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Gen Z Consumers and Product Usage and Disposal: Attitudes, Behaviours, and Emerging Trends

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ABSTRACT

Global Generation Z (Gen Z) consumers, born between 1997 and 2012, are significantly shaping the consumer landscape. As a digitally native, environmentally conscious generation, their attitudes toward product disposal and sustainability present a key area for study. This research article explores how Gen Z approaches product usage and disposal, emphasizing their awareness of environmental issues, the role of digital media in shaping consumer behaviour, and their growing preference for sustainable disposal practices. Gen Z is a generation increasingly motivated by sustainability exhibiting a preference for recycling, upcycling, and second-hand markets over traditional disposal methods. The study highlights the potential for brands and policymakers to leverage Gen Z's environmental concerns to promote circular economies and responsible consumption.

Keywords: responsible, consumption, policymakers, sustainable

1. INTRODUCTION

Generation Z is a unique cohort that exhibits a strong inclination towards environmental consciousness, shaped by exposure to global sustainability movements, digital media, and awareness campaigns. As a consumer segment, they not only prioritize ethical purchasing but are also increasingly concerned with the lifecycle of products, including their disposal. Understanding the usage and disposal behaviours of Gen Z is crucial for businesses looking to appeal to this environmentally aware group and for policymakers promoting sustainable consumption in a rapidly developing economy like India.

As rapid urbanization and consumption are on the rise, the challenge of product usage and disposal is becoming increasingly critical. Gen Z, more than any previous generation, has the potential to significantly impact product disposal practices due to their growing concern for the environment. This research explores the behaviours, attitudes, and trends associated with product disposal among Gen Z consumers, focusing on their preferences, practices, and how businesses and governments can harness this concern to promote sustainability.

2. GLOBAL PRODUCT AND USAGE DISPOSAL STATISTICS

In the modern era of rapid industrialization, globalization, and consumerism, the production and consumption of goods have reached unprecedented levels. From electronic gadgets and vehicles to textiles, plastics, and packaged foods, products are being manufactured, used, and discarded at a scale that far exceeds historical norms. While this surge in product usage has contributed to economic development and improved standards of living, it has also brought with it severe environmental and sustainability challenges.

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The global product lifecycle—from raw material extraction to production, usage, and final disposal—poses significant pressure on natural resources and ecosystems. Every year, millions of tons of waste are generated worldwide, much of it ending up in landfills, oceans, or incineration plants. Improper disposal and inadequate waste management systems exacerbate pollution, harm biodiversity, and contribute to greenhouse gas emissions. E-waste, plastic pollution, fast fashion, and end-of-life vehicles are just a few examples of sectors where the balance between consumption and environmental responsibility is increasingly strained.

Moreover, while high-income countries tend to generate more waste per capita, low- and middle-income nations often face greater challenges in managing disposal due to limited infrastructure, informal recycling practices, and policy gaps. The environmental impact is thus both a global and local issue, requiring coordinated efforts across borders, industries, and communities.

In this context, understanding the patterns of product usage and disposal is essential. It provides insights into consumer behaviour, industrial trends, and the efficacy of waste management systems, while highlighting the urgent need for sustainable practices such as recycling, circular economy models, and responsible consumption. This knowledge is crucial not only for environmental protection but also for shaping policies that promote long-term resource efficiency and social equity**.**

