

The Experience of Sustainable Consumption in Purchase to Practice of Household Appliance: A Descriptive Phenomenological Study

Rasmita Panda¹, Gopal Krishna Sharma²

¹ Research Scholar, Faculty of Management Studies & Commerce, PES University, Bengaluru, Karnataka, India; rasmatapanda@pesu.pes.edu, ORCID ID: <https://orcid.org/0009-0008-5775-1127>

² Professor, Faculty of Management Studies & Commerce, PES University, Bengaluru, Karnataka, India; gopalkrishnas@pes.edu, ORCID ID: <https://orcid.org/0000-0001-9964-7784>

ARTICLE INFO

ABSTRACT

Received: 30 Dec 2024

Revised: 19 Feb 2025

Accepted: 27 Feb 2025

This study investigates the lived experiences of the consumer on the sustainable use of household appliances. Qualitative research based on phenomenology tries to explore consumer experiences and behaviour related to the use of household appliances. Data were collected using a focus group discussion (FGD) and in-depth interviews to obtain consumer experiences in detail. A content analysis was carried out with first-order and second-order coding. Six sub-variables were extracted: environmental consciousness, economic consciousness, social consciousness, emotion, experience, and reference group and grouped under two latent variables: rational response and experiential response. Findings provide a valuable theoretical framework for understanding the consumer's lived experiences on household appliance use. The research contributes to a better understanding of sustainable consumption practices. It provides information to policymakers and practitioners on how to implement environmentally responsible behaviour in household appliance usage.

Keywords: Sustainable Consumption, Qualitative Study, Content Analysis, Sustainability, Household Appliance

1. INTRODUCTION

Sustainable consumption has recently emerged as an important area of focus with the growing environmental issues and urgency to mitigate resource depletion. The world is facing the challenges of climate change, energy crises, and environmental degradation (J. Wang et al., 2021) due to anthropogenic behaviour. Rapid urbanization, economic growth, and changing lifestyles are driving the adoption of household appliances in India, but increasing consumption impacts the environment. India's energy consumption increased significantly between 2012-13 and 2021-22, from 8,24,301 GWh to 12,96,300 GWh. The domestic sector exhibited the highest compound annual growth rate (CAGR) at 6.87% during this period (Ministry of Statistics and Program Implementation, 2023). E-waste production in India increased by 43% within three years underscoring its swift emergence as a major toxic waste category (Borthakur, 2023). With an anticipated 2 million metric tons of electronic waste by 2025 (Borthakur & Sinha, 2013). This matter needs immediate attention, especially for India as a rapidly developing and densely populated country. This study intends to explain, through insights from the lived experiences of Indian consumers regarding household appliance consumption, their behaviour and views toward consumption and sustainability.

2. LITERATURE REVIEW

Research on the ownership of household appliances and sustainability has explored many dimensions across various regions. Krych & Pettersen (2025) investigate the sales and ownership of large appliances which contribute to sustainable consumption in Norwegian. Class, Income, Education and lifestyle including social groups impact the possession of household appliances in Denmark and suggest future research on post-purchase behaviour like usage patterns, maintenance, and replacement of household appliances (Jacobsen, 2019). Consumer decision-making processes related to the purchase of energy-efficient appliances were also extensively discussed, such as the energy

efficiency household appliance choice influenced by the energy efficiency label which is guiding green consumption in China (B. Wang et al., 2021). The environmental concerns of young consumers in South Africa positively influence their intention to purchase energy-efficient household products (Fatoki, 2020). Guan & Lin (2024) in their research indicate that while energy savings are significant for consumers when acquiring energy-efficient appliances, the influence of perceived energy savings on the purchasing decision is less pronounced. Low-income and large-size households often reflect a traditional lifestyle pattern and make economic decisions regarding household appliance purchases (Lei et al., 2022). However, these studies provide useful insights into the possession, choice, and adoption of energy-efficient products. For energy-efficient products, we have to pay a premium. The previous studies highlight that people are more conscious about price not about energy saving (Guan & Lin, 2024).

