

The Impact of Consumer Behaviour on Natural Resource Depletion: A Case Study Approach to Influencing Buying

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Abstract: This study explores the relationship between consumer purchasing behaviour and natural resource depletion, particularly in resource rich-emerging nations experiencing fast population increase and resource overexploitation. By Examining the impact of consumerism on environmental sustainability, the research provides a novel perspective on how marketing and social influences contribute to ecological distribution. It emphasizes the negative effect of excessive purchasing on the environment and the importance of fostering sustainability in consumer attitude and behaviour to achieve successful long term resource management. Using a case study approach, the study illustrates the real-world consequences of unsustainable consumption and emphasizes the importance of integrating sustainability into everyday consumer practice. It proposes strategies for aligning consumer behaviour with sustainable practices, offering valuable insight for policy-makers and businesses. This research not only contributes to the understanding of consumer behavior's environmental impact but also lays the groundwork for the future studies, aiming the drive innovation policies and practices in sustainable resource management.

Keywords: Environmental sustainability, Unsustainable consumption, Consumer behavior, Resource management, Ecological degradation

1. Introduction

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The relationship between consumer behaviour and natural resource depletion is an important topic of study, especially in the context of sustainable development. (Antony2023). The exponential increase of human economic expansion has had a destructive impact on the environment and natural resources worldwide. At the same time, social effort to improve the situation is quite limited (Bauman, 2000; Korten, 2009). When the neoclassical economic growth model and its expansions in environmental economics and endogenous growth theory are analytically solved, welfare is usually represented as a single argument function of consumption. This simplified welfare specification is smaller than those provided in the quality-of-life literature and is favoured by proponents of sustainable development. Natural capital plays a crucial role in economic growth and wel-

fare, influencing the balance between consumption and preservation. A model with exogenous technical progress shows balanced growth routes, highlighting the need for sustainable development. (Krutilla & R. (2002).

As the world's population grows, the demand for resources increases, putting enormous strain on the environment. Depletion of natural resources happens when resources are used faster than they can be replenished. The abundance of natural resources is reflected in water use, agriculture, fossil fuel consumption, fisheries, and mining, all of which have an environmental impact. Many factors contribute to the depletion of natural resources, including overcrowding, bad farming methods, illegal logging, excessive consumption, and pollution. (Azwardi, Andaiyani, S., Igamo, A. M., & Wijaya, W. A. (2022, October).

In response to these challenges, the UN General Assembly announced the 2030 Agenda for Sustainable Development in 2015, which consists of 17 SDGs and 169 targets aimed at completing the Millennium Development Goals' unfinished objectives in the economic, social, and environmental dimensions. The SDGs prioritize sustainable economic growth, resource allocation, community prosperity, and acceptable working conditions. They want to build economies that are sustainable, inventive, and people-oriented, with more job possibilities for the younger generation and women. To achieve sustainable consumption and peaceful society, the 2030 Agenda calls for collaboration across many actors, including the commercial and public sectors, governments, corporations, philanthropic groups, and individuals (Chams, & Blandón, (2019).

1.1 Buying Behaviour and Its Effect on Natural Resource Depletion

Buying behaviour encompasses the entire shopping process, from discovery to repurchase, influenced by practical, personal, and societal factors. Marketing messages and social forces significantly impact purchasing decisions. Effective marketing connects buyers on mental and emotional levels, influencing rational and irrational decisions. This study aims to identify key factors influencing pro-environmental behavior and evaluate current marketing and policy measures for sustainable consumption patterns (SurveyMonkey. (n.d.-b).

Understanding purchase behaviour is critical in this study because it allows us to examine how consumer decisions affect natural resource depletion. Pocheptsova, A., Amir, O., Dhar, R., & Baumeister, R. F. (2009) Marketing and social conventions can impact consumers' tastes, causing them to gravitate toward items and services that do not adhere to sustainable principles. For example, a preference for quick fashion, fuelled by trends and marketing, leads to increasing production and waste rates, worsening resource depletion and environmental damage.

1.2 The Role of Marketing and Social Influence

Marketing influences customer behavior by creating appealing messages emphasizing ease, status, and quick gratification. Social influences reinforce these habits, leading to a short-term happiness cycle over long-term sustainability (Publisher, 2015b, October 27).

