

# SUSTAINABLE CONSUMPTION PATTERNS: THE ROLE OF CONSUMER BEHAVIOR IN A GREEN ECONOMY

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## Abstract

*The concept of sustainable consumption patterns emphasizes the necessity for individuals and communities to shift towards consumption habits that minimize environmental impact, conserve resources, and support long-term ecological balance. In a green economy, consumer behavior plays a pivotal role in driving the demand for sustainable products and services, which in turn influences production systems and business strategies. This paper explores the intersection of consumer choices and sustainability, investigating how factors such as awareness, values, social influence, and policy interventions impact the adoption of eco-friendly behaviors. By highlighting the barriers to sustainable consumption—such as perceived costs, lack of availability, and knowledge gaps—the discussion delves into how consumers can be empowered through education, incentives, and corporate responsibility to foster a green economy. Ultimately, it advocates for a holistic approach, involving stakeholders across sectors to promote behaviors that support sustainability at both individual and societal levels.*

**Keywords:** sustainable development, consumer behavior, environmental impact, eco-friendly products, resource conservation

## I. Introduction

In recent years, the urgent need to address environmental degradation and climate change has driven the shift toward sustainable development and the promotion of a green economy. A green economy prioritizes low-carbon, resource-efficient, and socially inclusive growth. One of the critical elements underpinning the success of a green economy is sustainable consumption, which requires individuals to adopt behaviors and consumption patterns that minimize environmental impact, reduce waste, and conserve natural resources.

Consumer behavior plays a central role in shaping the trajectory of the green economy. The choices that individuals make regarding the products and services they purchase significantly affect the demand for environmentally friendly alternatives, encouraging businesses to innovate and adopt sustainable production practices. However, fostering sustainable consumption is not without its challenges. Numerous factors—such as consumer awareness, economic considerations, cultural norms, and availability of sustainable options—impact individuals' willingness and ability to make eco-friendly choices.

This paper examines the role of consumer behavior in promoting sustainable consumption patterns within a green economy. It explores the drivers and barriers to sustainable consumption, considering how public policies, corporate strategies, and social influences can facilitate the transition to more responsible and environmentally conscious consumption habits. The discussion

underscores the need for a collaborative approach that involves governments, businesses, and consumers working together to promote a sustainable future.

By understanding the mechanisms through which consumer behavior can impact the green economy, this research aims to offer insights into how sustainable consumption patterns can be encouraged and adopted more widely. In doing so, it contributes to the broader dialogue on sustainability, emphasizing the importance of individual action as a catalyst for large-scale environmental progress.

Today's consumption is no longer just about using goods and services to meet immediate needs; it has also become a reflection of living standards, a marker of social structure, and a way for individuals to express their identity. In contemporary literature, many definitions of consumption emphasize its social, biological, and psychological dimensions, as well as the factors influencing the satisfaction of human needs. The evolution of consumption, driven by globalization, internationalization, innovation, and the rapid development of a knowledge-based economy, has led to consumption playing not only an important but perhaps a fundamental role, increasingly influencing modern economic processes and growth.

Today, even the youngest family members are becoming active participants in the shopping process, often acting as key advisors and decision-makers, especially when it comes to selecting and purchasing products for family enjoyment, such as modern and high-tech gadgets. In response to environmental degradation, a growing number of consumers are enthusiastic and committed to making significant changes in their daily lives to reduce their ecological footprint. As a result, they make purchasing decisions based on sustainable development principles, fully aware of the impact their choices have on their health and the environment.

Today's consumers, above all, are conscious of the effects of their decisions, largely thanks to greater access to information and active involvement in social life. They are knowledgeable about product quality and the price-to-quality ratio, making more responsible choices in shaping their consumption patterns and asserting their consumer rights. Pro-environmental consumer behavior involves the extent to which consumers engage in deliberate, rational actions to protect the natural environment. This environmentally friendly attitude is a product of knowledge and environmental awareness developed by informed individuals.

