

# Investigating about Consumers' Attitudes to Green Children's Toys Products in Vietnam

Nguyen Hoang Mai

**Abstract**—The literature on plastic waste recently focus upon products such as plastic bag and plastic straw. However, there are products that create a very huge amount of waste such as plastic children's toys, have not received proper attention. Also, the need of green products for children's toys is essential since plastic children's toys were proved that contain heavy metals which are potential sources risk to children's health. Therefore, this research aims at pioneering in doing investigate about consumer attitudes to plastic and environmentally friendly children's toys in Ho Chi Minh city, Vietnam. Also, propose green marketing activities for children's toy companies to become the leading recognized brand in the line of environmentally friendly product. A survey was conducted in Ho Chi Minh City in December 2019 with 200 respondents to assess their attitudes towards green products, especially green products for children. Based on the rationale and survey results, the research conclude that consumers' attitudes towards green products and their level of interest in the current environmental situation are very positive. Respondents did understand the concept of green products in detail and pay much attention to famous green campaigns and products. And there are statistics prove the high consumer awareness of environmentally friendly plastic toys. This forward-looking insights can create the potential for green marketing activities of children's toy companies.

**Index Terms**—Green products, green marketing, children's toys, consumers' attitudes.

## I. INTRODUCTION

With the rapid economic development in recent years, environmental concerns in Vietnam are mentioned by the governments, organizations and citizens of big cities as a painful issue in every respect of life. Consumers are called to reduce their consumption of plastic products by saying no to plastic bags and plastic straws; which is considered to be the main cause of plastic waste. However, people do not pay attention to other daily products which are silently create a huge amount of plastic waste, such as plastic children's toys. Dozens of plastic toys of all shapes, sizes and colors could be easily found in all Vietnamese households. According to The General Statistics Office (GSO) of Vietnam, the average population of Vietnam is 94,666.0 and the birth rate is 2.05 in 2018 [1]. It can be seen that, the market for children's toys in Vietnam is very promising in the upcoming years. The author when wandering around shopping centers and children's shops observe that more than 90% of children's toys are made of plastic. The problem is that most of these

products are not recycled. There are many questions and challenges increasing such as why recycling plastic toys is so difficult? How can we change this? Can recycling be improved with today's technology etc. It can be seen that, there are a lot of research on global warming, greenhouse effect, saline intrusion as well as increasing consumption levels for products such as plastic bags, plastic straws. However, research about children's toys is very limited. Therefore, the must for research related to green marketing for children's toys is essential; that would help in promote the intention and green consumption for this product.

The purpose of this study is to (1) investigate knowledge about green products and (2) investigate consumer attitudes to plastic and environmentally friendly children's toys. Thereby, (3) propose green marketing activities for children's toy companies. To accomplish the research objectives, research methods including surveys, statistics, and classifications were used. Specifically, a questionnaire was distributed to collect data from 200 respondents in Ho Chi Minh City in December 2019. The purpose sampling technique has been used, which focus on people who have green lifestyles and experience in purchasing green products. Then, based on the survey results, the analysis and comparison, we come up with conclusions and recommendations, especially for companies that produce children's toys.

## II. LITERATURE REVIEWS

For the past two decades, go-green lifestyle has reflected the people's support for sustainable consumption [2]. When consumers become more aware of environmental issues which associated with their consumption behavior, they seek to buy environmentally friendly products to benefit future generations [3]. Although convenience products are still the favor of many consumers, environmentally friendly products have gradually become top concern for some of them [4]. For maintain sustainability, balancing the ecosystem (ecology), creating profits (economic) and people (society) is a core concern [5]. This increased awareness and interest in sustainable consumption which expected to influence consumer purchasing decisions [6]. Moreover, sustainable consumption has drawn more attention from the company's managers due to stricter environmental regulations and increasing stakeholder regulations focusing on environmental preservation [2].

### A. Green Products

Many authors have tried to provide a definition for green products. According to Shidiq, green products are

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environmentally friendly, designed and processed in a way that reduces the impact that may cause environmental pollution from products, whether in production, distribution and consumption [7]. Dangelico and Vocalelli reported the most relevant definition of a product as ‘green’ “when its environmental and societal performance, in production, use and disposal, is significantly improved and improving in comparison to conventional or competitive products offerings” [8].

**B. Green Marketing**

Since the first definition of green marketing, it is said to have integrated environmental issues into strategic marketing processes [9]. More specifically, Liu refers to three distinct green marketing methods: to satisfy green consumers with green products; adjust marketing mix; gain a competitive advantage by applying green values and benefits by dominating the market, managing demand for sustainable products, and applying process for prioritizing environmental issues [10]. To support green products, marketers must focus on consumer preferences and their decision-making process [6]. Several articles focus on the study of the 4Ps (Product, Price, Place, and Promotion) of traditional marketing mix in the green marketing context and marketing strategy entails four different steps: segmentation, targeting, positioning and differentiation. Figure below reports the general marketing framework proposed by Kotler and Armstrong (2014) [11].

