

Beyond Awareness: Understanding the Behavioural Mechanisms Driving Sustainable Consumer Decisions

Elisabetta Savelli 

Department of Economics, Society, Politics, School of Economics, University of Urbino Carlo Bo, Via Saffi 42, 61029 Urbino, Italy; elisabetta.savelli@uniurb.it

1. From Awareness to Sustainable Action

For decades, research on sustainable consumer behaviour has largely focused on explaining why individuals who express strong environmental or social concerns often fail to translate these attitudes into consistent behaviours. This discrepancy, commonly referred to as the attitude–behaviour gap [1–3], has become one of the most widely discussed issues within consumer research and sustainability studies.

The evolution of the literature reflects this increasing awareness of behavioural complexity. Early research primarily viewed sustainable decisions as the consequence of rational information processing, assuming that increasing consumers’ environmental knowledge would naturally encourage more responsible choices. Subsequent theoretical developments, including the Theory of Planned Behaviour [4], the Value–Belief–Norm Theory [5], and Self-Determination Theory [6], considerably enriched this perspective by incorporating attitudes, subjective norms, perceived behavioural control, personal values, and intrinsic motivations into the explanation of sustainable behaviours.

More recently, however, sustainability research has moved beyond these linear models. Consumer decisions are increasingly recognised as dynamic processes influenced by the continuous interaction between cognitive evaluations, emotional responses, social relationships, technological infrastructure, institutional environments, and market conditions [7,8]. Sustainable consumption is therefore no longer interpreted as an outcome of individual preferences but rather as the product of multiple interconnected mechanisms operating simultaneously.

The thirteen contributions included in this Special Issue, “Consumer Behaviour and Sustainable Decision-Making: Bridging the Gap Between Awareness and Action”, clearly reflect this evolution. Despite addressing highly heterogeneous topics—including sustainable food consumption, eco-packaging, healthy lifestyles, sustainable tourism, digital behaviour, renewable energy, electric and hydrogen mobility, deconsumption, insurance services, and environmental advocacy—they converge towards a remarkably consistent conclusion. Awareness consistently emerges as an essential starting point, yet behavioural outcomes depend on a much broader constellation of psychological, relational, and contextual factors.

This convergence represents, in our view, the principal contribution of the Special Issue. Rather than simply providing additional empirical evidence concerning specific sustainable behaviours, the collected studies suggest a broader interpretation of sustainable consumer decision-making. They indicate that the attitude–behaviour gap should not be viewed as the consequence of a single missing variable but rather as the manifestation of a multidimensional decision-making process in which several behavioural mechanisms interact before sustainable action ultimately occurs.



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2. An Integrative Framework for Sustainable Consumer Decision-Making

Building upon this collective evidence, we propose an integrative framework of sustainable consumer decision-making that synthesises the principal insights emerging across the Special Issue. The framework is not intended to replace existing behavioural theories nor to constitute a new formal model. Instead, it serves as an interpretative lens capable of integrating findings generated across different disciplinary perspectives, empirical contexts, and methodological approaches.

Specifically, the framework suggests that sustainable consumer decisions emerge through the interaction of five complementary dimensions.

First, sustainable decisions require cognitive foundations, including environmental awareness, sustainability knowledge, information acquisition, and problem recognition. These elements represent the cognitive basis upon which individuals evaluate available alternatives. Without sufficient knowledge, consumers are unlikely to recognise either the environmental consequences of their behaviours or the potential benefits associated with more sustainable choices [9].

Studies investigating sustainable food consumption [Contribution 1], renewable energy adoption [Contribution 2], eco-friendly packaging [Contribution 3], and alternative mobility [Contribution 4] consistently show that consumers displaying higher levels of environmental awareness also report stronger intentions to adopt sustainable products and services. Similarly, the systematic review on life cycle assessment in this volume demonstrates that transparent environmental information represents an increasingly important tool for reducing information asymmetries and supporting more informed purchasing decisions [Contribution 5].