Fostering these attitudes and promoting healthy lifestyles in society through awareness-raising is one of the primary goals of education for sustainable development. Current research on the relationship between pro-environmental attitudes and behaviors, as well as the methodology used, requires a modern approach. While much of the literature links consumer behavior with these attitudes, empirical findings remain ambiguous regarding the nature, strength, and direction of these relationships.

Young consumers were selected for this study due to their growing influence and decision-making power within households. They tend to respond more actively to the evolving environment, globalization, and its impact on consumption, lifestyle, and emerging trends compared to other market participants. Understanding their motivations, behavior, and market attitudes can help businesses develop appropriate, innovative marketing strategies and identify the right paths for growth. This will enable companies to stay competitive and offer attractive products or services to new, particularly younger, customers, even amidst rapid changes in consumption patterns and the fast-paced development of mobile technologies and applications.

This article aims to identify the consumer attitudes and behaviors of young people that align with the principles of sustainable consumption. It is divided into three sections: theoretical, methodological, and empirical. The theoretical part explores the concept and essence of sustainable consumption and its link to Fair Trade. The methodological section briefly outlines the research design and sample selection. The empirical section investigates the pro-environmental behaviors of young consumers that can be characterized as sustainable consumption. The article concludes with a summary of key findings and insights.

## II. Methods

The research was conducted using a custom-designed questionnaire created by the author, consisting of 50 closed-ended questions focused on alternative consumer trends, including sustainable consumption. The survey was carried out between February 1 and May 1, 2018. One of the challenges was accurately defining the target group, as the term “young consumer” lacks a universally agreed-upon definition in the literature. Different studies define the age range of young consumers in various ways, such as 15-29 years old [Szulce, 2009, p. 637], 15-34 years old [Olejniczuk-Merta, 2001, p. 40], 18-25 years old [Grønhøj, 2007, p. 243], 18-30 years old [Kumar, Kapoor, 2017, p. 218], and 18-35 years old [Phillips, Stanton, 2004, p. 8; Oforu, Gyanewa, Boadi, 2013, p. 288]. For this study, the population was defined as individuals aged 18-34, in line with Polish literature, where 34 years is considered the end of youth.

Participants were recruited through the “ankietka.pl” platform and social media channels like Facebook, WhatsApp, Messenger, and email. To participate, individuals had to access a specific website containing the questionnaire, which was also shared on specialized forums and the fanpages of universities and private schools. The study focused on young consumers aged 18-34, belonging to Generations Y and Z, who made independent purchasing decisions. Importantly, the research targeted all young consumers, not just those engaged in sustainable consumption. A quota sampling method was applied, with gender and age being the key variables (quotas).

It should be noted that a primary methodological challenge in studying the sustainable behavior of young consumers stems from the non-random sampling approach and the use of an online survey. Incomplete or incorrect responses were excluded (17 cases), and out of the 606 initial questionnaires, 589 valid responses were retained, representing 97.19% of the total sample. These responses were coded, and the data were analyzed using the statistical software SPSS, version 23.

The main objective of the research was to explore sustainable consumption patterns among young Polish consumers. The study aimed to uncover the primary factors motivating young people to engage in sustainable consumption. To this end, three research hypotheses were proposed:

- H1: Sustainable consumption is more prevalent among well-educated young consumers living in large cities.
- H2: Disposable income significantly influences young consumers' positive attitudes toward sustainable development. The higher the income, the more favorable their views on sustainable consumption.
- H3: Young women demonstrate higher environmental awareness than young men, leading to consumer behaviors that are more closely aligned with sustainable consumption principles.

## III. Results

The restrictions on both domestic and international transportation during the Covid-19 pandemic led to a significant reduction in travel demand, a near standstill in transportation infrastructure, and numerous serious socioeconomic impacts. On the other hand, reduced transportation activity also meant lower demand for oil and other fossil fuels, which brought environmental benefits, including improved air quality. For example, NO<sub>2</sub> emissions dropped by up to 30%, contributing to enhanced environmental quality (Muhammad et al., 2020). Water quality also improved as a result of people staying home and reducing travel and shipping activities.