Similarly, Martinet 2007, discovered that equilibrium can be defined as either zero or growth by evaluating steady-state conditions. Growth occurs when the pace of exogenous technical change exceeds the rate of time preference, but negative growth is consistent with Hartwick's investment rule in a steady state.

The study examines the impact of purchasing choices on natural resource depletion and the transition from sustainable to unsustainable consumption, using case studies in resource-rich, developing countries, and recommending sustainable future strategies. Following the introduction, this paper will look at how consumer activity, specifically purchasing behavior, contributes to the depletion of natural resources. Using a few case studies, the study will critically examine the consuming theories and layers that lie underlying illogical purchase. It will also recommend some alternatives and techniques to promote sustainable habits. This holistic approach is used throughout the study to develop an understanding of how consumer behavior affects natural resource depletion and to outline the actionable solution technique that would mitigate the effect.

2. Literature Review

2.1 The Economic-Environmental Relationship

Contemporary capitalism is characterized by green consumerism, clean technologies, and corporate environmentalism, which legitimizes greenwashing for economic growth. Neoliberalism reframes environmental degradation and resource depletion as economic issues, influencing policy responses.

Whereas the economy has been central in these debates, many heterodox traditions of economics have until recently paid very little attention to the question of the environment. As Spash and Ryan (2012) put it, "The environment generally appears as an 'add-on' rather than forming part of the essential structure and operation of economies.". Their research into the economics schools of thought manifested a radical difference in how environmental issues have been handled, whereby orthodoxy incorporated the environmental issue into the architectures of economics, whereas heterodox traditions mostly disregarded them (Spash & Ryan, 2012).

The long-term viability of capitalism's structures and sustainability concerns are addressed in heterodox traditions, such as ecological economics, Feminist, and Marxian. Contemporary capitalism, characterized by green consumerism and corporate environmentalism, legitimizes economic growth by addressing environmental degradation and resource depletion.

Yet, most of the heterodox traditions in economics have long neglected the environment. In sharp contrast, Chester argues that the economic-environment relationship is not simply a social relation specific to and specific to capitalism, and that it is defined and founded by the mode of regulation which guarantees accumulation. The application of this regulatory approach from Chester gives sense to the ecological dimension as intrinsic in an economic system and spreads its overcoming over the past regulations 'environment-deficit-syndrome' question (Chester, 2010).

According to Chester, 2010, prospects for sustainable development exist only in those that do not challenge the accumulation processes of capitalism. Against this background, the regulations' analysis brought new insights—a more realistic picture of the challenges capitalism must deal with toward the attainment of the kind of equitable solutions Green Economics aims to resolve, be it for climate change, poverty, or biodiversity.

Orthodox economics incorporates environmental concerns within their frameworks, while heterodox traditions have not. Chester suggests a regulations' perspective offers a

comprehensive understanding of the economic-environment relationship, emphasizing continuous accumulation and regulatory mechanisms.

This agrees well with a study conducted by Moroz et al. in 2021, where the legal aspect of the relation of economic development with environmental pressure was evaluated on a special note to Ukraine's efforts in pursuing a balanced agenda among economic growth and environmental protection. It ascertains the existing scenario wherein understanding of the influence of global economic development on environmental conditions has increased manifold. Normally, an entrepreneur is not much concerned about the environment as much they care for private interest and profiteering. In sharp contrast to this, the governments of economically developed countries underline the enforcement of environmental legislation and the fostering of a green economy. (Moroz et al. 2021)

2.2 Sustainable Development and Resource Management.

Some of research has highlighted the influence of the human dimension on sustainable development and resource preservation (Pfeffer, 2010). With an increased emphasis on social responsibility and sustainable performance, corporations have set additional goals beyond financial profit, such as a commitment to social and environmental consequences (Elkington, 1997). In fact, a worldwide survey of 2800 global corporations found that 70% of these organizations prioritize sustainability in their strategic goals and objectives (Kiron et al. 2012).

SHRM (Sustainable Human Resource Management), a key component of the green movement, promotes social engagement and environmental preservation, aligning with the Sustainable Development Goals, aiming to create sustainable economies, improve employment opportunities, and foster harmonious societies. (Starik and Rands, 1995; Jennings and Zandbergen, 1995).

Moreover, firms have more and more placed social, ethical, and ecological objectives at a higher level of importance than financial profit, concerning themselves with the performance of people, communes, and environmental friendliness. SHRM promotes "green" organizations that realize sustainable development goals set by SDGs through ecological techniques and strategies of innovation (Krutilla, (1967). Similarly, Chams, & Blandón, (2019) investigate the idea that human resource practices must be aligned with the principles of sustainability, key to fostering long-term ecological balance and social responsibility.

