

Decoding Green Consumerism: Trends, Theories, and Implications of Labelling and Sustainable Packaging in Food Retail

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This paper investigates the growing significance of green consumerism within the food retail sector, focusing on the roles of labeling and sustainable packaging in influencing consumer behavior. It aims to understand which aspects of packaging and labeling bring consumers closer to making sustainable choices. The research evaluates current scholarly work to identify trends, theories, and practical implications, thereby contributing to the advancement of sustainable practices in food retail and informing future research and policy development.

Previous studies highlight an increasing societal concern for environmental sustainability, with a specific emphasis on sustainable consumption as a critical factor in combating environmental degradation (Akhtar et al., 2020; Camilleri et al., 2023). In the food industry, retailers are implementing sustainability initiatives like eco-friendly packaging and labeling, which act as visual cues in food products, to reduce environmental impacts (Vadakkepatt et al., 2021). However, despite rising consumer awareness, a gap persists between the intention to purchase green products and actual purchasing behavior (Akehurst et al., 2012). Research lines have explored psychological drivers, consumer perceptions, and the effectiveness of labels and packaging design in influencing consumer decisions.

A systematic literature review was conducted, analyzing 272 peer-reviewed articles published between 1991 and 2024 sourced from Scopus and Web of Science databases. The selection criteria included relevance to green packaging and labeling practices in the food retail context, focusing on consumer behavior and marketing aspects. Content analysis was employed to extract information on publication trends, methodologies used, theoretical frameworks, variables investigated, and key findings. Additionally, bibliometric analysis using VOSviewer software was performed to visualize keyword co-occurrence and author collaboration networks, identifying clusters of research themes and prominent contributors.

With regards to the results the analysis revealed a significant increase in publications over recent years, indicating growing academic interest. The majority of studies (81.25%) employed quantitative methodologies, predominantly surveys and experiments. The review revealed that the Theory of Planned Behavior (Ajzen, 1991) was the most frequently used theoretical framework, often supplemented with

constructs like environmental concern and knowledge. Signaling Theory (Spence, 1973) and Cue Utilization Theory (Burnkrant, 1978) were also utilized to understand consumer responses to packaging and labeling cues.

From the analysis five primary thematic clusters emerged:

1. **Impact of Information and Labels on Consumer Behavior:** labels influence consumer trust and perceptions; however, overly complex labels can lead to fatigue and reduce effectiveness.
2. **Psychological and Emotional Drivers of Sustainable Consumption:** emotional appeals and value-based influences significantly affect purchase intentions for eco-friendly products.
3. **Consumer Awareness, Knowledge, and Education:** a lack of consumer awareness about environmental impacts necessitates educational initiatives to promote sustainable consumption.
4. **Societal and Cultural Influences:** cultural factors and social norms significantly shape sustainable consumer behavior, with evidence of both positive and negative spillover effects.
5. **Impact of Packaging Design, Material, and Functional Attributes:** sustainable packaging design and functional attributes like recyclability influence consumer perceptions and willingness to pay.

Further analyses were carried out on the final database of papers on VOSviewer through which six clusters of keywords were identified, therefore revealing interconnected research themes. Prominent keywords included "attitudes," "behavior," "food," "willingness-to-pay," and "eco-labels." Author collaboration networks highlighted key contributors and interdisciplinary collaborations.

In conclusion the study underscores the critical role of clear eco-labels, consumer education, and sustainable packaging design in influencing sustainable purchasing behavior in food retail. Retailers should simplify eco-label information to enhance consumer understanding and trust. Implementing in-store educational campaigns can address consumer knowledge gaps, fostering informed decision-making. Aligning sustainable packaging with functional attributes valued by consumers can significantly impact purchasing decisions. Marketing strategies leveraging emotional and value-based appeals may strengthen consumer commitment.

Lastly, addressing the identified gaps, future research should:

- explore the long-term impact of labeling and sustainable packaging on consumer behavior through longitudinal studies;
- investigate cultural differences to tailor sustainability strategies;
- examine potential negative spillover effects of pro-environmental behaviors;
- study the impact of emerging technologies, such as augmented reality and blockchain, on consumer engagement with sustainability initiatives;
- employ innovative methodologies, like neuromarketing techniques, to uncover subconscious consumer responses.

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