There is a significant knowledge gap still exists, studies have not explored the usage and disposal behaviour of appliances to reduce environmental impact. The use phase is critical to sustainability as it determines actual energy use and long-term environmental degradation. This research addressed the gap and looked into consumer behaviours and efficiency practices during the appliance use and disposal phase to develop more holistic sustainable consumption strategies.

3. METHODOLOGY

This study adopts the phenomenological research method, which is important to understand the consumer's lived experience with sustainable consumption (Creswell, 2019). To explore the meaning of sustainable consumption in developing countries like India, we conducted one focus group discussion and in-depth interviews with Indian consumers. This qualitative study explores deeper insights into the underlying behavioural dynamic. In January 2024, a series of qualitative research activities were conducted to explore perceptions related to sustainable consumption. The collection of data was based on in-depth interviews and focus group discussions with Indian households followed by content analysis to explore the in-depth experience and perception of participants. It starts with observation and interviews lead to a theory development, based on collected data from interviews and discussions. A convenient sampling process was adapted for sample selection. Seven in-depth interviews and one focus group discussion were conducted among diverse age groups of 19 to 56 and educational backgrounds from 10th grade to post-graduate levels. Their professional backgrounds included housewives, employees, and businesspersons, ensuring a heterogeneous mix that allowed for a rich understanding of individual consumer perspectives on sustainability.

4. ANALYSIS AND RESULTS

The data analysis is in the process of content analysis and finding out different factors. Content analysis is the method of systematically analysing and interpreting data that are in the form of text, pictures, or audio by coding the data into categories to observed patterns or themes (Krippendorff, 2022; Shelley & Krippendorff, 1984). In the first order, texts are categorised into sub-factors: environmental consciousness, economic consciousness, social consciousness, emotion, experience, and reference group influence. Followed by second-order coding where the sub-factors are grouped into latent variables: rational system response and cognitive system response (Figure 1).

4.1. Environmental consciousness:

Environmental consciousness refers to an individual's awareness of environmental issues and actions taken to reduce negative environmental impacts. Mataracı & Kurtuluş (2020) define environmental consciousness as rational thinking about various eco-friendly behaviours. Many participants said that eco-friendly behaviour offers long-term benefits. Environmentally conscious consumers carefully consider their consumption to minimise the negative impact on the environment (Ishaq, Baloch, and Raza et al., 2025). They use the rational system to evaluate the implication of their behaviour to their advantage along with betterment for future generations and the environment. This reflects an analytical approach to making consumption decisions.

4.2. Economic consciousness:

Economic consciousness is a conscious habit of obtaining and employing economic goods and services to attain long-term goals (Lastovicka, Bettencourt, Hughner, & Kuntze, 1999; Lawson, Gleim, Perren, & Hwang, 2016). Participants

focused on saving money when adopting sustainable behaviour. “When I want to buy something, I will see the price and the convenience what I will get from its”. These responses reflect that logical thinking is related to the financial benefit of sustainable behaviour. The decision-making is influenced by economic benefits like reducing electricity bills, purchasing durable appliances, energy-efficient products etc.

4.3. Social consciousness:

Socially conscious consumers participate in community activities and show their values through environmentally friendly and socially responsible behaviours (Fu & Kim, 2019). Participants also explored the social benefits of sustainable consumption like helping future generations, local farmers and small businesses. One participant stated, “I tried to buy from local people because I know them and they will not cheat on me. My surroundings will also get some money from me.” This statement shows the combination of social responsibility and rational decision-making.

4.4. Emotion:

Emotional satisfaction is a key motivator to adopt sustainable behaviour (Ladhari & Tchetgna, 2017; Martiskainen & Sovacool, 2021). Several people expressed positive emotions of pride satisfaction and convenience after engaging in the action of buying organic foods or saving energy. “It feels good when we see the change in environment”. The experiential system motivates sustainable behaviour by creating positive emotions contributing to the environment society or personal health. Many people find it naturally satisfying to buy ecological products or save energy.