However, the pandemic also brought environmental challenges, particularly due to the vast amount of medical waste generated daily. The sudden increase in the use of disposable masks, gloves, and hand sanitizers by millions of people contributed to a surge in waste. Additionally, as

household organic waste increased and online purchases required more transportation and packaging, there was a dramatic rise in inorganic waste as well. The environmental consequences of the pandemic, both direct and indirect, continue to raise questions about new strategies and approaches that the global community is exploring to reduce future environmental impacts.

**H1: Pandemics have a positive impact on environmental awareness.**

Pandemics have had a significant influence on regulatory changes affecting global consumer behavior. At the onset of the Covid-19 outbreak, many countries implemented lockdowns or isolation measures, disrupting normal life and forcing the closure of local businesses. Concerns over product shortages triggered anxiety and led consumers to stockpile essential goods and medical supplies. However, as the pandemic persisted, with new variants emerging, financial instability became more pronounced. This resulted in rising unemployment, inflation, and an economic recession in many countries, all of which have affected consumer attitudes, perceptions, and behavior.

In response, consumers have become more cautious in their purchasing decisions, seeking to balance income and expenditure amid price fluctuations and uncertain wages. A 2021 survey of over 3,000 consumers across 15 countries revealed that the pandemic may have ushered in an era of healthier and more sustainable consumption that could last for the next decade (Accenture, 2021). It is clear that Covid-19 has had a profound impact not only on the global economy but also on the psychology of consumers, leading to notable changes in both short-term and long-term consumption patterns.

**H2: Pandemics have a positive impact on consumer attitudes.**

Subjective norms play an important role when individuals feel pressure to engage in certain behaviors. In response to unforeseen and potentially dangerous situations, like Covid-19, people often experience anxiety and negative emotions as a protective instinct. When feeling vulnerable, individuals may be more likely to accept negative judgments from others in order to safeguard themselves. For example, to prevent the spread of the virus, individuals may heed advice from their partners and maintain social distancing.

Cultural differences also influence responses to pandemics. Asian cultures, which emphasize social responsibility and collectivism, often encourage individuals to follow societal norms and suppress personal desires. In contrast, Western cultures place a greater emphasis on autonomy, independence, and self-regulation.

**H3: Pandemics have a positive impact on subjective norms.**

Perceived behavioral control refers to an individual's assessment of how easy or difficult it is to perform a particular behavior. People are more likely to exert effort to carry out an action if they believe they have the resources and skills needed and expect fewer obstacles. The Covid-19 pandemic disrupted global supply chains and created a workforce crisis, limiting consumer access to sustainable products and services. This led to a surge in stockpiling, although supply capacity could not keep up with demand.

Consumers must also factor in the added costs of green products, which have risen due to market fluctuations caused by the pandemic's direct and indirect effects, along with income loss from job cuts and social distancing mandates. However, reduced spending provides an opportunity to promote sustainable consumption patterns. These include lowering energy use, increasing recycling, cooking at home more often, avoiding unnecessary purchases, and buying secondhand clothing to manage living costs.

**H4: Pandemics promote sustainable consumption behavior by encouraging cost-saving and eco-friendly practices.**

## IV. Discussion

Green consumption has emerged as a popular and novel approach to consumption and lifestyle, gaining traction among a large number of consumers. This approach emphasizes environmental impact, resource efficiency, and consumer rights. Rooted in health protection and resource conservation, green consumption aligns with both personal well-being and environmental sustainability, with its core principle being sustainable consumption. According to the China Consumers' Association, green consumption encompasses three key elements: (1) encouraging consumers to choose eco-friendly products, (2) focusing on responsible waste disposal to prevent environmental pollution, and (3) promoting a shift in consumer attitudes towards valuing nature and prioritizing health. This approach aims to balance the pursuit of a comfortable life with the conservation of resources and energy, ultimately achieving sustainable consumption.