2.3 Consumer Behaviour Theories

Consumer behaviour is closely associated with the issues of environmental protection and sustainable use of resources. A great many environmental problems society experiences are quite linked with consumer lifestyles. Consumers who adopt environmentally friendly behaviours essentially alter the patterns through which they acquire, use, and dispose of products (Pieters, 1991). Pro-environmental consumers are characterized by attitudes and activities depicting people involved in recycling, choosing minimal or ecologically friendly packaging, avoiding RHS generation, disposing of hazardous by-products, and considering the impact on the environment while making purchase decisions. As Lu, Chang & Chang, 2015 state: Such knowledge into the consumption patterns and their influencing variables will tell a great deal about tracking pro-environmental alternatives and developing the necessary strategies to promote those alternatives. Up until now, the research into what factors stimulate or suppress pro-environmental consumer

behaviour has been diffuse and often contradicts the predictions from some relevant theories (Olney & Bryce, 1991).

Pro-environmental consumer behavior, also named ecological behavior, green purchasing or sustainable consumer behavior, is related to wider issues of social ethics and bio-medical values of society, besides being linked to individual consumer values, attitudes, and situation variables. It embraces all deliberate intrinsic and extrinsic actions that people make towards the conservation of the environment (Corral-Verdugo, 2001; Kollmuss & Agyeman, 2002), reduction of harmful effects on the ecosystem, and sustainability for future generations. According to Papaoikonomou et al. (2011), pro-environmental consumer behavior can be explained as an ethical disposition that is oriented towards the conservation of the environment for sustainable production and consumption with the same purpose of securing the future. Correspondingly, Castaneda et al. (2015) relate this behavior to the actions conducted by individuals and consumer groups that do not harm the environment. Basically, environmental protection is central to pro-environmental consumer behavior. Joshi and Rahman, 2015, therefore, affirm that eco-behavior is essentially a morality-driven choice. This will take into consideration the sustainability of the ecosystem before, during, and after said consumption experience is over.

Understanding the theoretical basis of pro-environmental consumer behavior is critical in developing initiatives to ensure consumers engage in sustainable practices. To explain such behaviours, numerous major theories apparently determinant have been developed, each of which provides distinct insights into the motivations and mechanisms driving environmentally friendly behavior. Table 1 summarizes the fundamental theoretical underpinnings of pro-environmental consumer behavior.

Table: 1 Theoretical Frameworks: Pro-environmental consumer behaviour (Joseph, (2019).

Theoretical Frameworks	Authors	Summary
Theory of Reasoned Action (TRA)	(Fishbein & Ajzen, 1975), (Trafimow, 2009), (Ramayah, Lee & Mohamad, 2010), (Mancha & Yoder, 2015), (Joshi & Rahman, 2015)	Human behavior is directly influencing behavioural intentions. Attitude, the intrinsic factor, and subjective norm, the extrinsic factor, combine to generate intention.
Theory of Planned Behavior (TPB)	Ajzen (1988), (Ajzen, 1991), (Wang et al., 2014)	TPB expands on TRA by integrating perceived behavioural control, which reflects how much control people believe they have over their own behavior. In addition to attitude and subjective norms, perceived control effects behavior performance.

Norm Activation Theory	(Gifford & Nilsson, 2014), (Sawitri et al., 2015)	Schwartz's norm activation theory focuses on three factors that influence pro-environmental behavior: awareness of consequences, attribution of responsibility, and personal norms. Awareness of negative consequences and attribution of personal responsibility induce personal norms, which impact preemptive efforts against adverse outcomes.
Goal Framing Theory	(Lindenberg & Steg, 2007), (Lindenberg, 2009), (Thøgersen, 2005), (Santos, 2008)	Human cognitive processes and behavior are modularly organized and directed by goals that cause cognitive and emotional responses.

These theoretical frameworks provide a comprehensive understanding of the various aspects that influence pro-environmental consumer behavior. The integration of inner and extrinsic factors perceived behavioural control, personal norms, and goal framing contributes to a more comprehensive understanding of how and why people engage in environmentally friendly behaviours.

