but it must also be accompanied by behavior from relevant businesses and governments.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

Face to Face interview for Georgians

Interview 1:

Information: 28 years old, Female, Georgia, Tbilisi, Working

Q1: What does sustainability mean to you?

A1: For me, sustainability means taking care of the environment and using less waste and using products that leave less waste.

Q2: How do you decide whether to buy a sustainable product?

A2: If there is a reference to the product and it catches my eye and the price is the same, then I choose a sustainable product.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: I don't think it catches my eye much when I enter the market and as an exception, if I can find them.

A7: I would advise businesses to look for more ways to recycle their waste, the coffee industry is very interested in trying this out. For example, I recently learned that you can recycle coffee capsules and reuse them. This can also encourage consumers to use them with various benefits. I would also advise the government to introduce more practices and tighten control over businesses through legislation.

Q4: What challenges do you face in making eco-friendly choices?

A4: The product is not very accessible, so it is a challenge not to be able to buy a sustainable product, if I do find it somewhere, the price is relatively expensive.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: I think that in Georgian culture I have not noticed the willingness and knowledge to be more sustainable and I think the reason for this is education and artificially changing the culture through education.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Yes, for example, I can talk about myself and my generation, that their behavior has

changed with education, because our parents did not raise us like this, because they did not raise us like this, so they had this culture, so education is the solution that effectively changes behavior, and there are clear examples of this in my personal case and in my environment.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

Interview 2:

Information: 24 years old, Female, Georgia, Tbilisi, Working, Student master

Q1: What does sustainability mean to you?

A1: Sustainability to me means the state when you do not harm the environment with your existence, or you do so minimally that it does not lead to a natural disaster. You make and take decisions that protect the environment and, moreover, take care of it so that what humans have ruined so far, at least do not ruin it any further, and at most look for ways to fix it.

Q2: How do you decide whether to buy a sustainable product?

A2: In general, I pay attention to the packaging, what material it is made of, I avoid plastic, I try to buy more packaging made of glass, I also pay attention to the inscriptions and information on the packaging, I also try to buy products directly from farmers who grow this or that product themselves, sell fruits and vegetables from their garden or dairy products from their own cattle. I

A7: First of all, they should take care of the waste that remains as a result of production, if they think of ways to recycle it and refine it, this would be my advice to businesses. The second advice would be to be able to produce such a product and then reuse it, perhaps this is the main one, which is one of the important values for sustainability.

also try to buy clothes in second-hand stores, which I believe is my contribution to preventing the further development of srafi fashion. Although I know that this is minimal.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Officially sustainable products are not widely available in Georgia, especially in the regions, but I think that if a person wants to harm the environment relatively less and is serious about it, in any case, they will find some solution and alternative. In general, our country is not yet developed to the point where the population thinks about such a choice, which product consumption will benefit the environment. In Georgia, cheap products are mainly preferred, which is usually an unsustainable decision.

Q4: What challenges do you face in making eco-friendly choices?

A4: Lack of information, you don't know exactly what a product is, what it is made of, what it contains, it's very difficult to trust labels, in fact, everything. The most important reason is the

price, as I mentioned in the previous question, for the average Georgian, making eco-friendly decisions is in the background, due to the economic and social situation of the country. However, in the new generation, these trends are changing in one way or another, which is caused by receiving more information, interest, rearranging priorities, as well as the slow development of the country's economy, etc.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: Although Georgians have always been proud of Georgia's nature, they have done very little to protect it. In general, caring for nature, as I mentioned in the previous question, has become more widespread with recent trends. A few decades ago, throwing any garbage on the street was considered normal, acceptable behavior, and people walking near beautiful forests or historical monuments would see people's footprints in the form of garbage. However, according to my observations, the older generation has retained such habits as using reusable cloth bags instead of plastic bags, buying food stored in glass containers and then returning it, or using these containers in everyday life, etc. So I don't have a definite answer to this.

Q6: Do you think education plays a role in promoting sustainable habits? How?

