

## Original Research Article

# Review of current literature on product aesthetics

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**Abstract:** Product aesthetics is an interdisciplinary field encompassing design, engineering, psychology, sociology, and more. With the prevalence of product homogenization accelerating market competition, major brands are adopting various strategies to stand out. This paper aims to review the primary trends and significant findings in product aesthetics research to explore the influencing factors of product aesthetics and its role in the marketing landscape. It discusses the importance of product aesthetics in product design and consumer experience, with a focus on defining product aesthetics and user experience, and offers suggestions for future research directions.

**Keywords:** Product Aesthetics; Aesthetics; Purchase Intention.

## 1. Introduction

The phenomenon of product homogenization is prevalent in the marketing landscape. For instance, mobile phone brands often emphasize features such as high resolution, large memory, efficient cooling, and superior chips, while refrigerator brands highlight spaciousness, energy efficiency, and antibacterial properties. This leads to intense competition among similar brands. The rapid advancement of big data further intensifies market competition, and consumers' aesthetic demands are becoming increasingly urgent. To stand out in the market, major product brands have adopted two primary strategies to attract and retain consumer attention. The first strategy involves brands capitalizing on trends through collaborations and endorsements, inevitably generating significant traffic and attention. The second strategy involves advertisers using appealing product images to enhance product allure, particularly for digital shoppers<sup>[1]</sup>. Emphasizing product uniqueness and differentiation aims to make products instantly recognizable and memorable to consumers. Research indicates that within the same price range, consumers often choose products with aesthetic elements. Consequently, more brands are focusing on creating visually appealing, fashionable, and artistically inspired products<sup>[2]</sup>. Aesthetic design has become a new avenue for achieving corporate differentiation and brand personalization, with products featuring high aesthetic value and unique designs gaining increasing consumer favor.

Product aesthetics is a multidisciplinary field encompassing knowledge from design, psychology, cultural studies, and marketing. This review aims to explore the fundamental concepts, influencing factors, and applications of product aesthetics across different domains. By conducting an in-depth analysis of the theories and practices behind product design and aesthetics, we can better understand how people perceive and respond to product appearances and visual elements, and how to leverage this knowledge in commercial settings to attract customers and enhance product market value.

## 2. Influencing factors of product aesthetics

### 2.1. Proportion

The shape and proportion of a product are crucial to its aesthetics. Basic geometric shapes, such as squares, circles, and ellipses, are often associated with stability and balance, while different proportions can affect a

product's appearance and feel. For example, symmetry is a powerful determinant of aesthetic judgment<sup>[3]</sup>. The symmetry and asymmetry of a product can influence its layout and visual perception. When "product aesthetics" information is presented, consumers perceive the information stimulus and exhibit corresponding behaviors. Symmetrical products are often associated with natural beauty and harmony. Research has confirmed that the clear visual experience provided by the natural attributes of symmetry not only reduces the attention required to search for and use the product but also enhances the user experience<sup>[4]</sup>. It can also increase purchase intention by enhancing associations with natural awareness<sup>[5]</sup>. Conversely, asymmetrical products are initially associated with creativity, sophistication, and interest. Gait (1985) noted that more interesting interfaces can increase user excitement and attract more attention. Empirical research has shown that asymmetrical visual stimuli are more attention-grabbing than symmetrical ones, leading to more pleasurable experiences and stronger purchase desires<sup>[6]</sup>. Highlighting novelty and interesting factors can attract consumer attention and increase purchases.

## **2.2. Color**

Color is a key element in product aesthetics as it can convey emotions, moods, and brand messages. Different color choices can evoke different perceptions and reactions. In behavioral research, the concept of aesthetics was first proposed by Liu (2003) to explore the relationship between different design dimensions and perceived attractiveness by designing visually impactful rectangles and ellipses, thereby identifying factors influencing object attractiveness, such as shape, hue, color, and texture<sup>[7]</sup>.