However, an equally important conclusion emerges across these studies: information alone rarely guarantees behavioural change. Consumers frequently possess adequate environmental knowledge while continuing to adopt unsustainable behaviours because cognitive awareness interacts with additional mechanisms that either reinforce or weaken behavioural implementation. This finding represents one of the strongest common messages emerging from the Special Issue and confirms the existing literature arguing that information campaigns, although necessary, are rarely sufficient to generate long-term behavioural transformations [2,10].

Moving beyond purely cognitive explanations, the second dimension of the framework highlights the central role of internal behavioural mechanisms, including intrinsic and extrinsic motivations, emotions, self-efficacy, trust, perceived responsibility, personal values, satisfaction, and perceived effectiveness. Rather than acting independently, these psychological variables influence the extent to which consumers believe that their individual actions are meaningful, feasible, and capable of producing desirable outcomes.

Different contributions illustrate this process from complementary perspectives. Research on healthy food consumption demonstrates that knowledge becomes behaviour only when accompanied by positive attitudes, satisfaction, and confidence in one's capability to make healthier choices [Contribution 1]. Similarly, studies investigating deconsumption behaviours emphasise that reducing consumption requires considerably more than environmental concern; consumers must also perceive reduced consumption as personally meaningful, socially acceptable, and compatible with their identities [Contribution 6]. The importance of self-efficacy appears particularly noteworthy. Across different contexts, consumers are more likely to engage in sustainable behaviours when they believe that their individual actions can effectively contribute to broader environmental or social objectives. Self-efficacy therefore acts as a psychological bridge connecting awareness with behavioural implementation, reducing the perceived distance between individual decisions

and collective sustainability outcomes [11]. This mechanism complements previous theoretical perspectives by highlighting consumers not merely as informed decision-makers but as active agents capable of producing meaningful change. Equally relevant is the role of trust, which emerges repeatedly throughout the Special Issue. Trust in institutions, certifications, technologies, information sources, and organisations reduces uncertainty and facilitates behavioural adoption, particularly when consumers face complex decisions involving innovation or long-term environmental benefits [12]. This finding is particularly evident in studies investigating renewable energy, insurance services, and alternative mobility technologies, where uncertainty frequently represents a stronger barrier than lack of awareness itself [Contributions 2, 4, 7].

Beyond cognitive and psychological determinants, the contributions consistently demonstrate that sustainable consumer behaviour develops within a broader social and relational environment. Consumer behaviour is continuously influenced by social norms, interpersonal interactions, community participation, place attachment, collective identities, advocacy processes, and institutional trust. Sustainability therefore emerges not merely as an individual cognitive process but as a socially constructed behaviour reinforced, or constrained, by relationships with other individuals, organisations, and communities [13]. Research on sustainable tourism, for example, demonstrates that emotional attachment to destinations, community engagement, and place identity significantly influence tourists' willingness to support environmentally responsible practices [Contribution 8]. Similarly, studies addressing healthy lifestyles and environmental advocacy reveal that behavioural change often extends beyond individual consumption to include broader forms of civic participation, recommendation, and peer influence [Contribution 9]. The growing importance of digital environments further strengthens this perspective. Digital platforms, online communities, and emerging technologies increasingly mediate interactions between consumers and sustainability-related information. The contribution addressing digital hoarding, for instance, expands the discussion beyond traditional environmental consumption by illustrating how digital behaviours themselves may generate significant sustainability implications [Contribution 10]. This broadens the conceptual boundaries of sustainable consumer behaviour, by considering sustainability as a relational phenomenon in which behavioural change is simultaneously individual and collective.

While internal motivations and social dynamics play crucial roles, the Special Issue also demonstrates that sustainable consumer behaviour depends fundamentally upon external enabling conditions. Market structures, technological innovations, digital infrastructures, public policies, product availability, certification schemes, information transparency, and organisational responsibility create opportunities or barriers that determine whether sustainable intentions can be effectively translated into action.