Interview 3:

Information: 22 years old, Female, Georgia, Tbilisi, Working, Student bachelor

Q1: What does sustainability mean to you?

A6: In general, education, as in everything, also plays a huge role in this issue, and it is very noticeable in Georgia that there is no significant emphasis on these issues in the education system. When a person is exposed to information from an early age, knows what consequences it can lead to and how important each of use's daily decisions are for the environment, he then forms eco-friendly habits to cause as little harm to the environment as possible, and these habits follow him throughout his life, and his decisions are already unconsciously directed towards this.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: It will be very important for the state to strengthen environmental education. Both theoretical and practical education. The state should also encourage green projects, support eco-friendly initiatives. As for the direction of business, they should also encourage eco-projects, try to use eco-friendly products in their offices (for example, replace plastic cups or have employees bring their own cups to the office, which they can use repeatedly), take care of disseminating information in this regard among employees, organize campaigns and instill in them a desire to take care of it.

A1: For me, sustainability means caring about the world and the earth, and giving back as much as it gives us.

Q2: How do you decide whether to buy a sustainable product?

A2: To be honest, it like depends on the price; usually they're more expensive, but if it will last me longer, I am willing to pay more for it. But I am all for recycling, so even if I don't buy a sustainable product, I know I am going to recycle and reuse as well. So I think I am giving back to the community.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: I wouldn't say so. Because if they are, uh, they are imported from other countries for a very high price, uh, like for example the reusable straws like the glass straws are very expensive and I know I bought one time for one euro the glass straws but in Georgia they cost like equivalent to like five or seven euros which is a lot. Also, the bamboo toothbrushes and etc they are very expensive in Georgia.

Q4: What challenges do you face in making eco-friendly choices?

A4: It usually comes down to the price because when I'm using like for example skincare products and etc. a lot of them can be made from reusable reused materials or recycled but they are usually more expensive so I would say the price still affects my decision.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: Historically, all the poets and like all the writers in Georgia were admiring Georgian nature and etc. so I would say that within our

hearts, I think we have the need to like give back to the nature and like don't destroy it, basically. But in this era, in this age, it's like harder to not fall nude and I would say it is like a quite large problem for Georgia pollution

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: like for example, when I was a kid, I read a post on Facebook or somewhere like that that uh, if you throw away chewing gum, the birds ate them and died, so like for like 10 years or 15 years I haven't thrown away a gum for example and like when you especially like when you give this information to young children, it's going to like be imprinted on their brains and they're going to act accordingly even when they're adults.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: In Georgia, I would say that I think they need to start making the products in Georgia, which will create more jobs, in my opinion, and also will help the market to stabilize. Yeah, I think we have enough resources to produce our Georgian stuff. And I think they should do that. For business and government? For government? I don't know. Maybe. I don't know. There are a lot of problems. There are a lot of problems with Georgian government. I would say that if they start promoting sustainability, I think they can get more funds from European Union and etc.

Interview 4:

Information: 25 years old, Male, Georgia, Tbilisi, Working, Student Master

Q1: What does sustainability mean to you?

A1: In my opinion, sustainability entails living in a manner that respects environment. It's a mindset, not merely about reducing the usage of plastic. I make an effort to put it into practice in my everyday life by doing little things like riding my bike instead of driving and utilizing reusable materials. However, I also believe that sustainability must be practical and that individuals need real, cost-effective solutions rather than simply aspirations.

Q2: How do you decide whether to buy a sustainable product?

A2: When it comes to sustainable products, I look for ones that are reasonably priced, reusable, and long-lasting. I stay away from single-use products and use environmentally friendly bottles and bags. However, I also think that sustainability should be accessible. If a product is priced too high simply because it is labeled "eco," I get suspicious. The economics must also make sense.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: They are now more accessible in Georgia, notably in Tbilisi, but they are still out of reach for many people. People in smaller towns may not even have access. Despite the fact that many Georgians already live sustainably by reusing, fixing, and reducing waste, we don't always refer to it as such.