The concept of green consumption was first introduced in 1987 by British scholars Elkington and Hailes in their book *\*Green Consumer's Guide\**. They defined green consumption as the avoidance of certain products, including: (1) goods harmful to health, (2) products that use excessive resources during their lifecycle, (3) items with unnecessary packaging or short lifespans, (4) products derived from endangered animals or natural resources, (5) items involving cruelty to animals, and (6) goods that negatively impact other countries, particularly developing nations (Lin & Xu, 2000; Xu, 2007).

Today, the "5R" principle of green consumption is globally recognized (fig.1): (1) save resources, (2) reduce pollution, (3) reuse and buy durable products, (4) recycle through proper waste sorting, and (5) protect and preserve nature (Wang, 2006). This broad concept covers not only consumer behavior but also the mindset and values behind consumption. Drawing from psychological theory, green consumption is characterized by three interconnected components: green consumption cognition (awareness and knowledge about green practices), green consumption attitude (a favorable or unfavorable psychological stance towards green consumption), and green consumption behavior (specific actions such as buying energy-saving products or avoiding disposable items). According to behavioral science, cognition influences attitudes, which in turn shape behaviors, creating a tightly linked cycle that forms the concept of green consumption.

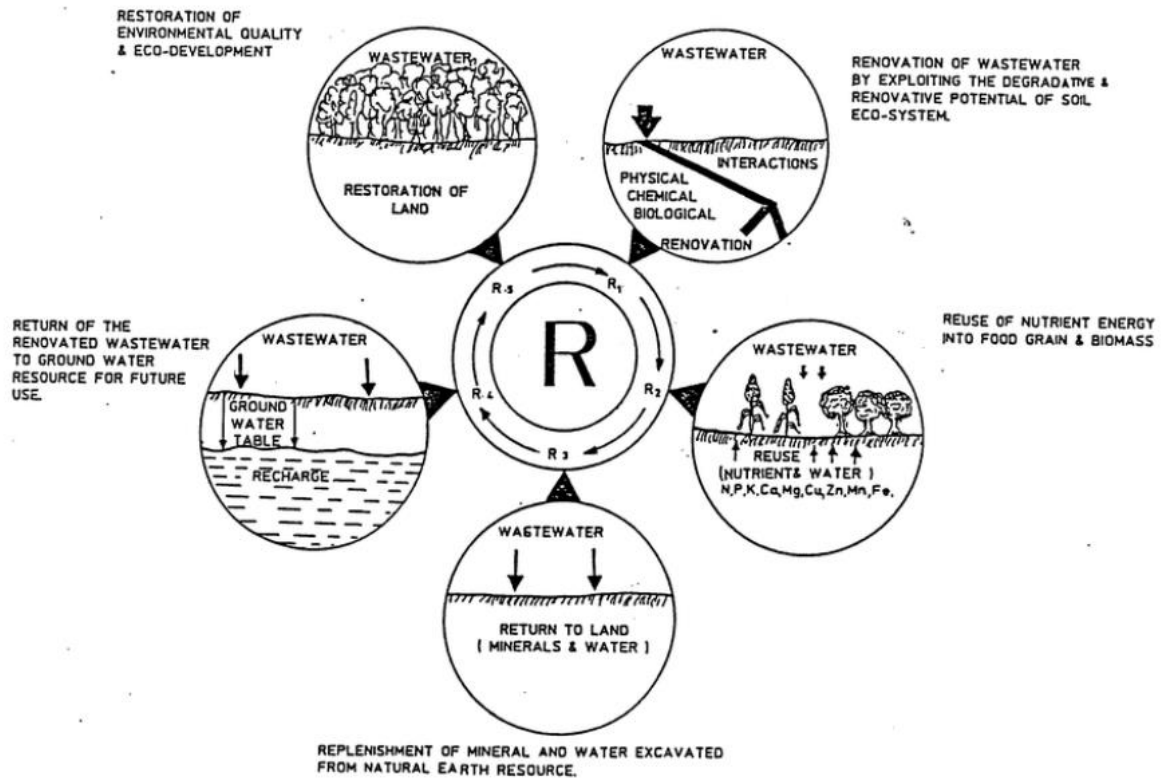


Figure 1: 5R concept of wastewater management and recycling, reuse and eco-development