This perspective emerges particularly clearly in studies investigating electric vehicles, hydrogen technologies, renewable energy adoption, and eco-packaging. Across these contributions, consumers generally express positive attitudes towards sustainable innovations; however, behavioural adoption remains strongly conditioned by factors such as infrastructure availability, affordability, technological maturity, information transparency, policy incentives, and perceived reliability [Contributions 2, 3, 11].

These findings suggest that responsibility for sustainability cannot be attributed exclusively to consumers. Rather, organisations, governments, technology providers, and policymakers collectively shape the environments within which sustainable decisions become either feasible or impractical. Individual willingness therefore represents only one component of a broader socio-technical system requiring coordinated institutional support.

Another recurring theme concerns the growing importance of transparency. Whether communicated through environmental labels, certification schemes, corporate sustainabil-

ity disclosures, or life-cycle information, transparent communication reduces perceived uncertainty and strengthens consumer confidence. Nevertheless, transparency appears most effective when integrated with broader institutional credibility and trustworthy communication strategies rather than functioning merely as an informational attribute.

Collectively, these findings indicate that sustainable decision-making increasingly reflects the quality of interactions between consumers and their surrounding institutional environments. Future sustainability policies should therefore complement behavioural interventions with structural initiatives capable of reducing contextual barriers and enabling responsible choices.

The final dimension of the framework concerns the behavioural manifestations of sustainability. Perhaps the most innovative contribution emerging from the Special Issue lies precisely in the remarkable diversity of behaviours investigated across the thirteen contributions. Sustainable consumer behaviour is no longer limited to purchasing environmentally friendly products. Instead, it encompasses a wide spectrum of everyday decisions involving nutrition, health, mobility, tourism, digital practices, energy consumption, financial services, product disposal, deconsumption, and civic engagement. This diversification has important theoretical implications. It suggests that sustainability should be understood less as a category of products than as a behavioural orientation capable of influencing multiple domains of everyday life. Responsible purchasing represents only one possible manifestation of a broader sustainable mindset that increasingly extends across interconnected consumption practices.

Taken together, these five dimensions challenge the implicit assumption that behavioural change follows a simple sequence from awareness to action. Instead, sustainable consumer decision-making appears to evolve through a dynamic interaction among cognitive, psychological, social, and contextual mechanisms that mutually reinforce, or occasionally inhibit, one another. Awareness initiates the process, but the actual behavioural outcome depends on the simultaneous presence of favourable internal motivations, supportive social environments, enabling contextual conditions, and opportunities for behavioural enactment. This interpretation is consistent with the findings of Caba et al. [Contribution 12], who demonstrate that sustainability awareness influences sustainable consumption behaviour indirectly through the serial mediating roles of attitudes and perceived global social responsibility, highlighting the importance of interconnected behavioural mechanisms rather than direct causal relationships. The neurocognitive perspective proposed by Petrescu and colleagues [Contribution 13] particularly supports this interpretation by demonstrating that sustainable behaviour results from the continuous interaction between affective and deliberative processes rather than from purely rational decision-making.

The integrative framework we propose here highlights several promising directions for future research.

3. Future Research Directions

A first priority concerns the need to move beyond behavioural intentions towards the investigation of actual behavioural implementation. Although considerable progress has been achieved in explaining pro-environmental attitudes and intentions, understanding how these intentions become stable behavioural patterns remains one of the major unresolved challenges within sustainability research. Longitudinal studies, field experiments, behavioural tracking, and digital observation methods could significantly improve our understanding of how sustainable habits emerge, evolve, and persist over time. Such approaches would also help overcome the limitations associated with cross-sectional self-reported measures, which still dominate the current literature.

Second, future research should integrate cognitive, emotional, and contextual determinants within unified explanatory models. The evidence emerging from this Special Issue consistently demonstrates that awareness alone cannot explain sustainable behaviour. Psychological variables such as self-efficacy, trust, and satisfaction interact continuously with contextual conditions, including technological infrastructures, institutional credibility, and policy support. Rather than investigating these variables separately, future theoretical models should explicitly examine their reciprocal relationships, recognising that sustainable decisions emerge through dynamic interactions among multiple behavioural dimensions.

