

Guest Editorial: Package Design: Overcoming Challenges for Brands

Packaging products (rather than marketing them unpackaged or loose) benefits both firms and consumers, making it a crucial marketing tool. In terms of consumer benefits, packaging is associated with convenience, aesthetic appeal, content preservation (e.g., Granato *et al.*, 2022), and safety (Schifferstein *et al.*, 2022). Benefits for firms include attracting attention to the brand (Clement *et al.*, 2013), communicating brand-related values (Kahn *et al.*, 2022), personality (Littel and Orth, 2013), healthiness (Bou-Mitri *et al.*, 2021), sensory qualities (Schifferstein *et al.*, 2022), and overall product quality (van Ooijen *et al.*, 2017). However, not all effects of packaging are positive. On the downside, packaging is often perceived as a source of waste, which negatively impacts the natural environment (Brennan *et al.*, 2021). Additionally, packaging has been criticized as a manipulative tool, such as misleading consumers by distorting content perception (Wilkins *et al.*, 2016) and concealing price increases (Aditya, 2001).

Product packages uniquely provide consumers with a multisensory experience (Krishna *et al.*, 2017; Velasco and Spence, 2019) that involves various sensory modes, typically including vision and haptics (e.g., Briand Decré and Cloonan, 2019; Littel and Orth, 2013), but potentially also encompassing olfaction (e.g., Krishna *et al.*, 2014) and even sound (Wang and Spence, 2019). Particularly in brick-and-mortar settings, packaged consumer goods serve as an effective means of persuading shoppers (Orth and Crouch, 2014). In digital environments (e.g., online shopping platforms like Amazon or virtual reality settings), a package's appeal is more constrained; nevertheless, the preeminence of the human sense of vision (over other sensory modalities) and cross-modal inferences (Spence, 2011) render visual package design a powerful means of communication in online contexts as well (Branca *et al.*, 2023).

A preliminary review of the literature indicates that between 2010 and 2024, 119,464 articles referencing packaging and consumer-related keywords (e.g., “buyer” or “customer”) were published in English-language academic journals (see Figure 1). Notably, the number of publications has steadily increased, nearly doubling between 2020 and 2024. Among these publications, 31,571 articles (26%) referred to “brand” or “branding”, reflecting a consistent upward trend—from 24% in 2010 to 28% in 2024. Presenting the state of research, these articles connected a wide array of elements, factors, and holistic impressions of package design with a similarly substantial range of consumer behavioral responses (Chandon, 2013; Cronin *et al.*, 2022; Deng and Kahn, 2009; Lunardo *et al.*, 2021; Raghubir and Greenleaf, 2006).

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As research progresses from describing associations to elucidating underlying mechanisms, the importance of causative factors grows (Hayes, 2018). Previous packaging research has primarily concentrated on establishing evidence of a relationship between package elements and consumer responses, specifically investigating whether this relationship is causal or merely an artifact. As research on the package-consumer response link develops and matures, the emphasis gradually transitions from merely demonstrating the existence of an effect to understanding the mechanism(s) through which that effect operates and establishing its boundary conditions or contingencies. Addressing questions of “how” (mechanism) and “when” (boundary conditions) package designs affect consumer responses leads to a deeper understanding of the phenomenon or process being studied, offering valuable insights for managers on how to apply this understanding productively.

However, managerial decisions regarding package design remain challenging, as a package’s design can evoke undesirable consumer responses. For instance, using package design to position a brand as sustainable can backfire (Felix *et al.*, 2022), if consumers

perceive discrepancies between claims and facts (Steenis *et al.*, 2023) or when responses vary substantially between more and less environmentally conscious consumers (Magnier and Schoormans, 2015). Furthermore, reducing the overall amount of packaging can lead to negative reactions, even though there is a general consensus that minimizing packaging waste is preferable (Monnot *et al.*, 2019). Overall, more insights are necessary on how package design impacts consumer and brand-related responses, especially regarding the interplay between the benefits sought by firms, consumers, and society at large.

In this special issue, we invited original research exploring the role of packaging in brand-building processes. We aimed to highlight the influence of package design on consumer and brand-related responses while also addressing the complexities and challenges it poses for brand managers. Below, we summarize the contributions of each article featured in the issue. We then propose a conceptual model that synthesizes the insights from these articles and provides a foundation for future research in this area.