Q4: What challenges do you face in making eco-friendly choices?

A4: The main obstacle is cost and availability. In Georgia, sustainable goods are still rare, and when they are available, they are often more expensive. Additionally, there is a lack of support and infrastructure, such as adequate recycling programs or safe bike lanes. Even if people want to live in an environmentally responsible way, it's more difficult for them to do so.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: Due to the innate resourcefulness of Georgian culture, older generations consume very little, prepare meals at home, and reuse everything. Even if it isn't promoted as such, it's already sustainable. However, we run the danger of losing those practices in this era of Western trends and rapid consumerism. We should cherish our traditional way of life more and integrate it with contemporary knowledge.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Certainly. Education teaches individuals why their actions are important and how they may effect change. However, it must be realistic and related to reality—not merely theoretical. Instead of merely discussing climate change data, we should teach young people how to live sustainably with the resources they have.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: In order to improve its image, I believe that Georgia businesses should be more transparent and cease using green labels. In reality, they should cut waste, encourage reuse among customers, and support local suppliers. The government should make investments in infrastructure, such as improved recycling, cleaner public transportation, and more bicycle-friendly cities. Additionally, make sustainable options more accessible and less difficult, not the other way around.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

Interview 5:

Information: 18 years old, Male, Georgia, Tbilisi, Working, High school

Q1: What does sustainability mean to you?

A1: In my opinion, sustainability entails avoiding waste and attempting to safeguard the environment. such as recycling, using less plastic, and conserving energy. Although I'm not really into it, I understand that it's crucial for the future.

Q2: How do you decide whether to buy a sustainable product?

A2: I don't generally give it a lot of thought, to be honest. I only purchase what I need and can pay for. However, I may select something if the cost is reasonable and I am aware that it is better for the environment.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A7: In order to improve its image, I believe that Georgia businesses should be more transparent and cease using green labels. In reality, they should cut waste, encourage reuse among customers, and support local suppliers. The government should make investments in infrastructure, such as improved recycling, cleaner public transportation, and more bicycle-friendly cities. Additionally, make sustainable options more accessible and less difficult, not the other way around.

A3: There are a few eco-friendly products available in stores. Due to their lower price, the majority of consumers continue to purchase standard items.

Q4: What challenges do you face in making eco-friendly choices?

A4: I think the biggest obstacle is cost. People or students who make little money have a hard time because environmentally friendly products are more expensive. Sometimes, too, we simply don't know what is truly sustainable and what isn't.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: To be honest, I don't believe that many Georgians discuss sustainability, particularly the younger generation. My generation is more interested in fast things—fast food, fast fashion—but I think some of us are beginning to

pay more attention. Perhaps all that is necessary is for us to view it in a manner that complements our way of life.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Education might be beneficial, but only if it is approached in a different way. In school, discussions about the environment typically consist of simple facts or uninteresting PowerPoints. Nobody really pays attention. However, it would be more intriguing if we had real-world examples, games, or projects, such as making something out of garbage or cooking without waste. I believe that young people, like myself, want to belong to something, but we

Interview 6:

Information: 24 years old, Female, Georgia, Kutaisi, Student, Bachelor

Q1: What does sustainability mean to you?

A1: Sustainability, in my opinion, is a way of life that does no harm to the environment or to other people. It's about considering beyond the present day and utilizing only what you need, not more. I wouldn't claim to be an expert, but I do attempt to make modest, more ethical decisions, such as using what I already have rather than constantly buying new things.

Q2: How do you decide whether to buy a sustainable product?

