



**Hungarian University of Agriculture and Life Science**

**Szent István Campus**

**Course: Business Administration and Management**

Factors Influencing Sustainable Consumption Behavior of Millennials in  
Hungary

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## Abstract

This study investigates the intricate dynamics influencing sustainable consumption behavior, exploring the roles of environmental knowledge, materialism, environmental influences, and the promotion of sustainable consumption. Utilizing a cross-sectional design, data were collected through surveys, capturing responses from (172) millennials in Hungary. The study's findings affirm the positive impact of environmental knowledge on sustainable consumption, emphasizing the critical role of awareness in shaping eco-friendly behaviors. Additionally, materialism is identified as a factor that, contrary to expectations, positively contributes to sustainable consumption, suggesting a nuanced relationship between materialistic values and environmentally conscious choices. The study underscores the significance of external influences, indicating that societal norms and promotional efforts play crucial roles in fostering sustainable behaviors. The acceptance of all hypotheses points towards a multidimensional understanding of sustainability, advocating for integrated theoretical frameworks that consider the complex interplay of cognitive, social, and promotional factors. These findings hold practical implications for educators, policymakers, businesses, and advocates seeking to promote sustainable consumption. The study contributes to the evolving theoretical landscape of sustainable behavior, prompting further exploration into the nuanced relationships between values, awareness, and societal influences.

*Keywords: Sustainable consumption, Environmental knowledge, Materialism, Environmental influences, Millennials, Hungary.*

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## CHAPTER ONE: BACKGROUND OF THE STUDY

### 1 Introduction:

Climate change and global warming have become recurring topics in recent news discussions (Nacu-Schmidt et al., 2020). In response, various solutions are under scrutiny, including transitioning to renewable energy, adopting more energy-efficient products, and promoting sustainable consumption. For instance, global market has witnessed growth in sustainable product offerings for more than a decade, reflecting growing awareness among consumers (Brach et al., 2018).

Research conducted by the Intergovernmental Panel on Climate Change (IPCC) attributes recent global warming to human activities such as consumption habits (Taufiquel & Vaithianathan, 2018). While escalation of global environmental degradation is associated with excessive economic expansion, overconsumption, and sometimes reckless consumption (Yue et al., 2020). Addressing this pressing global environmental issue requires individual action on the part of consumers (Taufiquel & Vaithianathan, 2018). The latest IPCC report (IPCC, 2016) notes that changes in dietary habits, adoption of energy-saving measures, reduction of food waste, and shifts in consumption patterns can significantly reduce global energy consumption and emissions. associated with it. Therefore, changing consumption habits is essential to mitigate environmental damage.

Although research on pro-environmental consumer behavior is important in developed countries, it is still in its infancy in many emerging economies, including Asia. This is evident in Biswas and Roy's calls for new research initiatives to explore the evolution of pro-environmental consumer behavior in the Asian region (2015a, 2015b).

Furthermore, given the great within-country variation in socio-economic, demographic, cultural and overall living standards, emerging markets should be viewed as an

ideal framework for reproducing and extending marketing theory (Burgess & Steenkamp, 2006). Urban environments in emerging economies, particularly in major cities, are crucial because consumers often have more opportunities to engage in sustainable behavior with a greater number of stores and a wider range of goods available.

A potential solution to these challenges lies in sustainable food production. However, defining what exactly is meant by “sustainable” food is crucial. According to the Environmental Impact of Products (EIPRO) report, sustainable food has a less harmful impact on the environment and society, taking into account factors such as greenhouse gas emissions, use of land and water resources, pollution, phosphorus depletion, and the impact of chemicals. Products such as herbicides and pesticides (Eder & Delgado, 2006).

The 1987 report of the United Nations World Commission on Environment and Development (WCED, 1987) defines sustainability as meeting current human needs without compromising the ability to meet the needs of future generations. Sustainable consumption, as explained by Brix-Assala et al. (2016), aims to improve the environmental, social and economic outcomes of consumption for both current and future generations.

In the area of food consumption, three main consequences can be addressed by choosing organic or locally grown foods (environmental impact), choosing fair trade products (social impact), and reducing overall food purchases to reduce waste (economic impact).

However, depending on the consequences that may govern consumption value, some customers may purchase sustainably grown food for environmental reasons, while others may prefer consequences. This is consistent with previous research (Hwang & Griffiths, 2017), which explains, among other things, the intention to purchase sustainable products. However, even as sustainable consumption becomes increasingly important in the future, the impact of climate change will be felt unevenly, leading to diversified shopping efforts. This discrepancy

persists over time, as future generations, such as Millennials or Generation Z, face more pronounced impacts of climate change than their predecessors do. In our contribution to the literature, we aim to explain Millennials' purchase intentions in the context of sustainable consumption, taking into account the inherent heterogeneity within this demographic group.

Our focus on Millennials stems from the fact that a large proportion of them, especially 57% in Eastern Europe (VuMa, 2018), have entered the labor market and actively influence purchasing decisions. It is worth noting that millennials in the United States are responsible for a significant revenue of \$600 billion (Donnelly & Skaff, 2013) which confirms their significant economic impact. According to VuMa (2018), individuals born between 1981 and 1998 are classified as millennials.

In Hungary, this translates to approximately 27% of the population falling into the millennial category. This generation has grown up in a world that is gradually becoming globalized and prosperous (Parment, 2013). As a result, millennials have developed uses compared to the preceding generation (Parment, 2013).

However, it is essential to note that Millennials are not a monolithic group; rather, they exhibit considerable heterogeneity. Previous research characterizes Millennials as optimistic and goal-oriented (Chen and Choi, 2008), as well as traditional and group-oriented (Howe and Strauss, 2000). Simultaneously, they are known to support socially responsible businesses (Furlow, 2011). In contrast, divergent studies propose that Millennials can be individualistic, bordering on narcissistic (Twenge and Foster, 2010), or at least more self-centered compared to others (Naderi & van Steenburg, 2018). In light of earlier findings, there arose a necessity to elucidate the factors impacting the sustainable consumption behavior of Millennials in Hungary.



## 1.1 Rational of Study

The rationale behind exploring the factors influencing sustainable consumption behavior among Millennials in Hungary lies in the imperative need to comprehend and address the unique dynamics shaping their choices. As Millennials represent a significant demographic segment born between 1981 and 1998, understanding their attitudes and behaviors towards sustainable consumption is crucial for several reasons.

Firstly, previous studies conducted before 2016 might not capture the comprehensive picture of this demographic, considering that most Millennials were underage at that time. By focusing on this age group in the current study, we aim to provide more relevant and updated insights into their sustainable consumption behavior.