The table shows that each hypothesis contributes significantly to our knowledge of pro-environmental behaviour. The Theory of Reasoned Action emphasizes on the function of intentions associated with attitude and subjective standards. Adding perceived behavioural control, the Theory of Planned Behavior raises this to number three. Norm-Activation Theory shifts the focus from personal norm activation to awareness and accountability, whereas Goal Framing Theory emphasizes the impact of specific goals on behavior.

Existing literature focuses on social exchange theory, reasoned action theory, and planned behavior theory. Goal framing theory and norm activation are two theories that can explain pro-environmental consumer behavior theory and the Hunt-Vitell model of ethical behavior. Empirical research supports the idea that pro-environmental consumer behavior is influenced by both internal and external variables. Intrinsic elements include consumers' psychological composition and education. Level, values, and attitudes. Extrinsic influences include consumers' disposable income, time availability, effort level, and social relationships (Spangenberg & Lorek, 2002).

Researchers can develop more effective strategies for promoting sustainable consumption patterns and reducing the environmental implications of consumer lifestyles by drawing deeper and broader insights from a variety of theoretical models and empirical studies. This holistic approach, if not necessary for achieving sustainable development goals, has significant implications for our planet's long-term health.

2.4 Research Problem

Although environmental awareness is growing and sustainable consumption is being promoted, little is understood about the motivators and barriers to pro-environmental consumer behavior. Theories of sustainable behavior are essential for policymakers to understand motivators and barriers to pro-environmental consumption. However, these theories have been fragmented, limiting the practical application of these insights. The current study aims to integrate and compare these theories, identify intrinsic and extrinsic factors influencing pro-environmental behavior, and evaluate current marketing and policy measures. The current study seeks to fill these gaps by making relevant and valuable recommendations to policymakers and enterprises.

2.5 Research Objective

1. The study explores the influence of intrinsic and extrinsic elements on pro-environmental consumer behavior,
2. Evaluating green product marketing techniques,
3. And personal norms on sustainable consumption intentions and behaviours.

2.6 Research Relevance of the Study

Pro-environmental consumerism research is critical for expanding theoretical and practical understanding. Theoretically, it compares TRA, TPB, Norm Activation Theory, and Goal Framing Theory frameworks to provide a comprehensive understanding of what determines sustainable behavior. Practically, it aids politicians in developing effective programs to promote sustainable consumption and assists businesses in more effectively marketing green products. The research has also made significant contributions to environmental sustainability by advocating strategies and behaviours that reduce resource use and pollution. Furthermore, it offers instructional value to future research investigations and courses focused on environmental psychology and sustainability. In a summary, this study plays a critical role in the advancement of environmental knowledge, practices, and a well-informed society.

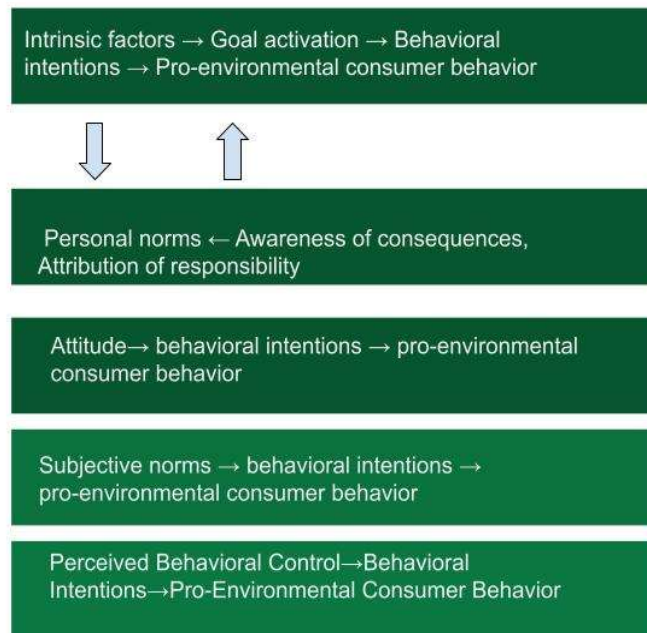
2.7 Research Methodology

This study will investigate an updated collection of studies on pro-environmental consumer behavior using a comprehensive examination of existing literature. The research methodology will include searching academic databases for keywords that are thought to indicate pro-environmental behavior as well as essential underlying theories. The current research comprises 64 studies for analysis from the databases Scopus, Elsevier, and ScienceDirect. Peer-reviewed publications, empirical data, theoretical assessments, and full-text or relevant studies are among the selection criteria. The extracted data from the identified studies in this research was coded, and the findings were then summarized by categorizing theoretical frameworks and summarizing major elements, difficulties, and research needs.