a) Electronics Usage: The global usage of electronic products, including mobile phones, computers, and televisions, has significantly increased over the past few decades. Mobile phones alone are estimated to number over 7 billion units globally, with a growing demand for personal electronics (Kang et al., 2020). In terms of disposal, electronic waste (e-waste) has become one of the fastest-growing waste streams. According to a 2020 report by the United Nations (UN, 2020), global e-waste reached 53.6 million metric tons in 2019 and is projected to rise to 74.7 million metric tons by 2030. Less than 20% of e-waste is formally recycled, leading to environmental concerns about the improper disposal of toxic materials like mercury and lead (Schluep et al., 2020). By 2030, e-waste is projected to reach 74.7 million metric tons. (United Nations University (2020), Global E-Waste Monitor.)
b) Plastics Usage: Plastic is one of the most widely used materials worldwide, primarily for packaging. In 2019, global plastic production reached 368 million metric tons, with 40% of this dedicated to packaging (Geyer et al., 2017). The disposal of plastics has raised significant environmental concerns. According to the World Economic Forum, approximately 8 million metric tons of plastic enter the oceans every year (Jambeck et al., 2015). Recycling rates for plastics are low, with only 9% of plastic waste being recycled globally (Geyer et al., 2017). This inefficiency in recycling contributes to the accumulation of plastic waste in landfills, rivers, and oceans, causing long-term environmental damage. By 2050, plastic production is expected to exceed 1.1 billion tons annually if trends continue. 8–12 million tons of plastic enter the ocean each year (Geyer et al. (2017), Science Advances; Jambeck et al. (2015), Science).
c) Vehicles Usage: Globally, there are over 1.4 billion vehicles in use (International Energy Agency, 2020), with this number expected to rise in developing countries as access to automobiles increases. The disposal of vehicles is a significant concern due to the environmental impact of the materials used, including metals, plastics, and chemicals. In terms of recycling, the automotive recycling industry handles the recycling of over 25 million vehicles annually in the United States alone (Bureau of International Recycling, 2021). Metal components from vehicles, particularly steel and aluminium, are widely recycled, but other components like plastics and rubber face challenges in efficient recycling. Recycling of electric vehicles is still in development, particularly for lithium-ion batteries (International Energy Agency (IEA); Bureau of International Recycling (BIR)).
d) Textiles Usage: The textile industry is one of the largest global industries, producing an immense amount of waste. In 2020, the global textile waste generated annually was estimated to be around 92 million tons (Niinimäki et al., 2020). Much of this waste is linked to fast fashion and

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overconsumption of clothing. The recycling rate for textiles is low, with an estimated 85% of used textiles ending up in landfills or incineration (Shen et al., 2020). Efforts are underway to improve textile recycling technologies and reduce waste through sustainable practices like circular fashion (Niinimäki et al., 2020). The global fashion industry produces 100 billion garments each year. Less than 1% of clothing is recycled into new garments (due to fibre complexity) (Ellen MacArthur Foundation (2017); Niinimäki et al. (2020), Nature Reviews Earth & Environment).

e) Food Packaging Usage: The food industry is one of the largest consumers of packaging materials, with plastic being the most commonly used material. According to a study by Geyer et al. (2017), 40% of all plastic produced globally is used for packaging. This contributes significantly to the growing problem of plastic waste. Efforts to reduce food packaging waste are increasingly focused on using biodegradable materials and promoting recycling. However, challenges remain in the effective recycling of food packaging, as contamination from food residue makes it difficult to process (Thompson et al., 2019). Recycling rates vary: in the EU, packaging waste recycling was around 64%, while in many other countries it's much lower (UNEP (2021); OECD (2022); European Environment Agency).

Global Waste Overview (All Categories Combined)

Category	Annual Usage	Annual Waste / Disposal
Electronics	7.5B+ devices	53.6M tons of e-waste (2019)
Plastics	390M+ tons produced	300M tons of plastic waste
Vehicles	1.4B+ vehicles	27M end-of-life vehicles
Textiles	100B garments	92M tons of textile waste
Food Packaging	40% of plastic use	Major share of ocean/landfill waste

3. GLOBAL TRENDS IN GEN Z PRODUCT USAGE AND DISPOSAL

Generation Z (born between 1997 and 2012) represents a unique cohort in terms of their product usage and disposal behaviours. As digital natives, their consumption patterns are shaped by a variety of factors, including technological advancements, environmental concerns, and the global interconnectedness of markets. This literature review explores global trends in Gen Z's product usage and disposal behaviours, focusing on their sustainability practices, social media-driven consumption, and varying practices across different countries.

3.1 Digital Consumption and Mobile Commerce

Gen Z is known for being the first truly "mobile-first" generation. They have grown up with smartphones and are avid users of mobile apps for shopping. In countries like Mexico, approximately 72.2% of Gen Z shoppers use mobile devices for e-commerce, while countries like the UK have only 18% in this age group shopping via mobile (Statista, 2023).

Social Media Influence: Gen Z's product usage is heavily influenced by social media, with platforms such as Instagram, TikTok, and YouTube playing significant roles in shaping their shopping decisions. Studies show that approximately 65% of Gen Z consumers have purchased products based on influencer recommendations, indicating a strong connection between social media engagement and purchasing behaviour (Forbes, 2024).

3.2 Sustainability and Ethical Consumption

a) Eco-Conscious Preferences: As a generation highly attuned to environmental and ethical issues, Gen Z shows a marked preference for sustainable and ethically produced products. Surveys suggest that 73% of Gen Z is willing to pay more for eco-friendly products, yet a gap exists between their ideals and actual purchasing behaviour, especially when faced with higher prices (Toxigon, 2024).