Additionally, this study recognizes the heterogeneity within the millennial cohort, acknowledging that factors such as age, income status, and entry into working life can significantly influence their values and consumption patterns. Additionally this nuanced approach allows us to go beyond broad generalizations and delve into the specific factors shaping sustainable consumption behaviors among Millennials in Hungary (Stern et al. 1993; Schultz & Zelezny, 1999; Gurel-Atay et al., 2010; Hwang and Griffith, 2017; Asselmann and Specht, 2021). While recent studies with respondents of similar age distributions have been conducted in countries like India (Yadav and Pathek 2017) or Anglo-American regions (Valentine and Powers 2013; Rex et al. 2015), Nevertheless this study focus on Hungary provides a unique cultural context. Moreover, values and beliefs are intricately tied to culture (Grunert & Scherlorn, 1990), and our study contributes to understanding sustainable consumption behavior within the specific cultural nuances of Hungary. Furthermore, the geographical context of Hungary adds another layer of significance. Cultural influences play a vital role in shaping values and beliefs, and by concentrating on Hungary, we aim to

uncover how the unique cultural landscape of the country interacts with the broader global trends in sustainable consumption.

In essence, this study aims to contribute to a more granular understanding of the factors influencing sustainable consumption behavior among Millennials in Hungary, offering insights that are timely, context-specific, and reflective of the diverse dynamics within this demographic.

## 1.2 Study Questions

This study will answer the following question:

- What factors contribute to the adoption of sustainable consumption behavior (SCB) among millennials in Hungary?

## 1.3 Study Aims

This study will try to reach the following aims at the end of it:

- Identify and understand the factors that play a role in the adoption of sustainable consumption behavior among millennials in Hungary.
- Examine and analyze the specific impact of environmental factors on the sustainable consumption behavior of millennials in Hungary.

## 1.4 Study significance

The significance of the study on the factors influencing sustainable consumption behavior of millennials in Hungary lies in its potential to provide valuable insights into the behaviors and motivations of this specific demographic group concerning sustainable consumption. The following points summarize the study's significance:

- The study contributes to a deeper understanding of the sustainable consumption behaviors of millennials in Hungary. It aims to uncover the factors that influence

their choices, shedding light on their values, preferences, and decision-making processes.

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## CHAPTER TWO: LITERATURE REVIEW

### 2 Conceptual framework

#### 2.1 Concept of sustainability

Johnston et al. (2007) offered a definition of sustainability as "ways of living, working, and being that enable all people of the world to lead healthy, fulfilling, and economically secure lives without destroying the environment and without endangering the future welfare of people and the planet." This definition underscores the importance of harmonizing human activities with the natural environment, striking a balance between human-made and nature-made capital, and making conscious decisions for the benefit of present and future generations.

Despite this clarity, the term sustainability is at times used interchangeably with sustainable development, although the two concepts carry slightly different meanings. The Brundtland Report, for instance, defined sustainable development with a focus on environmental concerns and addressing the "different types of needs" of future generations WCED (WCED, 1987). This definition emphasizes sustainable development as a path that involves environmental protection, restoration, and ongoing inclusive economic growth.

However, there is contention among scholars regarding the compatibility of economic growth and environmental protection. Washington (2015) argues that economic growth is the "root cause of the environmental crisis." Brown (2015) adds that continuous population growth and economic development with limited resources are biophysically impossible, deeming sustainable development an oxymoron. In contrast, Daly (1974) proposes a steady-state economic system that maintains equilibrium by appealing to qualitative change through technical progress, presenting a more realistic path to compatibility with sustainable development.

Distinguishing between sustainable development, a process toward a specific goal, and sustainability, a long-term state of human and natural environments capable of existing and developing without depleting natural resources, is crucial (Washington, 2015). Carroll (2015) notes the growing importance of social responsibilities and sustainability for companies and governments globally, despite the growth paradox dilemma. As the environmental impact of material growth becomes increasingly evident, many firms recognize the significance of incorporating corporate social responsibility into their business strategies (Wickert, 2022).

### 2.1.1 Sustainable Consumption

Consumption serves as the powerhouse for every economy; nonetheless, it is imperative for governments and businesses to reassess their production methods and approach to consumption in alignment with the Sustainable Development Goals (SDGs) (Gasper et al., 2019). While the notion of "shopping to save the planet" may seem paradoxical, it holds a certain realism. Each consumer choice carries social, ecological, and economic repercussions. Despite the inevitability of consumption and production processes in human life, achieving a "zero-consumption lifestyle" is only possible in death (Jokinen, 2023).

The global population is urged towards sustainable consumption through various action plans, primarily propelled by SDG 12 – Sustainable Production and Consumption (United Nations General Assembly, 2015). The United Nations' overarching objective is not merely a reduction in consumption but a profound reconsideration of consumption processes, elevating them to higher levels of social and environmental sustainability.

Sustainable consumption is often described as a vague and "fuzzy" concept, as noted by Reisch (1998). With roughly twenty existing definitions in literature, the lack of clarity

stems from undefined variables such as scope, scale, and period. To grasp sustainable consumption, one must first understand consumption itself. While not straightforward, most scholars view it as the economic circuit, satisfaction of needs and wants, a means of upholding lifestyles and lifecycles, and the exploitation of various resources (Jokinen, 2023). The discussion on sustainable consumption gains traction when the realization of scarce or finite resources and the environmental footprint of every act of consumption are acknowledged.

Brundtland (1987) offers a definition aligning with satisfying present needs without compromising the ability of future generations to meet theirs. The acknowledgment of overconsumption's impact on the planet emerged at the 1992 Rio Earth Summit, where proposals included promoting eco-friendliness, altering consumption patterns, and achieving higher living standards by reducing dependence on finite resources. Phrases like "living lightly on the planet" and "reducing your environmental impact" emerged, suggesting a shift towards emerging markets (Maniates, 2002).

The Oslo Symposium on Sustainable Consumption (1994) clarified sustainable development's defining words for the 21st century—using products and services to meet basic human needs, enhance quality of life, minimize resource usage, and mitigate harmful production consequences to ensure the satisfaction of future generations' needs.

While most political powers and organizations agree on the inevitability of promoting and implementing sustainable consumption, debates persist regarding its precise meaning. Viable assumptions include generating a "clean" economy with minimal negative environmental impact, ideas from zero-waste and reduced-consumption activist groups, and sustainable infrastructure functioning with high-tech and eco-efficient solutions. Thus, there

is no universally accepted representation of how sustainable consumption should manifest (Sovacool et al., 2015).

### 2.1.2 Weak & Strong Sustainable Consumption

Weak sustainable consumption is an approach where companies strive for sustainability by optimizing production and consumption processes through technological and design innovations. This strategy, aligned with weak sustainability classifications, enhances efficiency, reduces resource use, and follows an "econometric" approach, suggesting that human capital can substitute for natural capital (Gowdy & O'Hara, 1997; Lipej, 2023).