3. Integrated model of factors influencing pro-environmental consumer behavior.

The following flow chart, entitled "Integrated Model of Factors Influencing Pro-Environmental Consumer Behavior," provides a graphic representation of the relations between key variables identified in the literature review.

Flow Chart: 1 - Integrated Model of Factors Influencing Pro-Environmental Consumer Behavior



3.1 Intrinsic Factors and Goal Activation

Intrinsic factors, such as personal environmental values, trigger the activation of specific goals about sustainability.

Goal Activation generates an effect on Behavioural Intentions, which are so-called deliberate plans to perform pro-environmental behavior.

3.2 Personal Norms

The links to Awareness of Consequences (the degree of understanding of the environmental consequences of actions) and to Attribution of Responsibility (feeling responsible for a certain outcome concerning the environment) result in the formation of Personal Norms of moral obligation to act in an environmentally friendly way.

Direct effect: Personal Norms positively influence Goal Activation by boosting the intention to act pro-environmentally. TRA and TPB: Attitude Subjective Norm sensible for the cosmos, positive attitude in preserving the environment favours Behavioural Intentions. Social pressures and expectations from friends and society influence Behavioural Intentions. The combination of attitude and subjective norms leads to the formation of behavioural intention.

3.3 Perceived Behavioural Control (TPB)

Perceived Behavioural Control: One's belief in one's ability to perform pro-environmental behavior affects Behavioural Intentions and actual Pro-Environmental Consumer Behavior.

It infers that the stronger the confidence in the capability to be able to control the behavior, the stronger the intentions and the more consistent the behavior will be.

3.4 Behavioural Intentions

Behavioural Intentions: These are the directly resulting and central linking variables of all the prior variable's attitudes, subjective norms, perceived behavioural control, personal norms, and goal activation that directly led to Pro-Environmental Consumer Behavior.

3.5 Pro-Environmental Consumer Behavior

This is the outcome, moderated by the complex interaction of intrinsic and extrinsic factors, personal norms, goal activation, attitude, subjective norms, and perceived behavioural control.

Description of Flow Chart

Environmental values are an intrinsic factor that first activates the goal, which then influences behavioural intentions toward pro-environmental consumer behavior.

Awareness of consequences and attribution of responsibility are also factors in personal norms. These norms improve goal activation, thus further influencing behavior intention and behavior.

Therefore, attitude towards the environment and subjective norms symbolizing social expectations directly influence behavioural intentions that form pro-environmental consumer behavior.

It further flows that Perceived Behavioural Control not only affects Behavioural Intentions but has a direct influence on Pro-Environmental Consumer Behavior. The theory places an emphasis on the role of people's confidence in performing certain actions in a sustainable manner.

This overall flow chart illustrates how different theoretical frameworks and factors interrelate to determine pro-environment consumer behavior. It puts forward the complexity and multifaceted nature of the drivers of sustainable consumption patterns.

4. Materialism and Consumption in Contemporary Society

Materialism has been the central belief in the study of consumer behavior in modern consumer society. This word refers to the significance that people place on gaining and possessing material goods, which is most likely a strong motivator for consumer behavior.

1. The Role of Materialism in Consumer Society: Materialism is frequently blamed for creating a consumer culture that is overly focused on material items. Much of the basis for this argument stems from the assumption that consumer marketing frequently targets demands that go beyond basic material necessities, implying that

commercial items can satisfy deeper emotional and psychological needs. (El-Bassiouny et al, (2014)

2. **Psychological Motivators:** Fitzmaurice (2006) discusses the in-depth psychological motivators for materialism, claiming that materialistic attitudes frequently lead to specific consumer actions. They consume more, continually looking for new items to satisfy their glazed eyes, with the hope that all their possessions will offer them satisfaction and a raise in social standing (Fitzmaurice, J., & Comegys, C. (2006)
3. **Effects of Advertising:** Materialism is heavily influenced by advertising and marketing in a capitalist society. Advertisements frequently convey to its target audience the concept that happiness and success can only be obtained and brought about by consuming specific things, therefore material possessions are associated with satisfaction in people's minds (Srikant, & Manchiraju. (2013)
4. **Positive and Negative Effects:** Materialism has both positive and negative effects on people, consumption patterns, organizations, and society. On the other hand, materialism may stimulate economic growth and innovation, but the negative consequences include decreased personal satisfaction and increasing environmental destruction (Fu, S., & Liu, Y. (2019)
5. **Life Satisfaction and Well-being:** Materialistic ideals have been found to be significantly connected with lower levels of life satisfaction and well-being. This is due to early fears and never-ending unhappiness caused by the pursuit of more wealth and possessions (DeAngelis, T. (n.d.)

