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# The role of packaging colours in online consumer decisions: A secondary research approach

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## Abstract

In today's increasingly digital marketplace, packaging colour has evolved from a simple aesthetic choice to a critical visual cue that shapes online consumer behaviour. Unlike traditional retail settings where customers interact with tangible products, online shoppers rely heavily on visual signals particularly colour to form judgments about quality, trustworthiness, and desirability. This study adopts a secondary research methodology to explore how packaging colours influence consumer decisions in e-commerce environments. By synthesizing findings from recent literature in marketing, colour psychology, and digital retail, this paper highlights the psychological associations consumers make with specific colour palettes and how these perceptions vary by product category, device interface, and cultural context.

Key insights reveal that warm colours (e.g., red, orange) often evoke excitement and appetite, making them effective for indulgent or impulsive purchases, while cool tones (e.g., blue, green) tend to convey trust and health, ideal for wellness and tech products. The study also examines underexplored dimensions such as the impact of screen type, resolution, and digital interface on colour perception factors that can significantly alter how packaging is viewed across devices. Additionally, it identifies major gaps in current research, such as the absence of standardized guidelines for digital colour optimization and limited understanding of cross-platform and cross-cultural effects.

By consolidating diverse academic and industry perspectives, this paper offers a conceptual framework for understanding how packaging colours function as both strategic and operational tools in online branding. The findings serve not only to inform future empirical research but also to guide marketers, designers, and e-commerce professionals in crafting colour strategies that resonate with digital consumers and drive engagement in virtual marketplaces.

**Keywords:** Packaging colour, Online consumer behaviour, E-commerce, Consumer perception, User experience design, Virtual marketplace, Consumer decision-making, Purchase intention, Secondary research, Colour psychology

## Introduction

The rapid expansion of e-commerce has redefined consumer interactions with products, brands, and businesses. As the physical retail environment gives way to digital storefronts, marketers are increasingly challenged to replicate the sensory richness of in-store experiences through virtual means. Among the various elements that influence online consumer perception, packaging colour has emerged as a subtle yet significant determinant of product appeal and purchasing behaviour. This study aims to critically examine the role of packaging colours in shaping consumer decisions in online shopping environments using a secondary research approach grounded in existing literature and empirical studies.

Colour psychology has long been studied in marketing and consumer behaviour. It is well documented that colours influence human emotions, memory retention, and cognitive processing. Warm colours (red, orange, yellow) can stimulate excitement, energy, and urgency, whereas cool colours (blue, green, purple) are often associated with trust, calmness, and professionalism. The strategic use of colour in marketing is not arbitrary; it is a calculated decision that influences brand recognition, recall, and loyalty. In virtual environments, where colour is one of the few sensory cues available, understanding how different shades trigger psychological responses is crucial for influencing consumer behaviour effectively.

Traditionally, packaging serves multiple functions: it protects the product, provides information, and attracts attention to shelves. In the digital world, however, packaging is not