Companies adopting the weak sustainability approach not only contribute to sustainability but also promote their initiatives to raise awareness and differentiate themselves in the market. This, in turn, influences consumers directly, fostering loyalty and encouraging the adoption of sustainable lifestyles (Newman, 2020). In the realm of weak sustainable consumption, the focus is on improving material, social, financial, and production-consumption efficiency, ensuring economic growth for companies, and maintaining consumer convenience and utility (Victor, 2023). For instance, choosing a car that consumes three liters of gasoline instead of 10 per 100 km aligns with weak sustainability (Fuchs & Lorek, 2005; Lipej, 2023). It is crucial to note that weak sustainability is not seen as pointless but rather as a step on a smaller scale (Hobson, 2013). Essentially, weak sustainable consumption involves choosing the least harmful yet most efficient product option available.

On the other hand, strong sustainable consumption represents a more ambitious goal. As a transitional stage from weak to true sustainability, the strong approach aims to significantly decrease resource use during production and consumption. This requires

substantial changes in infrastructure, lifestyle, and decision-making processes (Fischer et al., 2021). For example, opting for alternative commuting methods like public transportation or cycling, instead of simply choosing a car with lower consumption indicators, reflects strong sustainable consumption (Fuchs & Lorek, 2005). The strong approach challenges existing consumption patterns and emphasizes concepts like non-consumption and reduced consumption (Hobson, 2013). However, the prerequisites for this approach often involve socio-economic, multilevel transformations and policy changes for producing organizations. On the consumer level, strong sustainability may involve radical shifts in consumption habits, requiring extraordinary efforts and changes (Princen, 1999; Lipej, 2023). While weak sustainable consumption remains an attractive and acceptable strategy for many, the turn towards strong sustainability poses a challenge for modern politics and governments, contradicting neoclassical economic principles (Levermann, 2019).

## 2.2 Factors Influencing Sustainable Consumption

### 2.2.1 Economic factor

The economic factor of sustainability, according to Munasinghe (1993), revolves around the imperative of maximizing profit (output) while minimizing the utilization of human, natural, and manufactured capital (input). In essence, this factor focuses on optimizing the production process. Munasinghe underscores the significance of preserving scarce, irreplaceable, and non-renewable resources and their optimal utilization. Countries and communities are urged to maintain their independence, ensuring access to financial, natural, and other resources to meet population needs without compromising other aspects of economic development and securing livelihoods.

Moving on to the ecological factor, it centers on the preservation, consistency, and stability of biological, natural, and physical systems, particularly those contributing to the stable functioning of the global ecosystem (Lipej, 2023). Biodiversity protection is



emphasized as a critical element since human actions, climate change, and extreme weather events can trigger irreversible processes. The ecological factor extends beyond natural systems to include man-made environments like cities, as acknowledged in the Sustainable Development Goals by the United Nations General Assembly (2015). The goal here is not just to preserve the initial state but also to maintain the resilience and dynamic ability of systems to adapt to change, ensuring ecological integrity and balance in resource consumption.

### 2.2.2 Social factor

In the social factor, or socio-cultural perspective, sustainability aims at promoting the stability and welfare of social systems, defining the extent of human well-being (Mohamed & Paleologos, 2021). Munasinghe (1993) stresses the importance of reducing conflicts, eliminating poverty (intragenerational equity), and considering the well-being and rights of future generations (intergenerational equity). Cultural preservation, including the diversity of less globalized cultures, is highlighted as crucial in decision-making processes. Modern sustainability science adds a focus on meeting basic needs, security, and health of families and communities, along with respecting personal, labor, and cultural rights to prevent discrimination in society.

Overall, the factors of sustainability aim for economic income maximization while preserving various forms of capital, protecting biological ecosystems, and maintaining a balance between resource exploitation and environmental replenishment, along with socio-cultural systems (Roy, 2020). While other sustainability factors, such as institutional, cultural, and technological, are recognized by some scholars, the factor framework serves as a general idea for a comprehensive approach to a sustainable future (Gustafsson & Ivner, 2018).

### 2.2.3 Culture factor

The cultural factor of sustainability underscores the significance of safeguarding and promoting cultural diversity. This involves honoring cultural traditions and practices, preserving historical sites and monuments, and ensuring the protection and celebration of cultural diversity. By advocating for cultural sustainability, society can guarantee the preservation of diverse cultural heritages, providing future generations with access to a rich cultural legacy (Jokinen, 2023).

Nevertheless, achieving sustainability is a demanding task. It necessitates finding a balance between economic growth and environmental protection, addressing global inequality, and overcoming short-term thinking. Additionally, sustainable practices often entail substantial investments and can be challenging to put into practice. Despite these obstacles, sustainability remains crucial for securing the long-term well-being of both people and the planet (Kent, 2015).

### 2.2.4 Psychological Factors

Corral et al. (2009) propose a set of predispositions that foster an appreciation for the diversity and interdependence of human-environment relationships. These predispositions, crucial for ensuring the sustainability of socio-ecological systems for present and future generations, prompt individuals to voluntarily act in favor of the environment. This inclination is rooted in sustainability reasons rather than external factors like coercion, customs, or monetary reinforcement.

Emphasizing the influence of daily life scenarios on thoughts, feelings, and behaviors, the study identifies three key factors: emotions, environmental actions, and socioenvironmental actions (Ibarra et al., 2020; Corral et al, 2009; Kaiser& Wilson, 2004).

## 2.2.5 Emotions

**1. Affinity towards Diversity:** This reflects a liking for biological, physical, and social varieties. It encompasses an affective component crucial for the conservation of diversity and is linked to various psychological dimensions of sustainability

**2. Feelings of Resentment for Ecological Deterioration:** Emotional reactions triggered by witnessing destructive behaviors, pollution, and resource wastage. This forms part of emotional affinity towards nature, indicating responsibility attributions related to environmental protection.

**3. Appreciation of Nature:** Represents a liking for contact with plants, animals, and non-built environments, generating positive emotions. Exposure to nature not only has restorative effects on health but also fosters emotional affinity translating into care for the environment.

### Emotional Actions

**1. Perception of Environmental Norms:** Reflects how much individuals believe others accept and support environmental care or destructive behaviors. This perception indirectly signals the presence of agreements, rules, or prescriptions governing sustainable behavior.

**2. Self-Presentation:** Involves controlling information about oneself presented to a social audience. Individuals may present themselves as responsible or consumerist based on community values regarding environmental integrity.

**3. Deliberation:** Defined as intentional behavior directed toward environmental care. It involves perseverance and a specific intention to bring about human wellness and the preservation of the environment.

### Socio-Environmental Actions

**1. Equity:** Involves fair treatment and resource distribution without bias, balancing human wellness and ecosystem integrity. Social equity is evaluated based on the distribution of resources or access to them.

**2. Altruism:** Encompasses selfless actions toward vulnerable groups, driven by the intention to help others and contribute to environmental protection.