Articles in the Special Issue

Buschgens *et al.* (2025) examine the relationship between visual elements in packaging design and diasporic consumer identity, focusing on aesthetic appreciation. Based on a mixed methods approach, the authors reveal that diasporic consumers favor hybrid visual designs that balance heritage and contemporary aesthetics, enhancing their feelings of diasporic identity and aesthetic appreciation. Their study contributes to the literature on visual package design by demonstrating how visual elements can engage diasporic consumers and support their dual identities. It further extends the understanding of hybrid visual designs to the domain of cultural aesthetics, highlighting aesthetic appreciation derived from visual designs to diasporic identity.

Favier *et al.* (2025) investigate the impact of embossed product labels on consumer purchase intentions and willingness to pay, emphasizing the mediating roles of willingness to

touch and perceived package uniqueness. Across two online experiments and a laboratory study, the authors reveal that embossed labels enhance perceived uniqueness, which in turn enhances purchase intentions and willingness to pay. The research contributes to the literature on package design by confirming the significant role of sensory modalities, particularly touch, in influencing consumer experiences and responses. It provides new insights into the effects of label surface texture, specifically embossing, on consumer outcomes.

Ghorbani and Westermann (2025) explore consumers' perspectives on the role of packaging in their consumption experiences and its contribution to brand image formation. Following a mixed methods approach, the authors identify a comprehensive set of roles that packaging plays throughout the consumer journey, which includes information, attention, protection, convenience, and experience. Their findings highlight the packaging's practical, symbolic, and social values, emphasizing its influence on establishing consumer-brand relationships. Overall, their research highlights the significance of both practical and symbolic aspects of packaging, extending previous literature by exploring experiential and social dimensions.

Hémar-Nicolas *et al.* (2025) investigate the impact of image realism on consumer acceptance of insect-based food products, focusing on how visual imagery affects perceived disgust and expected taste. Across three experiments the authors reveal that less realistic images, such as drawings, reduce disgust and enhance taste expectations compared to realistic images, such as photos, thereby increasing willingness to eat and purchase intention. Through the lens of construal level theory, the authors propose psychological distance as the mechanism that influences consumer responses to insect imagery. The research offers actionable insights for marketers on how to design packaging that aligns with consumers' psychological distance from insect-based products, thereby enhancing acceptance. Overall,

their work contributes to the understanding of how visual elements on packaging influence consumer responses.

Nickel and Böhm (2025) study the impact of perceived visual sustainability in package design on consumer purchase intentions and the mediating roles of cognitive and emotional attributes. Across three studies, the authors show that visual sustainability positively influences consumer purchase intentions. In addition, the authors show that this effect is driven by moral satisfaction for females and power-related attributes for males. Their work extends the literature on green behavior by emphasizing the significance of package design and perceived visual sustainability as factors that positively influence purchase intentions. In addition, it contributes to the understanding that gender differences can play on consumer responses to package design.

Reniu *et al.* (2025) examine the dynamics of packaging-free shopping, focusing on how retailers and consumers adapt to the absence of traditional packaging. The research emphasizes the ambivalence of packaging-free shopping, which can lead to overconsumption and social exclusion. Thus, their results nuance the perspective on the sustainability of packaging-free shopping, indicating that it may not always be environmentally friendly and can lead to waste. Overall, their work emphasizes the need to consider both environmental and social dimensions in the responsible function of packaging, and consider package design from a more holistic perspective accounting also the possible backfire effects that changes may result in.

Finally, Ruiz-de-Maya and Ferrer-Bernal (2025) investigate the public discourse on sustainable food packaging, examining how risk and analytical message content influence consumer engagement. Through the analysis of X/Twitter messages the authors reveal that discussions about sustainable food packaging use more analytical language, which leads to higher engagement, though skepticism toward food companies remains prevalent. The

authors further identify key themes in public discourse, particularly the dominance of the term “plastic”, which dominates societal perceptions of packaging. Overall, this study contributes to understanding the public discourse on sustainable food packaging, revealing how language features influence consumer engagement.