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physically experienced; it is only seen, often in a thumbnail image or digital mock up. This visual-only interaction magnifies the importance of colour as a communicative tool. The absence of texture, weight, and scent places a heavy reliance on visual cues such as shape, layout, and especially colour to convey brand values, product quality, and emotional tone. Effective packaging design can differentiate a product in a cluttered online marketplace, whereas poor colour choices can result in a lack of consumer interest or even mistrust. Research shows that packaging colours can affect consumer judgments about the taste, quality, and functionality of a product sometimes without them even realizing it. For example, a red packaging design might be perceived as bold or stimulating, ideal for food or energy drinks, whereas white or pastel tones might communicate purity and softness, suitable for beauty or health products. These perceptions are shaped by individual psychological traits and influenced by cultural contexts, generational experiences, and even device settings (such as screen brightness or mobile vs. desktop). Thus, the interpretation of packaging colours is multidimensional and deeply intertwined with the consumer's cognitive filters. Digital consumers behave differently than in-store shoppers. Online decision-making is often faster, visually driven, and information scarce. Without the ability to touch, try, or physically examine a product, buyers rely more heavily on brand reputation, customer reviews, and visual cues such as colour and layout. In this environment, even subtle differences in packaging colour can impact product visibility, click-through rates, and perceived trustworthiness. Additionally, the personalization algorithms of e-commerce platforms mean that products are no longer displayed in neutral contexts but rather in curated feeds, making colour consistency and digital presentation all the more essential. In the context of virtual shopping, packaging colour plays both a strategic and operational role. Strategically, it enhances brand recall and appeals to the preferences of the target audience. Operationally, it affects the appearance of products in search results, digital advertisements, and mobile app interfaces. For instance, a product with a high-contrast colour palette may perform better in terms of click-through rates, especially on smaller screens. Colour also impacts perceived value, which can be particularly important in price-sensitive or highly competitive categories. Furthermore, trust in a product or seller can be visually reinforced through packaging colours that align with consumers' expectations of credibility, cleanliness, or innovation. Given the increasing availability of digital marketing studies, consumer behaviour analytics, and user interface (UI) design reports, a secondary research approach provides a valuable framework for synthesizing existing insights. This study will draw from academic journals, marketing white papers, case studies from global brands, and consumer psychology literature to compile evidence on the effectiveness of packaging colour in online environments. This study aims to identify established findings, current trends, and under-researched areas topic.

## **Research Problem**

### **1. Absence of Standardized Protocols for Optimizing Digital Packaging Colours:**

In the realm of digital commerce, the colour of packaging is vital for expressing brand identity, product quality, and emotional resonance. However, unlike traditional

packaging, digital packaging must function effectively across various devices, lighting scenarios, and screen types, often lacking tactile or dimensional indicators. Despite its significance, there is no universally recognized or standardized guideline that marketers and designers can adhere to for optimizing packaging colours on digital platforms. Brands frequently depend on intuition, A/B testing, or anecdotal methods, which can result in inconsistent or suboptimal design decisions. This absence of standardization creates a knowledge deficit in digital marketing and e-commerce branding. A thorough examination of existing case studies, marketing literature, and digital design standards could aid in developing evidence-based guidelines specifically designed for digital colour presentation and packaging in online retail.

### **2. Ambiguous Connection between Packaging Colours and Product Categories in E-Commerce**

Colour affects consumer expectations in varying ways based on the product category. For example, green may suggest health or sustainability in food items, yet it may not resonate similarly with electronics or luxury products. Although some general principles of colour psychology are established, there is a scarcity of knowledge regarding how these principles apply to different product categories in online retail settings, where visual elements predominantly influence perception and decision-making. Furthermore, packaging colours that are effective in physical retail for a specific product category may not yield the same results in an online environment due to limitations in screen display and design factors. The absence of well-defined, research-supported correlations between product categories and optimal packaging colour schemes constrains marketers' capacity to implement focused, strategic design choices in the digital realm.

### **3. Insufficient Comprehensive Insight into Colour Psychology within Virtual Retail Contexts:**

Conventional research on colour psychology typically emphasizes face-to-face interactions, where consumers physically interact with products. Conversely, online shoppers depend predominantly on visual elements, rendering colour one of the most significant indicators in the decision-making process. Nevertheless, the emotional and psychological impacts of packaging colours in digital environments are still inadequately addressed in scholarly discourse. This deficiency encompasses not only the emotional perception of colours in online contexts but also their effects on trust, urgency, satisfaction, and risk perception throughout the online purchasing journey. The digital landscape introduces additional factors such as device illumination, interface design, and screen fatigue that may alter or even nullify the established effects of traditional colour psychology. In the absence of a thorough understanding of how consumers perceive packaging colour in online settings, marketers face the risk of misaligning their visual strategies with consumer expectations.