**3. Pro-environmental Behavior:** Intentional actions corresponding to social and individual demands, resulting in the preservation of the physical environment. These behaviors include waste reduction, recycling, and other actions contributing to environmental well-being.

**4. Environmental Identity:** Reflects a sense of connection with the non-human natural environment, influencing perceptions and actions. This identity signifies the belief that the environment is important and an integral part of individual identity.

#### 2.2.6 Personal Factors

Internal factors, known as personal influences, significantly shape consumer behavior. Among these, attitude holds prominence in the context of purchasing sustainable products. However, it falls short in explaining the reluctance of young consumers to embrace such products. Other influential personal factors include awareness, trust, priorities, emotions, and perceived control over external events (Csutora, 2012).

For instance, awareness is gauged by the time spent processing information about 'green' and sustainable products, with academic background playing a pivotal role in shaping this awareness. On the other hand, situational influences are external factors beyond a person's control that affect the link between attitude and behavior. These include elements such as time, opportunity, financial resources, and the ability to execute the desired behavior (Ajzen, 2012; Bernardes et al., 2018).

### 2.3 The Millennium and Sustainable Development Goals

In 2015, the United Nations General Assembly introduced a set of 17 Sustainable Development Goals (SDGs), marking a pivotal moment in the global effort to address environmental, social, and economic challenges. These goals called for urgent action and international collaboration, transcending boundaries between developed and developing nations (United Nations General Assembly, 2015). The widespread adoption of the SDGs by 193 countries turned "sustainability" into a ubiquitous term, finding its way into marketing campaigns as a response to public concerns and societal pressures regarding pressing issues like environmental degradation, infectious diseases, poverty, conflicts, and illiteracy. Anwar and El-Bassiouny (2019) provided insightful interpretations of the SDGs for marketing professionals, enabling them to apply these goals and recommendations in addressing sustainability issues through their marketing practices.

According to Robert et al. (2005), the most meaningful approach to defining sustainable development is through the lens of the United Nations General Assembly's Sustainable Development Goals. This framework is widely acknowledged as the most effective means of tackling global challenges. The predecessor to the SDGs was the Millennium Development Goals framework (MDGs), consisting of eight goals primarily focused on reducing global poverty and hunger in developing countries. Jones et al. (2018) noted the MDGs' success in combating poverty but acknowledged its shortcomings in addressing environmental issues and unsustainable production and consumption. Moreover, the MDGs framework lacked engagement from corporations and smaller businesses in goal implementation.

Drawing lessons from past experiences, the United Nations recognized the need to base its goals on the three pillars of sustainability—economic development, environmental sustainability, and social equity—with the aim of achieving these objectives by 2030 (Anwar

& El-Bassiouny, 2019). According to van der Waal & Thijssens (2020), the SDGs underscore the role of businesses in achieving collective targets and highlight the importance of their involvement in developing sustainable action plans and promoting sustainability. The authors assert that the active participation of private businesses is crucial due to their higher levels of creativity, flexibility, and innovation compared to governments, making their contributions invaluable, regardless of the specific sustainability pillar they choose to prioritize.

According to a survey conducted by KPMG, 40% of the largest global companies incorporate the Sustainable Development Goals (SDGs) into their action plans and feature them in annual sustainability reports to showcase their commitment to addressing global issues (Blasco et al., 2018). However, aligning business strategies with the common good often implies a trade-off with shareholder value. This tension is evident in the fact that economic growth can sometimes hinder social and environmental progress, making the integration of SDGs into corporate plans and rules appear paradoxical and counterintuitive.

Despite this apparent contradiction, Chakravorti (2015) argues that there are compelling reasons to implement SDGs in Corporate Social Responsibility, business plans, product development processes, and other operational aspects. Firstly, the author emphasizes that contributing to sustainability provides an avenue for long-term growth, particularly in emerging markets that may not have fully developed through technological advances or infrastructure improvements. Atsmon et al. (2018) highlight the substantial potential of consumption in emerging markets, including sustainable products and services, which could amount to approximately \$30 trillion, a figure 2.5 times higher than that of 2010. Engaging in the production and provision of services that address global issues can pave the way for the emergence of new markets, access to existing ones, and opportunities for long-term innovation, growth, and sustained profitability (Nidumolu et al., 2009).

Secondly, achieving SDGs and communicating these efforts to the public can confer a competitive advantage to companies and exert pressure on other industry players. Chakravorti (2015) suggests that companies positioning themselves as leaders in sustainable development and innovation not only enhance their value but also potentially ascend to higher rankings and attract new consumers. Some companies strategically incorporate SDGs and sustainability into their initial branding, giving them a "jumpstart" in their respective industries.

Thirdly, the realization of these goals depends on the active participation of corporations and smaller businesses in creating value for the global population. Given that governments may lack the will or resources to finance sustainable transformations, the impetus for change needs to originate from the private sector. Experiences indicate that governments often fall short of meeting targets, placing the onus for a rapid shift toward sustainable production and consumption squarely on the shoulders of the private sector. Therefore, an awareness of this responsibility may drive companies to integrate SDGs into their agendas (Yamane & Kaneko, 2021).

## 2.4 Hypothesis development

### - **Environmental knowledge and SCB**

Environmental knowledge refers to the level of understanding and awareness individuals have regarding environmental issues, ecological systems, and the impact of human activities on the environment (Blasco, King, & Jayaram, 2018). Higher environmental knowledge is often associated with increased awareness of sustainability issues, influencing attitudes and behaviors toward more environmentally friendly choices (Anwar & El-Bassiouny, 2019). Therefore, it is hypothesized that:

*H1: Environmental knowledge has a positive effect on sustainable consumption behavior.*

### - **Materialism and SCB**

Materialism refers to the importance individuals place on material possessions and the acquisition of goods as a measure of personal success or happiness. High materialism may be associated with a focus on consumption and a potentially lower inclination toward sustainable choices. Understanding materialistic tendencies helps in gauging potential barriers to sustainable behavior (Fischer et al., 2021). Materialism had a correlation with self-interest-triggered moral flexibility, and materialists rated immoral acts committed by themselves and others differently. Numerous research in the marketing literature have previously supported a link between materialism and consumer-brand relationship outcomes (Brach, Walsh, & Shaw, 2018). Therefore, it is hypothesized that:

*H2: Materialism has a positive effect on sustainable consumption behavior.*

- **Environmental influences and SCB**

Environmental influences encompass external factors such as societal norms, cultural values, peer behaviors, and institutional practices that shape individuals' attitudes and behaviors toward the environment. These influences play a crucial role in shaping sustainable consumption patterns by creating social norms and expectations related to eco-friendly behavior (Hwang & Griffiths, 2017). According to previous study, friends, family, and other groups regarded essential to a customer can impose social environment affects (Ibarra et al. 2020). Pilgrimien et al. (2020) validated the social environment's indirect favorable impact (as part of the external group of determinants) on green product purchase behavior (Biswas & Roy, 2015). Therefore, it is hypothesized that:

*H3: Environmental influences has a positive effect on sustainable consumption behavior.*

- **Promotion of sustainable consumption and SCB**

Promotion of sustainable consumption likely refers to promotional activities or campaigns aimed at encouraging individuals to adopt more sustainable consumption



behaviors. Promotion can influence behavioral intention by raising awareness, providing information, and creating positive associations with sustainable choices (Fischer et al., 2021). The promotion of the sustainability concept encourages alternative consumption patterns; it promotes consumers' awareness and understanding of environmental and social issues, modifies consumption and purchasing habits, and raises the level of acceptance of sustainable consumption (Gasper, Shah & Tankha, 2019). Therefore, it is hypothesized that:

*H4: Promotion of sustainable consumption has a positive effect on sustainable consumption behavior.*

Based on the previous argument and proposed hypothesis, the study model will be as follows:

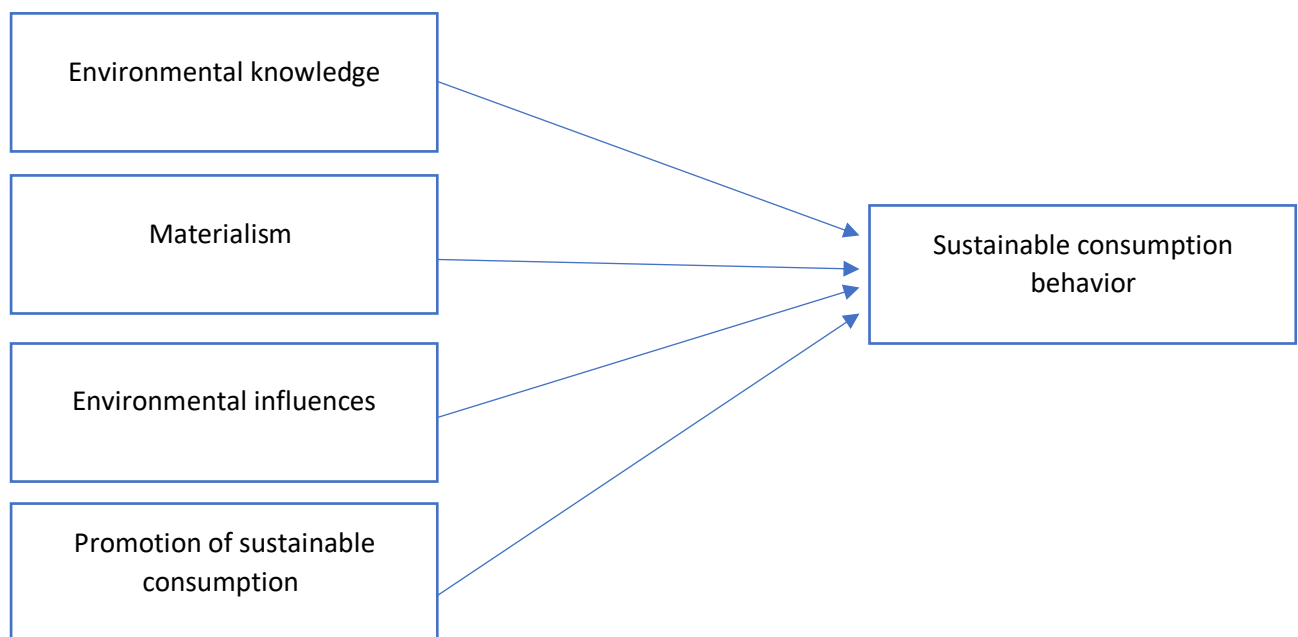


Figure 1: Study Model

## CHAPTER THREE: RESEARCH METHOD

### 3 Methodology

The descriptive-analytical methodology was used in this thesis, which is focused on determining the main features of the phenomena, characterizing its nature, and the quality of the correlation between the parameters, causes, and patterns.

#### 3.1 The population of the thesis and its sample

All Millennials in Hungary were included in the survey. The nonprobability sample approach was used to select the study sample, in which the researcher distributed an electronic questionnaire using social media platforms such as Facebook and WhatsApp, and 183 questionnaires were recovered. Following the review, 11 surveys were rejected due to a lack of responses. As a result, the number of questionnaires susceptible to statistical analysis increased to 172, accounting for (93.3 %) of the total number of recovered questionnaires. The demographic features of the study sample members are shown in the table below:

*Table 1: distribution of the study sample based on the gender variable*

		Frequency	Percent	Cumulative Percent
Valid	Female	114	66.3	66.3
	Male	58	33.7	100.0
	Total	172	100.0	

In terms of gender, female respondents outnumbered male respondents by a margin of 66.3% to 33.7%.

*Table 2: distribution of the thesis sample based on the age variable*

		Frequency	Percent	Cumulative Percent
Valid	18-25	85	49.4	49.4
	26-35	79	45.9	95.3
	36-45	3	1.7	97.1
	Above 45	5	2.9	100.0
	Total	172	100.0	

The majority of respondents (49.4%) were between the ages of 18 and 25 years old, 45.9% were between the ages of 26 and 35 years old, 1.7% were between the ages of 36 and 45 years old, and only 2.9% were over 45 years old.

*Table 3: distribution of the thesis sample based on the educational level variable*

		Frequency	Percent	Cumulative Percent
Valid	Bachelor	60	34.9	34.9
	High school	39	22.7	57.6
	Master	71	41.3	98.8
	PhD	2	1.2	100.0
	Total	172	100.0	

The study sample members with a Master's degree were the highest repeat category; their number reached 71 with 41.3%, then the Bachelor category 60 with a percent of 34.9%, followed by high school category with percent of 22.7%, and only 1.2% were PhD degree holders.

### 3.2 Data collection

An online survey was conducted using a well-structured questionnaire and was distributed to respondents via Google Forms. The questionnaire was divided into two sections; the first section was used to collect information about the respondents' socio

demographic factors. In the following section, five-point Likert-scale-based questions with values ranging from one to five for strongly disagree to strongly agree were used. The latent variables, such as environmental knowledge, Materialism, Environmental influences, and Promotion of sustainable consumption were expected to be measured using Likert-scale questions.

### 3.3 Study instrument

The literature and previous studies were used to develop a questionnaire to collect primary data. The questionnaire had three parts, namely, (1): socio-demographic characteristics of consumers (e.g., gender, age, and education level); (2) factors influencing consumers' sustainable consumption behavior; (3) general questions about consumers' sustainable consumption behavior. All measurement scales for the constructs have been included in prior publications. The SCB scale is a multi-dimensional second-order construct, which incorporates three dimensions, i.e., "Quality of Life (QL)", "Care for the Future Generation (CEW), and "Care for the Environmental Well-being (CFG)".

