

# The Impact of Misleading Visual Elements on Children's Food Packaging Design in Retailing Process

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## Abstract

In recent years, foods which are mainly consumed by children have sprung up. The cost of children's snacks has become one of the important expenditure items of families, and children's snacks have an increasing proportion of children's meals. The food safety problem has been paid more and more attention by the media and the common people. In an interview with China Press and Publication News, the vice president and secretary-general of the International Food Packaging Association said: "With the deepening of the concept of 'food packaging is equal to food', the safety of food packaging has gradually been paid attention. However, the safety problems of food packaging materials for children are ignored by regulations, standards and the market." In addition to the packaging materials, the graphic design elements on the packaging are also an important part. Because the design elements on the packaging are the language of communication with consumers, when consumers buy food, they learn about the product through the packaging first, and check the ingredient list or not after. Since Neeley and Petricone studied that Most children do not read products' nutritional information (unless they are bored while eating them) and do not make choices based on this information (Neeley & Petricone, 2006). Therefore, it is important to generalize which factors are misleading for children.

**Keywords:** Misleading Elements, Children's Food Packaging, Children's Purchase Behaviors

## Introduction

Maria D. De-Juan-Vigaray and Hota (De-Juan-Vigaray & Hota, 2019) noticed that children and young people have been shown to have an increasing buying power and power of influence in the retail sector for more than 50 per- cent of the household's expenses. This means that it is necessary to understand the behavior of children and young consumers in the retail process in this advanced age of retailing. But many marketing managers either directly ignore children or do not try to involve them in the correct manner. Earlier study has been identified that the factors influencing purchase decisions in a family now tend to favor children's own choices especially for buying their own items. Lindstrom (2004) estimates that children aged

8–14 annually spend as well as influence approximately \$1.2 trillion worth of sales worldwide (Lindstrom, 2004). At the same time, (Darley & Lim, 1986) consider that Children under 12 years old constitute a powerful market segment and influential in their families' purchase decisions. At the same time, retail and commercial markets are a key part of the external food environment, as they are the place where people decide what and how much to buy (Unicef, 2019). In most countries, supermarkets have become the most important environment where consumers make their food purchase decisions (Popkin & Reardon, 2018). Despite this evidence, there is limited research that examines the communication between children and children's food packaging in retailing process especially in visual elements.

### **Definition of Children's Food Packaging**

Food packaging is used to protect food from environmental contamination and other influences (such as odors, shocks, dust, temperature, physical damage, light, microorganisms, and humidity), and it is key to ensuring the quality and safety of food, while also extending shelf-life and minimizing food losses and wastage (Ribeiro-Santos et al., 2017). Moreover, a study of (Rettie & Brewer, 2000) reported that Packaging has become a primary vehicle for communication and branding. Product packaging is significant as a marketing method because it is the primary means of communicating information to the consumer at point of sale about product attributes and branding (Silayoi & Speece, 2004). In short, packaging is an inseparable part of the product. It not only protects the product, but also serves as a bridge between the product and the consumer. Besides, children are considered to be the demographic most influenced by product packaging and investment in child-oriented product packaging has been put at \$US 3 billion annually (Hawkes, 2009), and according to the study of Ares etc., food packages are one of the most important components of the marketing mix of food companies, being the central strategy to target products at children (Ares et al., 2022). Also, the graphic design on the packaging is to communicate the visual. It aims to encourage merchandising (Meyers-Levy & Peracchio, 1995). So as for the packaging design of children's food, the application of visual elements needs to listen to the voice of children, pay more attention to understanding the consumers 'psychology of children, which design suitable packaging to bring truly freshness and healthy food to children. It should be considered that how to make them understand the product in a right way through the visual elements on packaging. When they go to the stores or supermarkets to make their own purchasing, they will decide which product to buy based on the visual elements on the packaging.