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b) Packaging and Recycling: Gen Z is keen on minimizing plastic waste and prefers brands with eco-friendly packaging. According to a 2024 report, 80% of Gen Z considers sustainable packaging a deciding factor when purchasing a product, particularly in markets like the Asia-Pacific region, where eco-conscious shopping is increasingly the norm (Opeepl, 2024).
c) Waste Disposal: Gen Z is increasingly aware of electronic waste (e-waste) issues. Globally, 62 million metric tons of e-waste were generated in 2022, with only 22.3% being recycled, a situation exacerbated by fast technology turnover. In countries like New Zealand and the United States, disposal practices are less sustainable, with e-waste often ending up in landfills (UN, 2024).
d) Fast Fashion Impact: Gen Z is caught in a contradiction: while they advocate for sustainability, they are also frequent consumers of fast fashion. Despite the rising demand for second-hand clothes, studies indicate that 60% of Gen Z still purchase new items from fast fashion retailers, contributing significantly to textile waste (Grabon, 2024).
e) Second-Hand Shopping: Gen Z's approach to product disposal, particularly in the context of clothing, has seen a rise in the popularity of second-hand shopping. 35% of Gen Z actively purchases second-hand clothing, and 62% claim to recycle or donate used clothes rather than throwing them away (Fashion Coached, 2024).

3.3. Gen Z's Variations in Environmental Consciousness and Sustainable Consumption

Recycling habits vary significantly across regions. In **Indonesia**, **56%** of Gen Z engages in behaviours aimed at reducing waste, such as carrying reusable water bottles and using recycled materials. On the other hand, in the **United Kingdom**, although environmental awareness is high, recycling rates are much lower due to issues related to convenience and infrastructure (Statista, 2024) (The Times, 2022).

Asia-Pacific Region: A significant 88% of Gen Z respondents in the Asia-Pacific region consider sustainable production and packaging important when purchasing products. This indicates a strong preference for eco-friendly products among young consumers in this region. Statista

China and India: Surveys suggest that Gen Z consumers in China and India are more environmentally conscious than their peers in developed economies. They are more likely to buy sustainable products and are more distrustful of corporate sustainability claims. Al Jazeera

3.3. Variations in Product Usage Patterns

Mobile E-Commerce: In March 2023, Mexico had the highest proportion of Gen Z mobile e-commerce shoppers, with 72.2% of mobile shoppers aged 18 to 24. In contrast, the United Kingdom had only 18% in the same age group. This highlights the varying degrees of mobile commerce adoption among Gen Z across countries. Statista

Social Media Influence: In the first quarter of 2023, Australia and Portugal had the highest share of Gen Z consumers who followed and purchased from brands on social media accounts, each at 71%. This indicates the significant role of social media in influencing Gen Z's purchasing decisions in these countries. Statista

3.4. Variations in Product Disposal and Recycling Behaviours

Indonesia: A survey conducted in December 2024 found that 56% of Gen Z respondents in Indonesia brought their own water bottles to help reduce waste, and 31% used recycled materials. This reflects a proactive approach to waste reduction among young consumers in Indonesia. Statista

United Kingdom: Despite being eco-conscious, Gen Z in the UK is reportedly the least likely to recycle. A 2022 poll indicated that 92% of Gen Z individuals admitted to discarding items due to the inconvenience of cleaning them, highlighting challenges in recycling behaviours.