Thus, materialism plays a significant role in influencing consumer behaviour, which is supported by deep-seated psychological demands and marketing methods. While it stimulates economic activity, it also poses basic problems about well-being and sustainability in modern society.

5. The Green Consumer Movement.

For decades, the green consumer movement has been a pillar which environmentally conscious consumers have adopted in their quest to make less harmful purchasing decisions. The increased interest in long-term sustainability is manifesting in a growing demand for eco-friendly products and services, ethical manufacturing practices, and designs with lower environmental impact. Green consumerism refers to the act of choosing products considered more environmentally friendly, like those with minimal use of energy, many recyclables, and low waste and pollution. (Kirmani, M., & Khan, M. (2016).

Green consumerism studies include investigating consumer motivation, influence of marketing on these consumers, and efficacy of the green products. The researchers are working on future research topics in a bid to seek further understanding and promotion of green consumer behaviour (Bian, T. (2020b). Recent developments in green consumer research indicate that it has a larger scope than purchasing alone. It encompasses the entire life cycle of products, from production to disposal, and the environmental impact. The holistic approach is also encouraging in terms of formulation of full-cycle solutions for sustainable consumption. There has been a huge number of research on green consumption; however, more systemic reviews are required to synthesize data and clearly provide recommendations that could both inform policy and practice. Such reviews may point out deficiencies in the literature and provide leads for further research.

Consumption has undergone several changes, and different researchers have defined it differently. For an in-depth understanding of green consumption, consider the different definitions of the concepts given by authors. Table 2 provides a summary of the key definitions provided by the major studies.

Table 2. Defining the concept of green consumption (Bian, T. (2020))

Authors	The concept of green consumption
John & Julia (1987)	The products utilized are free of pollution, do not squander resources, and are safe for human health and national development.
Carlson & Grove & Kangun (1993)	The products utilized are free of pollution, do not squander resources, and are safe for human health and national development.
Roozen (2000)	The green consumption cycle is divided into three phases: purchasing, using, and disposing of products.
Lu (2013)	Green consumption refers to consumers' propensity to buy eco-friendly products that have a low environmental impact.

The provided definitions well explain how the concept of green consumption has grown with time toward greater awareness of consumer behaviours and impacts on the natural environment and stronger emphasis on sustainability from cradle to grave.

There are multiple factors that influence consumer attitudes towards green products, resulting in self-esteem, perceived quality, and affordability. Knowledge about these elements can help enterprises or regulators to design more effective ways of promotion of green consumption. (Barbu, et al, (2022).

The importance of green marketing lies in the fact that it propagates to the end customer the benefits accruing from purchasing green products and the impact they have on biodiversity. Effective green marketing would, therefore, go a long way in changing consumer attitudes and behaviours. (Premi et al, (2021)

In a nutshell, the Green Consumer Movement is an extremely vast and dynamic field of study that covers knowledge on consumer motivation, marketing strategies, and overall impact caused by consumption on the environment. More research and reviews should be carried out and read to increase our knowledge and accelerate the rate at which sustainable consumerism is adopted.

6. Case Studies to Support Pro-Environmental Consumer Behavior

Case studies are chosen and discussed to provide more information about how theoretical frameworks and influencing elements work in real-world settings. They can help contextualize and validate the theoretical principles discussed in this study. The following case examples are pertinent to the theoretical frameworks:

6.1 Case Study: Pro-environmental behaviours in Seoul and Tokyo

Lee, Kurisu, and Hanaki (2013) investigate the determinants of pro-environmental behaviors in Tokyo and Seoul; they discover that only some demographic factors, such as individual education and income, and ideological factors, such as cultural and social norms, environmental awareness, and personal values, including government policies, influence environmentally friendly behavior. The report emphasizes the importance of resolving issues of inaccessibility and a lack of infrastructure as barriers to the advancement of sustainable practices. The authors conclude that fostering pro-environmental behaviors in urban centres can only be achieved through a combination of education, policy interventions, and improvements to infrastructure. (Lee, et al, (2013).