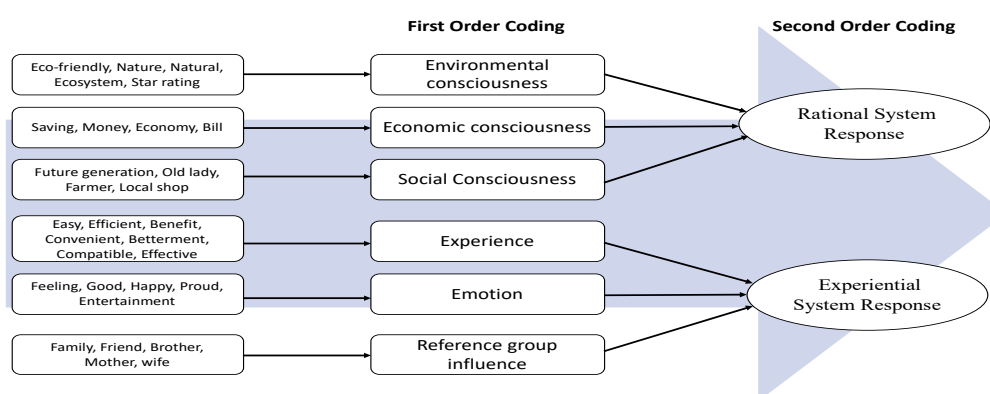
4.5. Experience:

Previous experiences significantly shaped the participants' sustainable consumption behaviour. Many participants cited practical experiences that inspired them to adopt energy-saving or eco-friendly practices. For example, “Yes I know from my experience that if I switch off the lights then I will get less bill” highlights that individuals use their learning behaviour to adopt sustainable actions.

4.6. Reference Group

The family has a significant role in the individual decision-making process. Many participants stated that their consumption habits were influenced by family members' beliefs, emotions and practises. “my wife will say it is good means I will buy it” and “I will feel very happy to buy something when my son will feel very happy”, the statement shows that individuals rely on the reference group as a behaviour guidance.

Figure 1: Second Order Coding



5. DISCUSSION

The focus group discussion and in-depth interviews explore the factors influencing sustainable consumption through the lens of cognitive experiential self-theory. To understand participants' information processing through both rational and experiential systems, the following themes emerged from the data, that highlighted the dual role of experiential and analytical thinking towards sustainable consumption behaviour. This research identified variable that affect the decision-making process. Conceptual definitions and operationalisation of those variables are presented in Table 1.

Table 1: Operational Definitions of Variables

Variables	Operational definition
Environmental Consciousness	Environmental consciousness involves choosing actions that benefit people and the environment, promoting the environment, and conserving resources.
Social Consciousness	Social consciousness is the satisfaction and awareness gained from carefully and effectively addressing complex societal problems, driven by social responsibility and societal improvement.
Economical Consciousness	Economic consciousness involves using analytical reasoning and logical thinking to make financial decisions, justify expenses, and solve financial problems.
Emotional	Emotion is the tendency to rely on feelings, intuition, and sentiment as guides for actions and decision-making, finding pleasure in making important choices based on these internal impressions.
Experience	Experience is the practice of relying on past experiences, intuition, and gut feelings to guide important decisions and actions, often leading to successful outcomes.
Reference group	A reference group is the collective influence of friends, neighbours, relatives, co-workers, and respected individuals, as well as authoritative symbols and family preferences, on one's actions and product choices.

6. CONCLUSION

The study identifies different factors driving sustainable consumption behaviour in the context of household appliance usage in developing countries like India. The use of a phenomenological approach reveals from the lived experience that usage behaviour is influenced by information processing. Consciousness enhances information processing and motivates the consumer to make informed purchasing decisions and usage of household appliances. Manufacturers and retailers should emphasize product labelling for information about the benefits and impacts of the product's lifecycle assessment (LCA). In the Indian context, these approaches can provide a more efficient way to environmental goals when incorporated into practice and policy. This study specifically focuses on Indian consumers, which may not account for cultural and regional variations within the country or in other developing economies. Lastly, the reliance on lived experiences might introduce subjective biases that could influence the interpretation of data. The limitations could be addressed by future research, such as including quantitative methodologies, exploring cross-cultural comparisons, and triangulating data from various sources for a more complete understanding of sustainable consumption behaviour.