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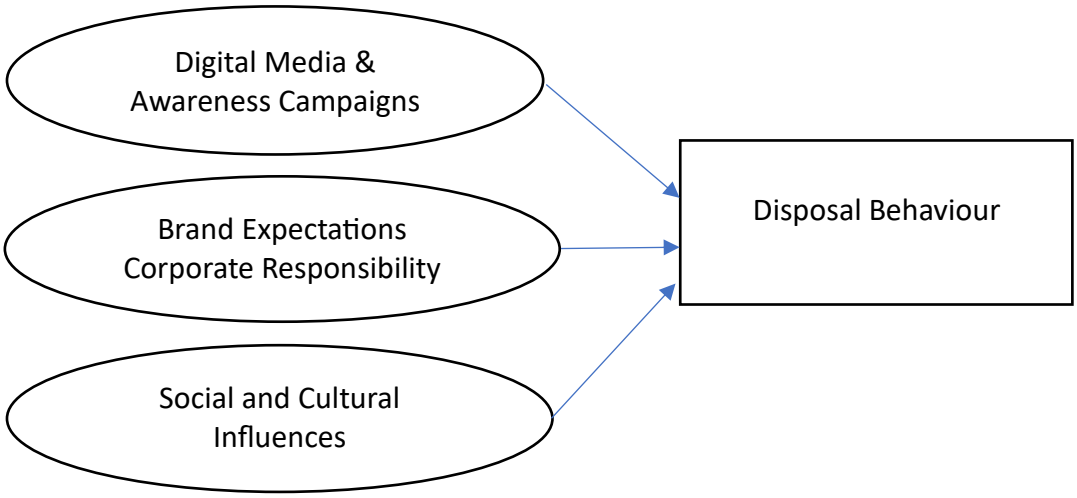
New Zealand: New Zealand generates approximately 99,000 tonnes of electronic waste annually, with a significant portion disposed of in landfills. The country has among the lowest documented recycling rates for e-waste, indicating a need for improved disposal practices. Wikipedia

Country	Environmental Awareness	Sustainable Consumption	Recycling Behaviour
Asia-Pacific	High	High	Varies by country
China & India	High	High	Varies
Mexico	Moderate	Moderate	Moderate
Australia & Portugal	High	High	High
Indonesia	High	High	High
United Kingdom	High	High	Low
New Zealand	Moderate	Moderate	Low

These insights underscore the diverse approaches to product usage and disposal among Gen Z across different countries. While there is a global trend towards sustainability, local factors such as economic conditions, infrastructure, and cultural values play a significant role in shaping Gen Z's behaviours.

4. KEY DRIVERS OF GEN Z'S DISPOSAL BEHAVIOUR



i. Digital Media and Awareness Campaigns

Social media plays a critical role in shaping Gen Z's attitudes toward product disposal. Awareness campaigns related to the environmental impact of poor disposal habits, such as those targeting plastic waste, have influenced young consumers' behaviour significantly. Platforms like YouTube and Instagram are often used to spread awareness of issues like landfill overflow, plastic pollution in oceans, and the importance of recycling (Soni, 2020).

ii. Brand Expectations and Corporate Responsibility

Gen Z expects companies to be responsible not only in terms of product creation but also in terms of product disposal. This generation seeks brands that are transparent about their environmental efforts, whether it involves sustainable sourcing, eco-friendly packaging, or take-back programs for used products. Many Gen Z consumers are more likely to purchase from brands that provide recycling options or incentivize the return of products for recycling or repurposing (Rao, 2021).

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iii. Social and Cultural Influences

The cultural shift toward sustainability is further supported by influencers and celebrities who promote eco-conscious living. As these figures play a central role in shaping Gen Z's consumption patterns, their endorsement of sustainable disposal practices is an important factor in driving behaviour change. This trend is amplified by the rise of local, homegrown sustainability movements that resonate with Gen Z's desire for meaningful, impactful consumption (Kapoor & Singh, 2021).

5. IMPLICATIONS FOR BRANDS AND POLICYMAKERS

a) Business Strategies for Product Disposal

Brands can capitalize on Gen Z's concern for sustainability by implementing take-back schemes, providing clear recycling instructions, and using sustainable materials in packaging. Marketing campaigns that promote the benefits of recycling or upcycling, particularly on platforms like Instagram or TikTok, can engage this consumer segment effectively. Companies in fashion, electronics, and food industries can highlight their sustainability credentials and encourage customers to dispose of products responsibly.

b) Government and Policy Initiatives

Policymakers can support the shift towards responsible disposal by strengthening recycling infrastructure and promoting circular economy initiatives. Public awareness campaigns and educational programs targeting younger generations can help reinforce the importance of proper disposal practices and further integrate sustainability into Gen Z's daily lives. Tax incentives for brands that promote recycling and sustainable practices could also help drive change (Reddy, 2020).

6. DISCUSSIONS

Indian Gen Z consumers are emerging as a powerful force in shaping sustainable consumption behaviours, including product disposal. Their preference for recycling, upcycling, second-hand markets, and avoiding single-use plastics reflects a broader shift toward environmental consciousness. Brands that align with these values and adopt sustainable product disposal practices are likely to gain favour with this influential group. As digital natives, Gen Z is also highly influenced by social media, which serves as both a platform for awareness and a driver of sustainable behaviour. With the right incentives and policies, India's Gen Z can play a significant role in promoting a circular economy and responsible product disposal.

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