Furthermore, Si (2002) identified four core aspects of green consumption: (1) minimizing resource and energy usage (economic consumption), (2) reducing waste and pollutants (clean consumption), (3) ensuring that consumption does not harm health (safe consumption), and (4) avoiding consumption patterns that jeopardize future generations (sustainable consumption). Pan (2003a) proposed a hierarchy of green consumption, starting with moderate consumption, followed by the use of green products, then spiritual consumption, and ultimately leading to a simpler and easier lifestyle. Green consumption not only fosters sustainable development but also helps harmonize the relationship between humans and nature, promoting health, equity, and the long-term prosperity of human society.

Raukoff and Wu (2013) define green consumption behavior as the actions of consumers who aim to protect the environment and minimize the negative impacts of consumption throughout the entire lifecycle of a product—from purchase to use and post-use disposal. Similarly, Chen et al. (2013) describe green consumption as a responsible and sustainable mode of consumption, in which consumers, after recognizing environmental issues, seek to fulfill their purchasing needs while minimizing environmental harm. In reviewing the literature, the terminology for green consumption behavior varies, with some scholars using terms like "ecological consumption" and others using "green consumption." However, after analysis, these terms are found to be fundamentally consistent. This paper uses the term "green consumption behavior," although other sources may refer to it as "green purchasing behavior," with no essential difference between the two.

The prevailing definition of green consumption highlights rational consumption where individuals not only focus on their own health and interests but also emphasize environmental protection, reducing resource waste, preventing pollution, and fulfilling social responsibilities. Other researchers frame green consumption as a socially responsible behavior where consumers are aware of the broader consequences of their consumption choices.

Green consumption is also considered an environmental behavior. Scholars have studied the factors influencing environmental behaviors, offering valuable insights into green consumption research. Stern (2000) categorized environmental behaviors into four types: (1) activism, (2) public-level environmental behaviors (such as supporting environmental policies or paying higher taxes for environmental protection), (3) individual-level environmental behaviors (such as green consumption), and (4) environmental behaviors of organizations. Green consumption falls under individual-level environmental behaviors, setting it apart from other types.

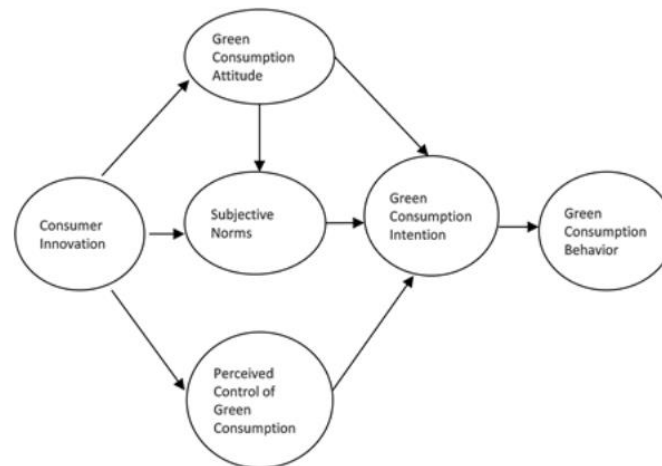


Figure 2: The influence of consumer innovation on green consumption behavior

Green consumption differs from other environmental behaviors in a few key ways. First, it is directly tied to consumer choices, where people consider factors like cost, quality, and environmental impact in their purchasing decisions. Second, consumers may use green products and brands as a way to express their values and identity. These distinctions between green consumption and other environmental behaviors suggest that different factors may influence green consumption compared to other types of environmental actions.

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