The Multifaceted Role of Package Design on Consumer Behavior

Building on the articles of the special issue and the expanding body of literature, we propose a model to conceptualize the multifaceted role of package design in consumer behavior (see Figure 2). The model suggests that package design elements can drive both consumer and brand-related outcomes, with these effects being primarily influenced by consumer psychological processes. Additionally, contextual factors may also influence both the outcomes and the psychological processes, and further moderate the impact of packaging design elements on these two facets.

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Package Design Elements

Package design elements refer to the specific features of packaging that are deliberately designed and studied. The marketing literature classifies these elements into three categories: informational (e.g., brand name, price, nutrition facts, usage instructions, ingredients, country of origin, and food labels), graphic (e.g., color, imagery, typeface), and structural (e.g., shape, size, material, transparency) (Kahn *et al.*, 2022). For instance, in this special issue, Nickel *et al.* (2025) investigate graphic elements by examining how visual sustainability is perceived, while Favier *et al.* (2025) explore structural elements through their study of embossed labels. These package design elements significantly influence consumer and brand-related responses, often mediated by various psychological processes (e.g. cognitive and emotional reactions).

Contextual Factors

Contextual factors are external influences that shape and interact with package design elements. These factors encompass individual characteristics, market-related conditions, and cultural contexts. For example, in this special issue, Reniu *et al.* (2025) examine market-related factors by exploring packaging-free shopping as a retailer-driven solution. Similarly, Ruiz-de-Maya and Ferrer-Bernal (2025) investigate public discourse surrounding sustainable food packaging. Contextual factors not only moderate the effects of package design elements but also directly influence consumer psychological processes and their associated outcomes.

Consumer Psychological Processes

Consumer psychological processes refer to the internal mechanisms through which consumers interpret and respond to package design and contextual factors, addressing the question of “how” these factors influence behavior. These processes may encompass cognitive and emotional reactions, perceptions, and beliefs. For instance, in this special issue, Hémar-Nicolas *et al.* (2025) explore perceived disgust and expected taste as key mechanisms explaining how image realism influences consumer acceptance of insect-based food products. Similarly, Favier *et al.* (2025) examine perceived uniqueness as the mechanism through which embossed product labels impact consumer purchase intentions and willingness to pay.

Consumer and Brand Related Outcomes

Consumer and brand-related outcomes represent the ultimate effects of package design elements and contextual factors on consumer behavior. In this special issue, various outcomes have been explored, including purchase intention (Favier *et al.*, 2025; Hémar-Nicolas *et al.*, 2025; Nickel *et al.*, 2025), willingness to pay (Favier *et al.*, 2025), brand image formation (Ghorbani and Westermann, 2025), and consumer engagement (Ruiz-de-Maya and Ferrer-Bernal, 2025).

Conclusion

Packaging is a critical component of the marketing mix, serving as both a functional tool and a communication medium. While its aesthetic appeal plays a key role in shaping consumer experiences, the functional and sustainable aspects of package design are increasingly central to decision-making. The studies in this special issue underscore the multifaceted nature of packaging, emphasizing its influence on consumer and brand-related responses. At the same time, they highlight the need for interdisciplinary approaches that integrate insights from marketing, materials science, recycling, and cultural studies to address the complexity of package design.

Overall, with this special issue, we would like to emphasize that the central element that should remain is how package design can support brand-building. On a closing note, and with an eye toward future research on sustainable development, it is crucial to emphasize the dual role of packaging as both a communication tool and a driver of sustainability. Sustainable packaging must adhere to the principles of circularity (Dörnyei et al., 2023), ensuring it not only meets environmental standards but also retains its functional benefits. While research offers valuable insights into packaging solutions that advance sustainability and enhance consumer and brand-related outcomes, these solutions must undergo rigorous validation in industry settings to ensure they are practical, scalable, and financially viable (Brennan et al., 2024).

As a final note, we would like to thank the editor-in-chief, Dr Cleopatra Veloutsou, for the opportunity to develop this special issue, the researchers who submitted their work for this special issue, and the reviewers for their constructive criticisms and timely reviews.