## **2.3. Shape**

The theory explaining the psychological effects of shape is largely based on the Gestalt principles of visual perception<sup>[8]</sup>. From a design perspective, different shapes elicit different psychological responses from users. Shape-related design principles typically associate circles with emotion, comfort, harmony, warmth, and sensuality, while rectangles represent logic, order, consistency, regularity, and mathematical foundations<sup>[9]</sup>. Square screen designs are more common in smartwatches because rectangles are prevalent shapes in various consumer electronics, such as smartphones, tablets, and PC monitors, and system interface designs generally follow rectangular designs. Currently, smartwatches on the market mainly have two screen shapes: circular and square. According to Wang's (2020) research, circular screen interfaces are more likely to evoke user emotions than square screen interfaces<sup>[10]</sup>. Circular screens can share circular emotional elements (emotion, comfort, harmony, warmth, and sensuality), positively influencing the hedonic motivation of using smartwatches<sup>[11]</sup>. As a fashionable feature, the emotional connotation and visual appeal of circular screens may make them more attractive than square screens<sup>[11]</sup>. Theoretically, circular screens can serve as an aesthetic or novel cue, triggering a cool heuristic<sup>[9]</sup>.

## **3. The importance of product aesthetics in consumer experience**

Product aesthetics not only affects product sales and market competitiveness but also directly impacts consumer experience and satisfaction. Research shows that aesthetically pleasing products can enhance users' emotional connections and increase their loyalty to the product. A study found that consumers are more willing to establish emotional connections with aesthetically pleasing products, which can encourage more frequent use and recommendations to others. Additionally, aesthetically pleasing products can improve user experience. For example, good human-computer interaction design can enhance user satisfaction and reduce confusion and discomfort during product use. This further emphasizes the importance of product aesthetics in consumer experience.

### **3.1. Product aesthetics influences consumer emotions**

Product aesthetics is not just about appearance; it also involves the emotional connection between consumers and products. When a product has a pleasing appearance and design, consumers typically have a positive emotional experience with it. This emotional connection can increase consumer satisfaction and loyalty. Consumers are more inclined to purchase products that make them feel good, and product aesthetics can help achieve this goal.

### **3.2. Product aesthetics conveys brand values**

Product aesthetics can be used to convey brand values and culture. Through the appearance and design of a product, companies can communicate their brand story and core values. This helps establish an emotional connection with consumers, making it easier for them to resonate with the brand. For example, a brand focused on environmental sustainability can convey its eco-friendly values through sustainable design and material choices. Consumers tend to support brands that align with their values, making product aesthetics a key tool for brand building and trust establishment.

### **3.3. Product aesthetics enhances product practicality**

Product aesthetics is not just about appearance; it can also influence the actual user experience of a product. Good product design often considers user needs and experiences to ensure that the product is both aesthetically pleasing and practical during use. For example, a well-designed smartphone is not only visually appealing but also offers an excellent user interface and functionality. Product aesthetics can motivate companies to invest more time and resources in improving product functionality and performance, thereby enhancing product practicality and competitiveness.

### **3.4. Product aesthetics increases market competitiveness**

Product aesthetics can help companies gain a competitive advantage in the market. In a market with numerous similar products, product aesthetics can be a key factor for companies to attract consumers and gain market share. An attractive product appearance and design can make a product stand out and attract more consumers. Additionally, consumers often perceive products with good appearances as higher quality, making them willing to pay a higher price. This can increase a company's profitability and market share.

In summary, product aesthetics plays a crucial role in consumer experience. It is not just about product appearance and design but also involves consumer emotional experience, brand recognition, market competitiveness, and other aspects. Companies should value product aesthetics and incorporate it into their product development and brand-building strategies to enhance consumer satisfaction, strengthen brand value, expand market share, and achieve long-term business success. Only by focusing on product aesthetics can companies stand out in a competitive market and earn consumer trust and support.

## **4. Conclusion and future research directions**

Product aesthetics research is a multidisciplinary field encompassing various aspects such as product appearance, material selection, human-computer interaction, and cultural differences. Research shows that product aesthetics not only affects product sales and market competitiveness but also directly impacts consumer experience and satisfaction. Future research will continue to explore how to better apply aesthetic principles to product design to meet the ever-changing market demands and consumer expectations. Product aesthetics

research will continue to play an important role in advancing product design and user experience.

Although significant progress has been made in product aesthetics research, many future research directions remain worth exploring. One aspect is to continue exploring and testing the influencing factors, mediating mechanisms, and moderating mechanisms of consumer purchase intentions or behaviors, striving to construct a comprehensive model that aligns with the real context of “product aesthetics” information influencing consumer purchase intentions, thereby enhancing the validity of the constructed model. Another aspect is to delve deeper into exploring and testing the impact of structural dimensions of perceived value as mediating variables, deepening the deconstruction of mediating or moderating mechanisms. Possible research directions include exploring how to integrate sustainability principles with product aesthetics to create more attractive sustainable products and studying how emotional design influences product appearance, feel, and emotional experience, and how to evoke consumer emotional connections through design.

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