Relation to Theories

Norm Activation Theory: This case study demonstrates how boosting awareness about consequences and responsibility attribution can activate personal norms, resulting in high rates of PEBs.

Goal Framing Theory: These cities' cultural and social norms are extrinsic motivators, and thus serve as the foundation for establishing environmental goals and influencing individual behaviours.

6.2 Case Study: How Environmental Knowledge Influences Consumer Behavior

Onel & Mukherjee (2016) investigate the link between consumer knowledge and pro-environmental behavior. The study investigates how knowledge, among other mental forces, might serve as a motivator for such green actions. The primary cause of sustainable consumerism is identified as environmental awareness, attitudes, and values. It goes on to examine the consequences of that behavior, claiming that as consumer knowledge increases, so does the likelihood of doing pro-environmental acts. The authors found that increasing consumer understanding may be the most important criterion for promoting sustainable habits and achieving broader environmental goals.

Relation to Theories

Theory of Planned Behavior: Knowledge increases perceived control over behaviours, which is a crucial precursor to TPB, causing an individual to feel more secure in their perceived ability to engage in pro-environmental behaviours.

Theory of Reasoned Action (TRA): Similarly, information shapes a person's attitude toward his action, which determines his intention to engage in that behavior.

6.3 Case Study: Government Policies and Pro-Environmental Behavior

Pham, Thai, Heffernan, and Reynolds conducted a comprehensive literature review to investigate the influence of environmental legislation on pro-environmental consumer behavior. According to them, the importance of regulatory policy stems from its ability to generate opportunities and restrictions that directly influence consumer environmental behavior. In this sense, governmental measures play a particularly important role in promoting sustainable consumption patterns and reducing environmental impacts. They suggest that to improve pro-environmental attitudes, effective policy measures should

be implemented alongside suitable public awareness campaigns and incentives (Pham et al, (2024).

Relationship with Theories

Norm Activation Theory: Through government policy, awareness about environmental impacts may be increased, thus enhancing responsibility and activating personal norms.

Goal Framing Theory: Policies set goals concerning the environment, hence setting a framework that influences people's cognitive and emotional responses toward performing pro-environmental behaviours.

6.4 Case example: happiness and pro-environmental consumption behaviours

Nguyen, Le, Pham, and Cox (2022) claimed that happiness and pro-environmental consumption are inextricably linked. This shows that those who are happier are more likely to adopt sustainable consumption. The authors speculate on the mechanisms, suggesting that good emotions increase environmental awareness and incentive to behave properly. They are also discussing how other elements influence the specified actions. This conclusion will be reached if happiness is viewed as a strategic means of encouraging pro-environmental consumption to attain established goals successfully and sustainably. (Nguyen et al, (2022).

Relationship with Theories

Goal Framing Theory: This study serves as an excellent example of how setting specific goals impacts behavior; it is, therefore, a title supporter of the idea that goals frame cognitive and emotional responses.

Norm-Activation Theory: This invokes personal norms that link personal binding goals about happiness and environmental impact by driving pro-environmental behaviours.

6.5 Case Study: Realistic Environmental Problems and Research of Pro-Environmental Behavior

Tian and Liu (2022) analyse developments in theories about pro-environmental behaviours and make recommendations for future research. The authors underline that understanding and supporting pro-environmental acts requires developing multiple behavioural theories at the same time. These encompass the primary theoretical streams of value-belief-norm theory and the theory of planned behavior, indicating a comprehensive approach. According to the authors, some future study should focus on multidisciplinary studies, real-world applications, and policy implications; this appears to be adequate in terms of effectiveness in responding to environmental concerns and promoting sustainable practices. (Tian & Liu (2022).

Relationship with Theories

Norm activation theory: A realistic environmental problem is associated with increasing awareness of consequences and personal responsibility, since it activates personal norms.

Theory of Planned Behavior: Addressing realistic problems can enhance perceived behavioural control as well as attitudes, leading to stronger intentions.

7. Effect of Influencing Buying on Natural Resource Depletion.

In this regard, consumer behavior influences immense depletion of natural resources and environmental degradation. Induced by marketing and socially determined norms of living, demand-driven patterns tend to result in excessive resource use and cause environmental damage.