### 3.4 Reliability analysis

Internal consistency testing The alpha coefficient, which runs between 0 and 1, was used to determine the degree of reliability in the responds of the study sample on all paragraphs of the instrument, and the closer its value is to 1 indicates the degree of high reliability. Its value is acceptable when it is 75% or above. Table 2 shows the test results:

*Table 4: Cronbach's alpha coefficients*

Dimension	Number of items	Alpha coefficient
<b>Environmental knowledge (EK)</b>	3	0.906
<b>Materialism (Mat)</b>	5	0.844
<b>Environmental influences (EI)</b>	4	0.786

<b>Promotion of sustainable consumption (PSC)</b>	<b>3</b>	<b>0.843</b>
<b>Consumers' sustainable consumption behavior</b>	<b>13</b>	<b>0.869</b>
<b>The tool as a whole</b>	<b>28</b>	<b>0.935</b>

According to Table (5), Cronbach's alpha coefficients for the dimensions ranged between 0.786 and 0.906. At the same time, it amounted to 0.935 for the questionnaire as a whole, all of which are greater than 75%, indicating the instrument's validity to meet the study's aims.

### 3.5 Data analysis

The data obtained through the questionnaire were entered into the Statistical Package for Social Sciences (SPSS) program 26v, where they were then processed according to the tests that achieved the purpose of the thesis, and the thesis used the following statistical methods:

- Cronbach's alpha coefficient: To verify the stability of the thesis's resolution and its internal consistency.
- Frequencies and Percentages: for the answers of the thesis sample related to demographic data.
- Arithmetic averages and standard deviations: to find out the level of answers of the study sample on the paragraphs of the questionnaire.
- Multiple regression test to test the hypothesis.

## CHAPTER FOUR: RESULTS & DISCUSSION

### 4 Results and discussion

#### 4.1 Descriptive analysis

##### **Factors influencing consumers' sustainable consumption behavior.**

To answer the first question of the thesis: **“What factors contribute to the adoption of sustainable consumption behavior (SCB) among millennials in Hungary?”** the arithmetic averages and standard deviations were calculated, the results were as below:

*Table 5: Arithmetic means and standard deviations of the dimensions of the independent variable*

	Mean	Std. Deviation	Ranking	The degree
EK	3.9322	.78480	2	High
Mat	3.7616	.68547	3	High
EI	3.4927	.76205	4	Moderate
PSC	4.0620	.92473	1	High
The dimensions as a whole	3.6863			High

Table (5) shows that the general arithmetic means of the dimensions of the variable “factors influencing consumers’ sustainable consumption behavior” from the Hungary millennials point of view was 3.6863, with a high degree of appreciation. Promotion of sustainable consumption had the highest mean which means that, PSC is the most important factor affecting consumers’ sustainable consumption behavior from the respondents’ point of view indicates a relatively important value of perceived promotion on sustainable consumption. On average, participants perceive that there is a significant emphasis on promoting sustainable consumption in their environment.

##### - **Environmental knowledge (EK)**

Table 6: Environmental knowledge (EK) dimension Arranged in descending order according to the arithmetic mean

		Mean	Std. Deviation	Agreement degree
EK3	How much do you agree or disagree with...: I find it hard to know whether the way I live is helpful or harmful to the environment.	3.99	.885	High
EK2	How much do you feel you know about solutions to these sorts of environmental problems?	3.92	.817	High
EK1	How much do you feel you know about the causes of these sorts of environmental problems?	3.88	.864	High
EK dimension		3.9322	.78480	High

Table (6) shows that the general arithmetic means of the EK dimension from the millennials in Hungary point of view was 3.9322, with a high degree of agreement. The paragraph that states, “How much do you agree or disagree with...: I find it hard to know whether the way I live is helpful or harmful to the environment,” had the highest arithmetic mean, which reached 3.99 with a standard deviation of 0.885. While the paragraph that states, “How much do you feel you know about the causes of these sorts of environmental problems?,” ranked last with an arithmetic mean of 3.88. These results collectively underscore the importance of enhancing environmental literacy and providing clearer information on the ecological consequences of individual actions. The participants' self-awareness is a positive indication that they recognize the need for more information and education on environmental issues. Addressing this need could empower individuals to make more informed and sustainable choices in their daily lives.

- **Materialism (Mat)**

*Table 7: Materialism (Mat) dimension Arranged in descending order according to the arithmetic mean*

	Mean	Std. Deviation	Agreement degree
Mat 1 I admire people who own expensive homes, cars, and clothes.	4.13	.917	High
Mat 3 I like to own things that impress people.	3.85	.892	High
Mat 2 I would be much happier if I could afford to buy more things.	3.73	.912	High
Mat 5 It bothers me that I cannot afford to buy all the things I like	3.61	.908	Moderate
Mat 4 I like a lot of luxury in my life.	3.49	1.079	Moderate
Mat dimension	3.7616	.68547	High

Table (7) shows that the general arithmetic means of the EK dimension from the millennials in Hungary point of view was 3.7616, with a high degree of agreement. The participants' responses indicate a mixed set of attitudes towards materialism and the pursuit of luxury. The statement "I admire people who own expensive homes, cars, and clothes" with an average score of 4.13 suggests a general admiration for material wealth and a certain level of appreciation for the outward signs of affluence. The responses to "It bothers me that I cannot afford to buy all the things I like" (3.61) suggest a degree of frustration or discontent with financial limitations but not to an extreme extent. Overall, these results reflect a nuanced perspective on materialism. While there is an appreciation for luxury and admiration for those with expensive possessions, there is also a recognition that material acquisitions do not necessarily equate to sustained happiness. This nuanced viewpoint may indicate a balanced approach to the pursuit of wealth and possessions, with participants valuing experiences and personal satisfaction alongside material achievements.

- **Environmental influences (EI)**



Table 8: Environmental influences (EI) dimension Arranged in descending order according to the arithmetic mean

	Mean	Std. Deviation	Agreement degree
EI 2 I have participated as a volunteer in social work or environmental organizations.	3.90	1.065	High
EI 1 Someone from my family or my friends motivates me to follow their example in environmental care.	3.57	.937	Moderate
EI 4 Caring for the environment is a tradition in my family.	3.27	1.149	Moderate
EI 3 I take advantage of the fact that now there are organic or ecological products in the supermarket to buy them.	3.24	1.001	Moderate
EI dimension	3.4927	.76205	Moderate

Table (8) shows that the general arithmetic means of the EI dimension from the millennials in Hungary point of view was 3.4927, with a moderate degree of agreement. The statement "I have participated as a volunteer in social work or environmental organizations" with an average score of 3.90 suggests a relatively high level of involvement in volunteering, indicating a willingness to contribute time and effort to social and environmental causes. The statement "I take advantage of the fact that now there are organic or ecological products in the supermarket to buy them" with an average score of 3.24 indicates a moderate inclination towards choosing organic or ecological products. Participants, on average, express a tendency to make environmentally conscious choices when it comes to their shopping habits. Overall, these results suggest a positive orientation towards social and environmental engagement, with participants actively participating in volunteering and being influenced by their social networks. The presence of a family tradition, although not highly pronounced, indicates an awareness of environmental care within familial contexts. Additionally, the inclination to choose organic or ecological products signals an interest in making environmentally conscious consumer choices.