### **4. The Impact of Screen Type and Digital Interface on Colour Perception is Insufficiently Explored**

One of the most distinctive challenges in digital retail is the inconsistency in the display and perception of packaging colours across various devices. A product observed on a high-resolution desktop monitor may appear markedly

different when viewed on a smartphone, tablet, or laptop. Furthermore, display configurations such as brightness, contrast, and colour calibration can significantly modify the perceived hue, saturation, and vibrancy of packaging colours. Although this issue is highly relevant in the realm of e-commerce, it has been largely overlooked in consumer behaviour and marketing research. The lack of investigations into how these technological elements affect consumer perceptions, trust, or product assessment represents a significant research opportunity. Grasping this variation is essential for businesses aiming for brand consistency and accurate product representation in the digital landscape.

### Research Objectives

1. To investigate the absence of standardized guidelines for optimizing packaging colour in digital retail environments.
2. To examine the relationship between packaging colour schemes and different product categories in the context of e-commerce.
3. To assess the role of device type, screen resolution, and digital interface in influencing consumers' perception of packaging colours.
4. To understand the psychological impact of packaging colours on online consumers in the absence of physical product interaction.

### Rationale for Adopting a Secondary Research Approach

#### a) Rich Availability of Existing Data and Literature

Over the past decade, there has been a significant increase in academic interest and commercial research focused on colour psychology, packaging design, consumer behaviour, and e-commerce trends. Numerous studies, case reports, and user experience analyses have been conducted globally. Given this abundance of high-quality secondary sources, the researcher can efficiently analyse a wide spectrum of findings without needing to recreate primary studies, thereby maximizing breadth and depth within the research scope.

#### b) Cost-Effectiveness and Time Efficiency

Primary research involving consumer experiments, surveys, or A/B testing across various devices and platforms would require extensive resources, budget allocation, and ethical clearances. In contrast, secondary research allows the scholar to make use of pre-validated, peer-reviewed data and market-tested insights, which accelerates the research process without compromising academic rigor.

#### c) Suitability for Exploring Emerging and Complex Themes

The role of packaging colours in digital consumer behaviour is a multidisciplinary topic that intersects marketing, behavioural psychology, digital design, and information technology. Secondary research enables the integration of diverse perspectives and findings from multiple disciplines, offering a holistic understanding that would be difficult to capture through a single primary study.

#### d) Identification of Research Gaps and Theoretical Patterns

One of the key goals of this study is to map the current state of knowledge, identify research gaps, and propose future research directions. This is best achieved through the synthesis of existing literature, where comparative analysis can highlight inconsistencies, underexplored

themes, and contradictory findings across past research. Secondary data is thus an effective tool for building conceptual clarity and refining the theoretical foundation of the topic.

#### e) Ethical Accessibility and Non-Intrusive Nature

Since the study does not involve collecting personal or sensitive data from human subjects, the use of secondary data ensures ethical compliance, particularly in avoiding privacy concerns or participant bias. Additionally, it allows the researcher to examine real-world, large-scale consumer behaviour patterns without influencing them directly.

#### f) Alignment with Research Objectives

The key objectives of this paper such as understanding colour perception in online contexts, comparing product-category-specific packaging colours, and evaluating consumer trends across platforms require a comparative and interpretive methodology. Secondary research is well-suited for this as it enables the aggregation and thematic analysis of diverse findings across sectors, industries, and geographies.

### Research Questions

- **RQ1:** What are the existing guidelines or frameworks, if any, for optimizing packaging colours in digital retail environments?
- **RQ2:** How does the association between packaging colour and product type vary across different product categories in e-commerce?
- **RQ3:** What is the psychological impact of packaging colour on consumer decision-making in virtual (online) retail settings?
- **RQ4:** How do different screen types, resolutions, and interfaces influence the perception of packaging colours in online shopping?
- **RQ5:** To what extent does packaging colour affect online consumer trust, product preference, and perceived value in the absence of physical product experience?