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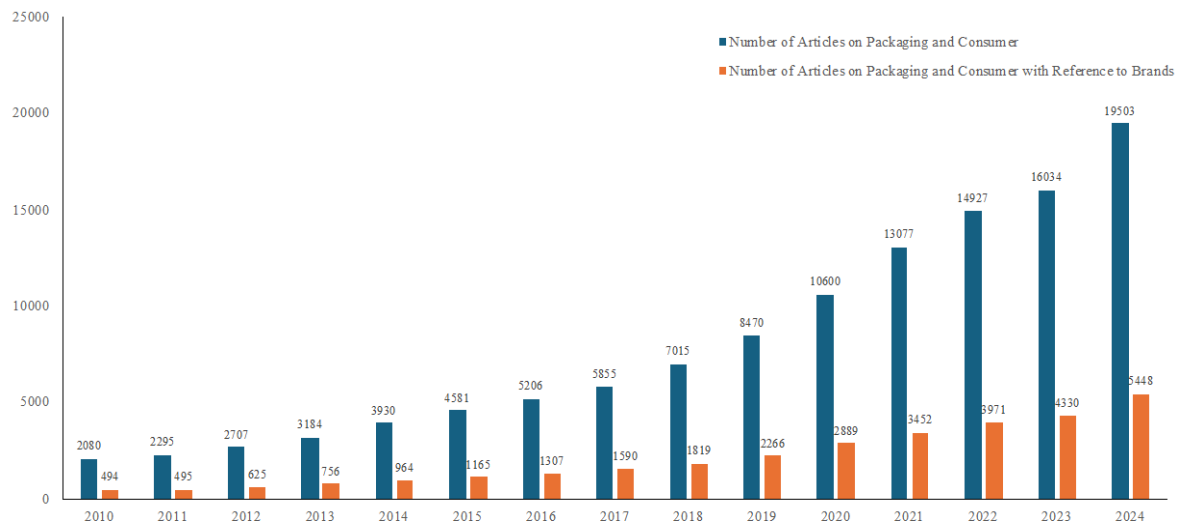
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Figures

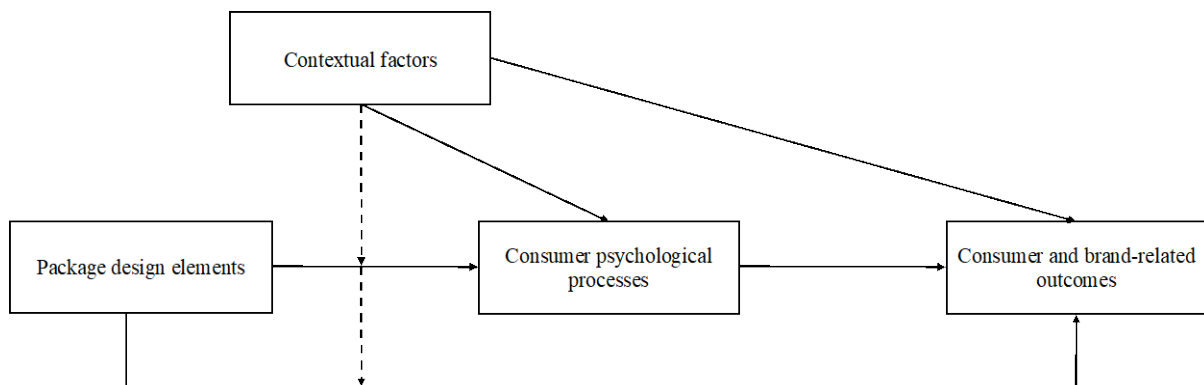
Figure 1. Articles published in Scopus between 2010 and 2024 on package design with reference to consumers and brands



Source(s): Authors' work

Note: Search strings used for search in Scopus: (A) *ALL(packag*AND consumer OR buyer OR customer) AND PUBYEAR > 2009 AND PUBYEAR < 2025 AND (LIMIT-TO(DOCTYPE, "ar")) AND (LIMIT-TO(LANGUAGE, "English")) AND (LIMIT-TO(SRCTYPE, "j"))*; (B) *ALL(packag* AND consumer OR buyer OR customer AND brand*) AND PUBYEAR > 2009 AND PUBYEAR < 2025 AND (LIMIT-TO(DOCTYPE, "ar")) AND (LIMIT-TO(LANGUAGE, "English")) AND (LIMIT-TO(SRCTYPE, "j"))*.

Figure 2. A conceptual representation of the multifaceted role of package design in consumer behavior



Source(s): Authors' work