Third, the rapid digital transformation of contemporary societies calls for a broader conceptualisation of sustainable consumer behaviour. Digital technologies increasingly mediate information acquisition, purchasing decisions, social interactions, mobility choices, financial services, and lifestyle management. At the same time, emerging technologies, including artificial intelligence, recommendation algorithms, conversational agents, and personalised digital assistants, are progressively assuming a more active role in influencing consumer choices. Future research should therefore investigate how these technologies influence sustainable decision-making, exploring not only their potential to facilitate environmentally responsible behaviours but also the ethical challenges associated with transparency, trust, algorithmic accountability, and consumer autonomy.

A fourth research priority concerns the need to better understand the interdependence among different sustainable behaviours. The studies included in this Special Issue clearly demonstrate that sustainability extends far beyond green purchasing, encompassing healthy lifestyles, deconsumption, tourism, mobility, and other contexts. However, relatively little is known about how these behaviours influence one another. Future research should investigate whether behavioural spillovers occur across consumption domains, examining, for example, whether adopting one sustainable behaviour increases, or reduces, the likelihood of engaging in other responsible practices. Understanding these behavioural interconnections would contribute to a more systemic interpretation of sustainable lifestyles and support the development of more effective intervention strategies.

Another important direction emerging from the Special Issue concerns the need to expand the geographical and cultural diversity of empirical investigations. Sustainable consumption is strongly influenced by institutional environments, cultural norms, economic development, and social values. Comparative cross-country studies could therefore provide valuable insights into the contextual conditions that facilitate or hinder sustainable decision-making across different societies. Such research would also contribute to identifying which behavioural mechanisms display universal characteristics and which remain context-dependent.

Overall, the framework proposed in this editorial suggests that future consumer research should progressively shift its focus from identifying isolated behavioural determinants towards understanding the complex interactions through which cognitive, psychological, relational, and contextual factors jointly shape sustainable decisions. This transition from linear explanatory models to multidimensional behavioural systems may represent one of the most promising directions for advancing both theory and practice in sustainable consumer research.

4. Concluding Remarks

Collectively, the contributions of this Special Issue offer several advances to the literature. First, they replace linear awareness–intention–behaviour assumptions with multilevel explanations incorporating cognitive, emotional, moral, social, and structural mechanisms. Second, they demonstrate the value of combining established theoretical perspectives (including the Theory of Planned Behaviour, Self-Determination Theory, the Motivation–

Opportunity–Ability framework, dual-process theory, the cognitive–affective–conative framework, Value–Belief–Norm theory, technology acceptance models, Social Practice Theory, Behavioural Spillover Theory, and the Theory of Consumption Values). Third, they extend sustainable consumption research beyond traditional green product purchasing to include deconsumption, digital accumulation, destination behaviour, advocacy, insurance, and the adoption of complex technologies. Fourth, they provide evidence from several emerging and transitional markets, helping to address the geographical concentration of prior consumer sustainability research in Western contexts.

The methodological diversity of this Special Issue is another strength, as the studies employ structural equation modelling, serial and moderated mediation, importance–performance analysis, contingent valuation, discrete choice modelling, life cycle assessment, literature reviews, and adversarial interpretive structural modelling. Most empirical contributions rely on cross-sectional surveys and self-reported intentions, while relatively few measure observed behaviour over time. As mentioned above, future studies should combine survey data with purchasing records, experiments, field interventions, digital trace data, or longitudinal observations to establish whether the mechanisms identified in this volume produce persistent behavioural change rather than temporary attitudinal effects.

The contributions to this Special Issue ultimately demonstrate that bridging the gap between awareness and action requires moving beyond the question of whether consumers care about sustainability. A more productive question is under which psychological, social, economic, technological, and institutional conditions sustainability becomes actionable. By illuminating these relationships across diverse consumption contexts, this Special Issue contributes to a more comprehensive behavioural foundation for sustainability research and provides actionable insights for the design of markets, communications, experiences, infrastructures, and policies capable of converting sustainable awareness into enduring individual and collective action.

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