Consumer Culture and Environment: Consumer culture, driven by marketing and societal demands, upholds the ideology of overconsumption. Such a culture promotes the buying of goods and services beyond the consumer's true needs—but in most cases, it results in wasteful methods and enhances the rate of pollution (Behl, C. (2024, March 28).

Green Buying Behavior: While environmental knowledge might have a positive effect on green purchase intentions, nevertheless, the overall contribution of consumer behavior to the depletion of resources still stays very high. Although sustainable consumption has increased recently, it is not yet standard practice and needs further dissemination and anchorage in the daily consumption habits of consumers (Joshi, Y., & Rahman, Z. (2015).

Unsustainable consumption and production practices Deplete natural resources and pose a significant harm to the environment. It comprises that the use of material inputs per se is higher than their replenishment rate accorded by nature, which will cause long-term resource scarcity and bring about ecological imbalance (Natural-Resource Use and Environmental Impacts. (n.d.).

Factors Influencing Consumer Choices: Environmental factors relating to natural resource depletion and global warming are highly linked to the choices and decisions made by consumers. Consumers that hold positive environmental attitudes tend to purchase more environmentally friendly products, but this might only temper some impacts of overall consumption patterns (Ogiemwonyi, et al, (2023; Zannakis, et al, (2019))

Overall, influencing buying behavior has a profound effect on natural resource depletion. While sustainability is being fast-tracked as a trend, more radical changes in consumer behavior, coupled with stronger promotion by businesses, are necessary to avert or reduce the worst environmental impacts of present consumer culture.

8. Discussion

According to research on pro-environmental behavior, knowledge, attitude, values, social norms, and government regulations are all necessary for sustainable consumer behavior. This theoretical explanation of PEB investigates the internal and external factors that influence people's pro-environmental behaviors, as well as how the integration of theories such as the Theory of Planned Behavior, the Value-Belief-Norm theory, and the Goal Framing Theory influences them. For example, principles are clearly demonstrated by using case studies from urban contexts such as Tokyo and Seoul to demonstrate practical application, emphasizing the importance of education, cultural norms, and policy interventions in achieving environmental sustainability.

Lee et al. found that higher education levels, income, environmental knowledge, and positive attitude are significant predictors of pro-environmental behavior. Nonetheless,

effective government policies and initiatives can help to strengthen such behaviors through sufficient infrastructure and other incentives. However, limitations such as a lack of infrastructure and access to green products must be overcome for sustainable practices to be widely adopted.

9. Conclusion

Hence, the study concludes that problems as highly interrelated as sustainable consumption and pro-environmental behavior must be approached in a multidimensional way. It therefore underlines that education, government intervention, and infrastructure development are some of the main effective tools toward the promotion of sustainable behaviors amongst consumers. The results underscore the view that an interaction of internal factors, such as knowledge, attitudes, and values, with external factors relating to social norms and regulation, is of cardinal importance in the emergence of pro-environmental actions. For any meaningful sustainability effort to be realized, stakeholder collaboration at all levels—governments, corporations, and individuals—is needed. From this perspective, the current research establishes a strong foundation for analysing consumer behavior and charting relevant actions geared toward environmental sustainability by drawing on several theoretical perspectives. Ultimately, therefore, an approach integrating education, commensurate incentives, stronger laws, supportive infrastructure, and public-private linkages will have to be designed to help in the induction of a culture of sustainability that will go on to preserve and ensure the health of human and natural ecosystems in perpetuity.

Policy Recommendation: In view of these findings, there is a clear need to translate insights accruing from the research into actionable strategies. The following key policy proposals outline a basic framework for fostering sustainable consumption and pro-environmental behavior.

The key policy proposals recommend the following points:

- **Comprehensive Education Programmes:** Increasing environmental awareness and understanding via comprehensive education programs.
- **Incentive Systems:** Creating incentives to encourage customers to adopt sustainable habits.
- **Tougher Environmental Legislation:** Enforcing stronger rules to control resource use and decrease environmental damage.
- **Supported Infrastructure Development:** Creating infrastructure that promotes sustainable consumption, such as recycling facilities and renewable energy sources.
- **Public-business Partnerships:** Promoting and supporting sustainable initiatives via collaboration between the government and the business sector.

By incorporating these elements, the study emphasizes the significance of a comprehensive approach to influencing consumer behavior toward environmental sustainability. These strategies aim to raise environmental awareness, promote sustainable consumption, and facilitate the transition to an eco-friendlier society.

10. References

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