### **Visual Elements on Children's Food Packaging**

Silayoi & Speence (Silayoi & Speece, 2007) define two categories of elements which potentially have an impact on the purchase decision: visual and informative. Visual elements include graphics, typography, color, size and shape of the packaging, while the informative elements refer to the information and technology that was used to produce the packaging. This research aims to strengthen the analysis of visual elements that based on the principle of food packaging design including graphic (e.g., photographs, cartoon characters), color, shape and summarize the elements that will misleading children when they are purchasing. In addition, the problem mentioned from James that most healthy food packaging tends to communicate only to adults, whereas unhealthy food is being increasingly marketed toward children by using appealing colors, words, and symbols (McNeal, 1992). In a sense, the packaging, especially the packaging of children's food, is not only a technical problem, but also reflects psychological effect of children, an excellent children's food packaging can not

only attract attention at first sight, but also need to satisfy children's curiosity and express the truly information. Therefore, these elements are a language tool for children to communicate with products.

### **Criteria of Visual Elements on Children's Food Packaging**

Neeley and Petricone studied that Most children do not read products' nutritional information (unless they are bored while eating them) and do not make choices based on this information (Neeley & Petricone, 2006). On the other hand, children are driven to unhealthy products by playful designs, indicating that the food industry needs better regulatory guidance to design packs that can help parents and encourage healthy eating habits for children (Abrams et al., 2015). All these finding indicate that it is important to explore the criteria of visual elements on children's food packaging. An effective design is only when the information conveyed by the design elements on the packaging is in line with the value of the food itself and can also convey the real information to children very accurately. This research aims to develop a guideline for children's food packaging designers, especially focuses more on misleading elements on children's food packaging that will convey the wrong information to children. So that children's food packaging designers can have a clear theoretical basis to achieve more efficient children's food packaging.

### **Methodology**

This study will employ quantitative design using investigation method to gain first-hand materials and data, reveal existing problems, expose contradictions, and promote development by constantly resolving various internal and external contradictions. So, the investigation method can collect data that is difficult to obtain from direct observation. Through the survey, researchers can collect materials in the spiritual field such as people's evaluation of certain phenomena, social public opinion, etc. In this study, the data will collect through questionnaire surveys to know the consumption characteristics of children aged 10-12. This age group was selected because the most important feature is their realistic and incisive approach (Valkenburg & Cantor, 2001), which means that children at this age having their own unique thinking and ideas. Second, collect how different elements make them feel from photography, cartoon character, color, and shape. Third, collect visual elements that they don't want to see on the packaging from photography, cartoon character, color, shape and simply explain why. The questionnaire should be clear and simple which lead children can focus on answering it truly. Forth, the research data collection study will operate through a documentation method on previous studies and observation method. The research proposes to utilize SPSS software to analysis every data collection to draw the conclusion.

### **Results and Discussion**

Singh states that prudent use of colors can contribute not only to differentiating products from competitors, but also to influencing moods and feelings – positively or negatively –and therefore, to attitude towards certain products (Singh, 2006). And people have different taste cues for different colors (Ginsberg, 1923). In addition, there is evidence to support the view that the shape of a package can convey meaning about other sensory attributes of its contents (Spence, 2012). Moreover, according to the results of Robert P Hamlin's tests, it shows that graphic design has a massive and statistically significant impact on consumer choice, *ceteris paribus* (Hamlin, 2016). This research intention is to focus on analyzing photographs, cartoon characters, colors, and shapes on children's food packaging, they are all very important

factors that affects children's emotions and feelings. It is necessary to deeply extend existing knowledge about misleading elements on packaging design that will mislead children's purchasing decisions.

### **Conclusion**

In conclusion perhaps from the major findings will revealed the most popular image categories for boys and girls from the age of 10-12. Hence it will identify visual elements that used widely on children's food packaging design. These elements impact the brand communication and marketing and consumer mind set. Secondly, these elements are primary vehicle for communication and branding, they also will make people misunderstanding during retail process. So it will analyze what is misleading visual elements on children's food packaging design. Thirdly, to recommend a appropriate guideline for children's food packaging design. For future research, this study can be continued analyze information components on children's food packaging design, and identify how information components impact children during their shopping.

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