### Literature Review

Packaging colour is a powerful cue that shapes consumers' Perceptions and purchase intentions [pmc.ncbi.nlm.nih.gov/nature.com](https://pubmed.ncbi.nlm.nih.gov/26111111/). In marketing terms, colour is "one of the most dominant design cues on product packages" [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/26111111/), and vibrant or novel colours tend to capture attention. For example, Kotler and Keller note that "vibrant colours and innovative designs increase purchase intention" [nature.com](https://pubmed.ncbi.nlm.nih.gov/26111111/). Psychological research explains this by linking colours to emotions and concepts (e.g. blue=trust, red=excitement), which consumers use heuristically. Packaging colour can thus signal attributes like potency or quality: highly saturated (bold) colours often make products seem more powerful [phys.org](https://pubmed.ncbi.nlm.nih.gov/26111111/), while dark tones (black, silver) connote luxury [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/26111111/). In online shopping, where product images are the main touchpoint, the chosen packaging colour can be especially influential in grabbing attention and conveying brand image from a distance.

### Key insights from the literature include

- **Colour as a cue:** Colour integrates emotional and functional cues. Packaging designs with warm vs. cool hues alter product evaluations. For instance, studies found that green or blue packaging led to higher



perceptions of healthiness and sustainability than red or orange [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov). In one experiment, yellow vs. red labels on soft drinks made the yellow-packaged drink seem healthier [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov). Another review shows that *lighter, low-saturation* colours boost perceived healthiness (though sometimes at the cost of perceived tastiness) [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov).

- **Category and goal effects:** The impact of colour depends on product category and consumer goals. Su and Wang (2024) <sup>[6]</sup> report that for indulgent “vice” foods (tasty/unhealthy), warm-coloured packaging increases purchase intent, whereas for “virtue” foods (healthy/less tasty), cool colours boost intent [pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov). Similarly, high-calorie snack packaging often uses bold colours to signal fun, whereas health foods use greens or pastels. These effects arise
- From learned colour associations (e.g. green health, red sweetness) and perceptual fluency in recognizing congruent cues [pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)
- **E-commerce context:** Despite the rise of online shopping, research on packaging colour in digital contexts is limited [nature.com](https://nature.com). In brick-and-mortar settings, colour interacts with the surrounding retail environment (e.g. store colour schemes) to affect attractiveness.
- Martinez *et al.* (2021) <sup>[4]</sup> showed that contextual colour congruence between store and package influences appeal and choice, especially differing for food vs. non-food products (e.g. complementary vs. matching colours) [researchgate.net](https://researchgate.net). In online listings, these spatial effects are less clear, but distinct packaging colours still help a product *stand out* in a grid of images. Recent reviews emphasize an urgent gap: few studies have systematically examined how packaging design (including colour) drives e-commerce purchases [nature.com](https://nature.com) [pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov).

### Fashion Industry

In fashion and luxury products, packaging colour is part of brand storytelling. High-end fashion brands often use minimalist or dark packaging (black, white, deep jewel tones) to signal elegance and exclusivity, whereas youthful brands may choose bright or pastel colours to appear trendy. For example, dark and glossy hues (black, silver) are culturally associated with luxury and sophistication [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov); consumers infer higher quality from such cues. While few academic studies focus explicitly on fashion packaging colour, these principles likely apply online: a clothing item displayed with chic, monochromatic packaging may attract shoppers seeking premium brands. One laboratory finding by Steiner and Florack (2023) <sup>[5]</sup> noted that colours signalling luxury (black/silver) can raise quality expectations [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). However, empirical evidence is sparse, and the specific impact of fashion-related colour schemes on online purchase decisions remains under-researched.

### Food Products

Among food and beverage products, packaging colour has been studied extensively. Consumers use colour to infer taste, healthiness, and freshness. One common finding is

that green and blue cues boost health perceptions. For example, Hallez *et al.* found blue/green packages were judged healthier than warm-coloured ones [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). Similarly, multiple studies show that light or pastel-coloured

packaging (e.g. white or light blue) increases perceptions of health but often reduces perceived tastiness and sometimes purchase intent [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). In contrast, saturated warm colours (reds, oranges) are associated with indulgence: Nguyen *et al.* and others show that bright red or yellow on snack packages suggests sweetness and excitement.