- **Promotion of sustainable consumption (PSC)**

*Table 9: Promotion of sustainable consumption (PSC) dimension Arranged in descending order according to the arithmetic mean*

Item		Mean	Std. Deviation	Agreement degree
PSC 2	I am willing to buy green products instead of regular products if there is a price promotion.	4.13	.995	High
PSC 1	Initiatives of socially responsible organizations to inform society about the damage consumption does to the environment and promotion of sustainable behavior have an impact on my consumption patterns.	4.08	.994	High
PSC 3	If there are some incentive mechanisms, I could change some consumption modes.	3.98	1.008	High
PSC dimension		4.0620	.92473	High

Table (9) shows that the general arithmetic means of the PSC dimension from the millennials in Hungary point of view was 4.0620, with a moderate degree of agreement. The statement "I am willing to buy green products instead of regular products if there is a price promotion" with an average score of 4.13 suggests a high level of willingness to choose green products when there is a price promotion. This indicates that financial incentives play a significant role in influencing sustainable consumption behaviors among participants. The response to "If there are some incentive mechanisms, I could change some consumption modes" with an average score of 3.98 indicates a positive attitude towards incentive mechanisms. Participants express openness to changing their consumption patterns if provided with appropriate incentives, suggesting a potential for behavior change with the right motivational factors. The positive response to initiatives by socially responsible organizations suggests that awareness and education play a role in influencing consumption patterns. Additionally, the openness to incentive mechanisms indicates a potential for adopting more sustainable consumption modes with the right motivational factors in place.

- **Consumers' sustainable consumption behavior**

*Table 10: Consumers' sustainable consumption behavior dimension Arranged in descending order according to the arithmetic mean*

Items		Mean	Std. Deviation	Agreement degree
<b>Quality of life well-being (QL)</b>				
QL 4	I plan carefully before I purchase a product or service.	4.17	.847	High
QL 1	I always try hard to reduce misuse of goods and services (e.g., I switch off the light and fan when I am not in the room).	3.62	.939	Moderate
QL 3	While dining in a restaurant, I order food(s) of only the amount that I can eat in order to avoid wasting food.	3.58	1.020	Moderate
QL 2	I avoid being extravagant in my purchases.	3.48	1.167	Moderate
<b>Care for the environmental well-being (CEW)</b>				
CEW 2	I use eco-friendly products and services.	3.96	.963	High
CEW 5	I prefer to use a paper bag since it is biodegradable.	3.85	.892	High
CEW 1	I do care for the natural environment.	3.82	.972	High
CEW 4	I often pay extra money to purchase environmentally friendly products (e.g., organic food).	3.73	.912	High
CEW 3	I purchase and use products, which are environmentally friendly.	3.11	1.374	Moderate
<b>Care for the future generation (CFG)</b>				
CFG 2	I try to control my desire for excessive purchases for the sake of future generations.	3.96	.963	High
CFG 4	I try to minimize the excess consumption for the sake of preserving environmental resources for future generations.	3.96	.963	High
CFG 1	I always remember that my excess consumption can create hindrances for the future generation to meet their basic needs.	3.49	1.079	Moderate
CFG 3	I am concerned about future generations.	3.11	1.374	Moderate
The dimension as a whole		3.673	0.6371	Moderate

Table (10) shows that the general arithmetic means of the consumers' sustainable consumption behavior dimension from the millennials in Hungary point of view was 3.673, with a moderate degree of agreement. Regarding the quality of life, the response to "I plan

carefully before I purchase a product or service" with an average score of 4.17 indicates a strong commitment to mindful consumption. Participants, on average, express a high level of intentionality in planning their purchases, reflecting a thoughtful approach to consumption decisions. The response to "I avoid being extravagant in my purchases" with an average score of 3.48 indicates a moderate inclination towards avoiding excessive or wasteful purchases. Participants, on average, express a desire to curb extravagance in their buying behavior.

For care for the environmental well-being (CEW), the response to "I use eco-friendly products and services" with an average score of 3.96 suggests a relatively high level of engagement in eco-friendly practices. Participants, on average, indicate a conscious effort to choose products and services that align with environmental sustainability. The statement "I purchase and use products, which are environmentally friendly" with an average score of 3.11 indicates a moderate level of agreement. While participants express a tendency to choose environmentally friendly products, the score suggests that this behavior may not be as consistently practiced by everyone.

Regarding to the Care for the future generation (CFG), the statement "I try to control my desire for excessive purchases for the sake of future generations" with an average score of 3.96 indicates a relatively high level of commitment to mindful consumption for the benefit of future generations. Participants, on average, express a conscious effort to curb excessive purchases, recognizing the potential impact on the well-being of future generations. This suggests a sense of responsibility and forward-thinking in their consumer behavior. On the other hand, the statement "I am concerned about future generations" with an average score of 3.11 suggests a moderate level of concern among participants. While there is some acknowledgment of the importance of future generations, the score indicates that this concern may not be as strongly felt by everyone.

## 4.2 Results of hypothesis test

### 4.2.1 Variance inflation factor (VIF)

The coefficient of variance inflation test is used to determine whether there is a linear relationship between the independent thesis variables. This means that the linear relationship between two independent variables is so strong that the variables' limits can affect the value of the dependent variable with the same value as another variable, implying that it acts as a substitute for it.

The VIF test should not have a value more than 5, and the variance inflation test is complemented by the Tolerance test, which is the reciprocal of the variance inflation factor. The Tolerance variance test value must be larger than 0.05. The test results are reported in Table 11:

*Table 11: The VIF test for the dimensions of the independent variables*

Variables	Collinearity Statistics	
	Tolerance	VIF
EK	.309	3.234
Mat	.295	3.387
EI	.809	1.236
PSC	.417	2.399

Table (11) shows that the values of The Inflation Factor (VIF) ranged from 1.236 to 3.387, and they are all less than 5, indicating that there are no multiple linear overlaps between the dimensions of the independent variable. The Tolerance test scores varied from 0.295 to 0.809, all of which are greater than 0.05, indicating that there is no substantial correlation between the independent thesis variables, indicating the data's relevance to the regression analysis test.