REFERENCES

- [1] Borthakur, A. (2023). Design, adoption and implementation of electronic waste policies in India. *Environmental Science and Pollution Research*, 30(4). <https://doi.org/10.1007/s11356-022-18836-5>
- [2] Borthakur, A., & Sinha, K. (2013). Electronic waste management in India: A stakeholder's perspective. *Electronic Green Journal*, 1(36). <https://doi.org/10.5070/g313618041>
- [3] Creswell, J. W. (2019). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). *English Language Teaching*, 12(5).
- [4] Fatoki, O. (2020). Factors influencing the purchase of energy-efficient appliances by young consumers in South Africa. *Foundations of Management*, 12(1). <https://doi.org/10.2478/fman-2020-0012>
- [5] Fu, W., & Kim, Y. K. (2019). Eco-Fashion Consumption: Cognitive-Experiential Self-Theory. *Family and Consumer Sciences Research Journal*, 47(3), 220–236. <https://doi.org/10.1111/fcsr.12296>
- [6] Guan, C., & Lin, B. (2024). Do consumers concern about energy saving in purchasing energy-efficient home appliances? Evidence from online e-commerce review. *Energy Policy*, 193, 114277. <https://doi.org/10.1016/J.ENPOL.2024.114277>

- [7] Jacobsen, M. H. (2019). Social bases of material consumption: The relationship between social groups and possession of household appliances in Denmark. *Journal of Consumer Culture*, 19(1). <https://doi.org/10.1177/1469540516684190>
- [8] Krippendorff, K. (2022). Content Analysis: An Introduction to Its Methodology. In *Content Analysis: An Introduction to Its Methodology*. <https://doi.org/10.4135/9781071878781>
- [9] Ladhari, R., & Tchetgna, N. M. (2017). Values, socially conscious behaviour and consumption emotions as predictors of Canadians' intent to buy fair trade products. *International Journal of Consumer Studies*, 41(6). <https://doi.org/10.1111/ijcs.12382>
- [10] Lastovicka, J. L., Bettencourt, L. A., Hughner, R. S., & Kuntze, R. J. (1999). Lifestyle of the tight and frugal: Theory and measurement. *Journal of Consumer Research*, 26(1). <https://doi.org/10.1086/209552>
- [11] Lawson, S. J., Gleim, M. R., Perren, R., & Hwang, J. (2016). Freedom from ownership: An exploration of access-based consumption. *Journal of Business Research*, 69(8). <https://doi.org/10.1016/j.jbusres.2016.04.021>
- [12] Lei, M., Cai, W., Liu, W., & Wang, C. (2022). The heterogeneity in energy consumption patterns and home appliance purchasing preferences across urban households in China. *Energy*, 253. <https://doi.org/10.1016/j.energy.2022.124079>
- [13] Martiskainen, M., & Sovacool, B. K. (2021). Mixed feelings: A review and research agenda for emotions in sustainability transitions. *Environmental Innovation and Societal Transitions*, 40. <https://doi.org/10.1016/j.eist.2021.10.023>
- [14] Mataracı, P., & Kurtuluş, S. (2020). Sustainable marketing: The effects of environmental consciousness, lifestyle and involvement degree on environmentally friendly purchasing behavior. *Journal of Global Scholars of Marketing Science: Bridging Asia and the World*, 30(3). <https://doi.org/10.1080/21639159.2020.1766988>
- [15] Shelley, M., & Krippendorff, K. (1984). Content Analysis: An Introduction to its Methodology. *Journal of the American Statistical Association*, 79(385). <https://doi.org/10.2307/2288384>
- [16] Wang, B., Deng, N., Liu, X., Sun, Q., & Wang, Z. (2021). Effect of energy efficiency labels on household appliance choice in China: Sustainable consumption or irrational intertemporal choice? *Resources, Conservation and Recycling*, 169, 105458. <https://doi.org/10.1016/J.RESCONREC.2021.105458>
- [17] Wang, J., Yang, X., Bailey, A., & Wang, J. (2021). Positive spillover of consumers' sustainable behaviors: The mediating role of self-determination need satisfaction. *Journal of Cleaner Production*, 317, 128436. <https://doi.org/10.1016/J.JCLEPRO.2021.128436>