Importantly, packaging colour also interacts with product type. Su and Wang (2024) <sup>[6]</sup> found that for unhealthier “vice” foods (like desserts), warm orange/red packaging enhanced purchase intent, whereas for healthy “virtue” foods (like salads), cool blue/green packaging did so [pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov). They explained this via perceived fluency: matching the packaging colour to category expectations makes evaluation easier and more favourable. Other studies confirm similar patterns: e.g., blue packaging on reduced-sodium crackers increased choice under health-focused goals [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov), while colourful, playful packaging increased taste expectations but lowered healthiness ratings (triggering the “unhealthy = tasty” belief) [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov).

Overall, across food categories, packaging colour consistently drives purchase-related judgments (healthiness, tastiness, and intent).

[pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov) [pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov). A recent systematic review notes that colour often exerts a strong influence, sometimes even more than explicit health claims or ingredient information.

[pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov) [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). In practical terms, brands leverage this: “vice” foods often come in warm, saturated packages, while “health” foods use cooler, lighter schemes. These effects also appear online: product images of food with congruent colour cues likely boost click- and buy-rates by aligning with expectations.

### Electronics Products

In the consumer electronics industry, packaging colour tends to align with brand positioning. Many electronics brands favour neutral or premium colours - for example, tech companies often use white, black, or metallic packaging to convey cleanliness, innovation, or luxury. Although direct empirical studies on electronics packaging colour are rare, general findings are suggestive. Colour saturation research implies that bold, saturated packaging leads consumers to infer higher potency or effectiveness [phys.org](https://phys.org). Labrecque *et al.* (2024) <sup>[1]</sup> demonstrate that vivid packaging makes products seem stronger - a desirable trait for gadgets asserting superior performance [phys.org](https://phys.org). Conversely, muted or pastel tones might signal simplicity or affordability.

One relevant insight from packaging research is that colours signalling higher price can elevate perceived quality [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). In electronics, black/silver packaging often denotes premium models (e.g. high-end smartphones), aligning with the finding that “luxury” colours raise quality and even health expectations [pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov). For example, an electronic device in sleek black packaging may seem more sophisticated than the same device in bright plastic. Nevertheless, there is little academic data

specifically on electronics packaging colour in online shopping. Given that product images on e-tail sites often include the box design, packaging colour likely contributes to initial impressions, but quantifying this influence remains an open research question.

### Discussion and Conclusion

Across fashion, food, and electronics, a consistent theme is that packaging colour meaningfully shapes online consumer behaviour, but *context matters*. Psychologically, colours evoke associations (e.g. warmth indulgence, cool calm) that consumers apply during quick online decisions [pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/31111111/). Marketing research similarly shows that packaging colour is not independent - its effect depends on product category, branding, and Presentation.

[nature.compubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/31111111/). For instance, what works for a candy bar (bright, fun colours) may backfire for an organic health bar (where subtle, earthy colours are expected).

From an e-commerce perspective, visual cues are even more critical due to information constraints. However, systematic studies of packaging colour *online* are still scarce [nature.com](https://nature.com). Li *et al.* (2025) <sup>[2]</sup> highlight this gap, noting the rapid shift to online retail is outpacing scholarly understanding of visual packaging cues in e-shops [nature.com](https://nature.com). In practice, brands and platforms are adapting: e-commerce listings often show packaging in thumbnails, and marketers optimize colour schemes for digital appeal. But rigorous evidence is only beginning to emerge.

In summary, the literature indicates strong but complex effects of packaging colour on online purchase behaviour. For food products, empirical studies consistently tie colour cues to health and taste inferences, thereby influencing purchase intent.

[pmc.ncbi.nlm.nih.govpubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/31111111/). In fashion and electronics, colour aligns with brand image and perceived quality, though more research is needed. Notably, highly saturated or “bold” packaging tends to boost perceptions of potency or luxury [phys.orgpmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/31111111/). Online retailers and designers should therefore consider colour strategically: the right hue and saturation can make products more attractive or signal desired attributes at a glance. Future work must address the e-commerce context more explicitly, testing how packaging colours shown on screens (with varying background and lighting) affect click-through and conversion rates [nature.com](https://nature.com). Overall, successful online packaging design will blend psychological insights (e.g. colour-emotion links) with marketing goals (e.g. brand positioning) to nudge consumers toward purchase.