A2: I generally ask myself whether I truly need it. I would rather borrow or recycle anything if at

need to feel that it's important and not just another regulation at school.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: They shouldn't treat us like we're wealthy adults. The majority of students cannot afford pricey green products. They should make it simple and enjoyable if they want us to care, such as by offering discounts for bringing your own cup or by organizing interesting local events that combine music, cuisine, and environmental concepts. Additionally, try not to give the impression that we are the issue. If we are included and treated with respect, we are willing to help, but we did not cause this mess.

all possible. I don't go shopping much because I'm still a student. When I do, I either try to avoid plastic if there is another option or pick anything that seems likely to last longer. However, I sometimes lack the time or resources to verify every detail.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: I believe things are improving in Georgia, particularly in larger cities. However, the majority of businesses continue to sell inexpensive plastic goods, and sustainable alternatives are either harder to come by or cost prohibitive. Not everyone is aware of certain ecoshops that you must visit sometimes. There is still a lot of work to be done before sustainable choices seem commonplace and accessible.

Q4: What challenges do you face in making eco-friendly choices?

A4: The most important factor is undoubtedly price. There is frequently more plastic or packaging in the less expensive product. Additionally, a lot of items use the words "natural" or "eco" without really defining what those terms signify. Although I want to make the right decisions, I also don't want to be duped. Moreover, there are times when my life is simply too hectic for me to give it any thought until after.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: In Georgia, I believe, people are accustomed to being practical—not for sustainability reasons, but for financial and practical reasons. My grandmother and mother always conserved food, reused jars, and seldom discarded clothing. Although it is somewhat sustainable, no one uses that term. The issue is that today's youngsters want convenience and modern products, which frequently results in more waste. I don't believe that our culture is anti-sustainable, but we haven't realized that some of our former practices may be a part of the answer. All we need is a new perspective on them.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Yes, education plays a part, but I don't believe it's doing enough at the moment. The majority of our education is theoretical or centered on major global issues. It seems far away. We need more practical, community-based education, such as how to minimize waste at home, how to make better purchases, or how to spot genuine ecofriendly goods.

Students should also be urged to ask questions rather than merely accept policies or slogans. We'll make more thoughtful decisions if we use critical thinking rather than just following trends.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: I believe that companies should quit acting and start behaving. They shouldn't simply use green logos to claim sustainability; they should demonstrate it openly. Give us easy, everyday choices, such as letting us refill, use our own containers, or fix items rather than replacing them.

In my opinion, the government should back sustainable enterprises rather than merely major industries. Additionally, public awareness initiatives using plain language would be beneficial. The majority of individuals need to see that they can apply the information in their everyday lives and that it's feasible; they don't read reports.

Interview 7:

Information: 29 years old, Female, Georgia, Kutaisi, working

Q1: What does sustainability mean to you?

A1: I see it in the kitchen every day since I work there, and it's all about not wasting food, resources, and money. While sustainability is widely discussed, fundamental concepts such as avoiding food waste are often overlooked.

Q2: How do you decide whether to buy a sustainable product?

A2: I'll buy it if it makes sense and isn't too expensive. However, not all items with a green label are trustworthy; many "eco" goods are simply advertisements. I like to make use of what I already have.

Q3: Do you think sustainable products are widely available in Georgia/ Portugal?

A3: Not really. There aren't many options in Kutaisi, and they're frequently pricey. Even if they want to, the majority of individuals are unable to select the "green" alternative.

Q4: What challenges do you face in making eco-friendly choices?

A4: Time, trust, and resources. I put in a lot of hours at my job. I don't want to pay too much for something that might not even be environmentally friendly, and I don't have the time to hunt for unique shops.

Q5: How do cultural values in Georgia/Portugal affect sustainable consumer behavior?

A5: Our culture is not rooted in a culture of sustainability, because, for example, water is not expensive and we can consume as much as we want. I think that natural resources allow us to not worry about it anymore.

Q6: Do you think education plays a role in promoting sustainable habits? How?

A6: Although yes, it must be realistic. Educate people on how to live better lives, not simply on theories. Demonstrate how to cook without wasting half of it, use it more, and waste less.

Q7: What improvements would you suggest for businesses and government to promote sustainability?

A7: Companies must quit greenwashing. Governments must promote recycling, back regional markets, and make sustainable decisions affordable. Nobody can do it by themselves.