#### 4.2.2 Multiple regression test

A multiple regression test was conducted to test the hypothesis of the study with the aim of detecting the factors Influencing sustainable consumption behavior of millennials in hungary at the significance level ( $\alpha \leq 0.05$ ), and the results are presented below:

Table 12: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830 <sup>a</sup>	.688	.681	.35699

a. Predictors: (Constant), P, EI, EK, Mat

Table 13: ANOVA result

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.954	4	11.739	92.109	.000 <sup>b</sup>
	Residual	21.283	167	.127		
	Total	68.237	171			

a. Dependent Variable: v2

b. Predictors: (Constant), P, EI, EK, Mat

Table (12) shows the validity of the multiple regression test model to explain the phenomenon, where the correlation coefficient (R) between the independent and dependent variables reached 0.830, which indicates an acceptable and robust relationship. It also appears from the table that the value of ( $R^2$ ) coefficient of determination amounted to 0.688. The independent variables were able to explain 68.8% of the changes that occurred in the dependent variable, the sustainable consumption behavior, and the rest attributed to other variables.

It is also worth noting that the adjusted R2 coefficient of determination was (0.7681), with a difference of 0.005 between it and the importance of R2, indicating the ability of the

variables accepted in the model to predict the values of the dependent variable. According to Table (13), the validity of the multiple regression test model is shown by the value and statistical significance of F for the combined dimensions, which amounted to 92.109 at a significance level of 0.000 (less than 0.05), and the following table shows test results:

*Table 14: Multiple regression analysis-coefficient results*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Hypothesis status
		B	Std. Error	Beta			
1	(Constant)	.558	.169		3.305	.001	
	EK	.142	.063	.176	2.267	.025	accepted
	Mat	.417	.073	.452	5.689	.000	accepted
	EI	.165	.040	.199	4.141	.000	accepted
	PSC	.103	.046	.151	2.259	.025	accepted

It appears from Table (14) by reviewing the impact values of each of the dimensions of the independent variable (EK, Mat, EI, and PSC) have a positive, statistically significant impact individually on the sustainable consumption behavior at the level of ( $\alpha \leq 0.05$ ). Based on the results in a table (14), the hypotheses of H1, H2, H3, and H4 were accepted.

## CHAPTER FIVE: CONCLUSION

### 5.1 Conclusion

In conclusion, the study's findings provide useful insights into the intricate interaction of factors impacting participants' sustainable consumption patterns. Environmental Knowledge (EK), Materialism (Mat), Environmental Influences (EI), and Promotion of Sustainable Consumption (PSC) were all factors considered in the study. However, given the prevalence of multicollinearity, notably between EK and Mat, it is critical to approach the results with delicacy. The limited tolerance and somewhat high Variance Inflation Factors (VIF) for EK and Mat indicate that distinguishing the individual effects of these factors on sustainable consumption behaviors may be difficult. This necessitates caution in interpreting regression coefficients linked with these variables.

On the bright side, variables such as Environmental Influences (EI) and Promotion of Sustainable Consumption (PSC) have lower collinearity, resulting in more stable regression model results. The modest VIF for PSC indicates a degree of association but does not raise major concerns. Regardless of methodological considerations, certain patterns emerge from the research. Participants demonstrate a noteworthy understanding of environmental issues, as evidenced by their favorable replies to comments about the use of eco-friendly products and the influence of socially responsible efforts. The attitudes of the participants regarding materialism are diverse, showing a balanced approach to purchasing habits. While there is a respect for luxury and admiration for those who have expensive items, there is also an understanding that material possessions do not always correlate to long-term happiness. Furthermore, the study reveals a positive proclivity for social and environmental participation, with participants actively volunteering and being impacted by their social networks. Although rarely overt, the presence of a family tradition demonstrates an understanding of environmental care within familial boundaries.



In terms of future considerations, researchers may benefit from investigating more advanced statistical techniques to handle multicollinearity issues, resulting in a more robust and accurate understanding of variable interactions. Furthermore, qualitative data may supplement quantitative findings by providing a more in-depth knowledge of participants' motives and perceptions. Overall, the study adds to the larger conversation about sustainable consumption practices by underlining the importance of targeted interventions and awareness efforts to encourage ecologically conscious choices. The varied findings highlight the need of fostering sustainable behaviors among individuals and communities through a comprehensive and context-specific approach.

The culmination of this study offers robust evidence supporting the positive impact of key variables on sustainable consumption behavior. The acceptance of all hypotheses—H1 emphasizing the role of environmental knowledge, H2 highlighting materialism, H3 underlining environmental influences, and H4 focusing on the promotion of sustainable consumption—underscores the multifaceted nature of sustainable behavior and the diverse factors at play. The positive effect established between environmental knowledge and sustainable consumption behavior underscores the pivotal role of awareness and understanding. Participants with a higher level of environmental knowledge are more inclined to adopt behaviors that contribute to sustainability, reflecting a consciousness of the environmental consequences of their actions.

## 5.2 Implications of the study

### **Practical Implications**

Given the favorable impact that environmental information has on sustainable consumption, there is an obvious need for focused educational programs. These programs can be designed to improve environmental literacy by increasing understanding of the environmental effect of consumer choices. Curricula and workshops that inculcate a sense of

responsibility and understanding in persons can be developed in collaboration by educational institutions and environmental organizations. As businesses and marketers can benefit from the discoveries about materialism and the promotion of sustainable consumption. Marketing messages that are consistent with both materialistic values and sustainability can be effective. Emphasizing a product's quality, durability, and beneficial societal impact might appeal to customers who value both material things and environmental responsibility. Furthermore, companies involved in product development might prioritize the production of environmentally friendly products. The study's endorsement of the materialism hypothesis implies that there is room for innovation in sustainable product design. Creating items that satisfy materialistic desires while complying to environmental norms might be a competitive advantage in the market.

### **Theoretical Implications**

The acceptance of assumptions connected to environmental knowledge, materialism, environmental effects, and the promotion of sustainable consumption in the study underscores the importance of a comprehensive theoretical framework. Integrating individual-level elements (such as knowledge and materialistic ideals) with societal-level effects allows for a more comprehensive understanding of the complex dynamics influencing sustainable behavior. The positive impact of materialism on sustainable consumption provides a more nuanced view of the interaction between personal beliefs and environmentally friendly actions. Environmental psychology and consumer behavior theoretical frameworks may need to explore how materialistic ideals can coexist with, and even contribute to, sustainable decisions.

### 5.3 Future Directions

Future research could explore deeper into the interplay of these components, looking for potential moderating or mediating variables. Longitudinal studies may also shed light on the long-term sustainability impact of interventions and the evolution of behaviors over time. In conclusion, this study not only confirms the importance of environmental information, but it also emphasizes the complex web of forces that shape sustainable consumer behavior. Accepting this complexity is critical for developing comprehensive and effective policies that will move individuals and society toward more sustainable and ecologically conscientious futures.

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