### Conclusion

#### • Summary of Key Findings

- This study explored the role of packaging colours in online consumer decision-making using a secondary research approach. The literature reveals that packaging colour is a powerful visual cue that shapes consumer perceptions, emotions, and behavioural intentions in e-commerce environments:
- **Colour Psychology:** Warm colours (e.g., red, orange) evoke emotions such as urgency and excitement, while cool colours (e.g., blue, green) are associated with calmness, health, and trust. These psychological

responses are leveraged in packaging to influence perceptions of product quality, taste, and purpose.

- **Category-Specific Impacts:** The effectiveness of colour varies across product types:
- **Food products:** Warm colours enhance perceived tastiness (vice foods), while cool or pastel colours enhance perceived healthiness (virtue foods).
- **Fashion products:** Dark, minimalist tones signal luxury and exclusivity; bright pastels cater to younger audiences.
- **Electronics:** Bold, metallic, or neutral packaging increases perceptions of innovation and value.
- **E-commerce Dynamics:** In online retail, where physical interactions are absent, packaging colour plays a heightened role in drawing attention, fostering trust, and conveying brand identity through thumbnails and product images.
- **Contextual and Technological Factors:** Consumers' perception of colour is influenced by screen type, resolution, lighting, and UI layout. However, the literature also reveals a scarcity of empirical studies that directly address how these digital factors shape interpretation.

### Theoretical and Practical Implications

#### Theoretical Implications

The findings contribute to *consumer behaviour theory* by extending colour psychology into the virtual retail environment, where traditional multisensory cues are replaced by visual-dominant stimuli.

They also support *signal theory* in marketing, showing how packaging colour acts as a non-verbal signal of product attributes and brand values.

#### Practical Implications for Marketers and Designers:

- **Product-category alignment:** Designers should match packaging colour schemes with product goals and consumer expectations (e.g., health foods = green/blue; luxury = black/silver).
- **Digital optimization:** Marketers must consider how packaging colours appear across devices, platforms, and screen sizes to ensure consistency and clarity.
- **Click-through performance:** High-contrast or strategically chosen colours can improve visibility and interaction in digital marketplaces.
- **Brand trust:** Packaging colour that aligns with perceived product function can enhance consumer confidence and purchase likelihood.

#### Limitations of Secondary Research

- **Lack of primary data control:** The study relies solely on previously published data, which limits the ability to account for evolving consumer behaviours or emerging digital platforms.
- **Inconsistent methodologies:** Different studies used varied sample sizes, geographies, and definitions of “effectiveness,” which may introduce inconsistencies or bias in interpretation.
- **Limited e-commerce-specific insights:** While colour psychology is well-established in general marketing, few empirical studies focus exclusively on digital retail settings and cross-device perception.
- **Generalizability:** Many studies are culturally specific;

colour associations may differ across countries and age groups, reducing the universality of conclusions.

### Suggestions for Future Research

- **Experimental Studies on Digital Devices:** Future work should include controlled experiments that analyse how consumers perceive packaging colour across different devices (e.g., smartphones vs. desktops) and under varied lighting conditions.
- **Consumer Journey Mapping:** Longitudinal studies could explore how packaging colour affects various stages of the online buying journey (e.g., click, cart, purchase, re-purchase).
- **Cross-Cultural Comparisons:** Given the cultural specificity of colour meanings, comparative studies across regions (e.g., Western vs. Asian markets) would add depth to the understanding of online consumer responses.
- **Neuroscientific Integration:** Eye-tracking and neuromarketing tools could be used to study subconscious reactions to packaging colour in digital shopping environments.
- **Platform-Specific Optimization:** Research should examine how packaging colours perform differently on Amazon, Instagram Shops, or e-grocery platforms, helping brands fine-tune their visual strategy.

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