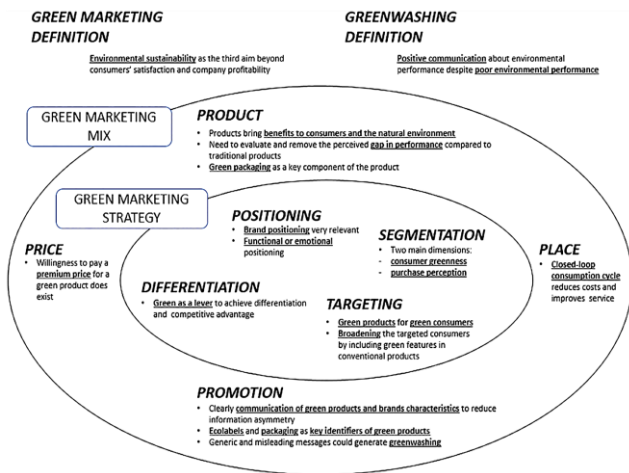


Fig. 1. Green Marketing Strategy and the Green Marketing Mix (adapted from Kotler and Armstrong, 2014).

**C. Plastic Children's Toys**

Omolaoye's research revealed that plastic toys which made in China contain heavy metals in different concentrations [12]. With 17% of products shown high levels of lead, cadmium, chromium and other metals. This poses a threat to children in usage stage. Therefore, the results show that plastic toys have the potential to greatly affect children's health. Moreover, Al-Qutob reaffirmed that plastic toys contain heavy metal concentrations higher than the maximum allowed level [13]. Environmental activist has proposed urgent actions, namely the application of policies to protect and educate consumers about the risks posed by plastic toys. In addition, saying no to children's toys made of plastic will reduce the amount of heavy metal polymers that will released into the environment at the end of the product life cycle.

**D. Consumers' Attitudes**

The theory of planned behavior includes three conceptually profound determinants of intent that are subjective norms, cognitive behavioral control and attitudes toward behavior [14]. Where the behavioral attitude factor refers to the degree to which a person has a favorable or unreliable rating or rating of the behavior in question. Specifically, in this article we delve into the concept of consumers' attitudes towards the environment. This attitude is considered to be an individual's assessment of environmental protection. Green marketing depends on consumers' attitudes towards the environment. Without a strong demand for changing attitudes of consumers, businesses will not make more effort towards introducing green products and services [15].

**III. RESEARCH METHODS**

To assess consumers' attitudes towards green products and their level of interest in the current environmental situation as well as consumers' attitudes towards green products and especially green products for children, we conducted a survey in Ho Chi Minh City in December 2019 with the number of 200 respondents. The questions for the survey were developed and validated by field experts. The purpose sampling technique has been used, focusing on people with green lifestyles and had experience in purchasing green products. The sample size needed for this study was calculated based on recommendations from Hair [16]. Next, it can be seen that the majority of the respondents were female, married, educated and living in Ho Chi Minh City. They have a family size of three to five people and monthly income of more than 25 million VND. Most of them fall in the age group 25-40.

To assess consumers' attitudes towards green products and their level of interest in the current environment, we asked respondents a series of questions using the 5 Likert scale, 40% of respondents showed that they were extremely concerned about environmental issues; 33% of them expressed a highly interest in a global campaign which aim at “Restrict use of plastic products” and most importantly 52% of respondents were really concerned about “recycling”. However, there are still 10% of respondents do not interested in the current environmental situation and 3% of them are not interested in the “recycling” issue. Details are given in the table below.

TABLE I: CONSUMERS' LEVEL OF INTEREST TOWARD CURRENT ENVIRONMENT ISSUES

	Very interested	interested-Do	not interested	
The level of attention to the current environmental situation	40%	30%	20%	10%
Interest in global campaign calling for “Restrict on Plastic Use”	33%	27%	20%	20%
The level of concern about “recycling”	52%	41%	4%	3%
Readiness to participate with their children in environmental protection campaigns	73%	12%	10%	5%

In addition, 62.4% of the respondents used their own bottle

when buying water. 68.5% of them expressed their support for stores that use stainless steel straws and made from rice or paper straws instead of plastic straws. 59.6% of respondents use paper bags instead of plastic bags and 30.5% of respondents have participated in environmental protection programs or organizations.

In the next section, we focus on questions that investigate the impact of knowledge on green products on consumer attitudes toward environmentally friendly children's toys. First, we asked respondents whether they are willing to participate in environmental protection campaigns with their children, 73% of them said that they would definitely want to participate. However, 22% of them were still uncertain and 5% of the respondents said they did not want to participate. When asked about the criteria for choosing toys for children, besides the two most important things that the participants mentioned were safe design (75.6%) and safe materials (77.3%), children-friendly and environment-friendly factors were also highly appreciated by the respondents (71.3%). Details are given in the table below.

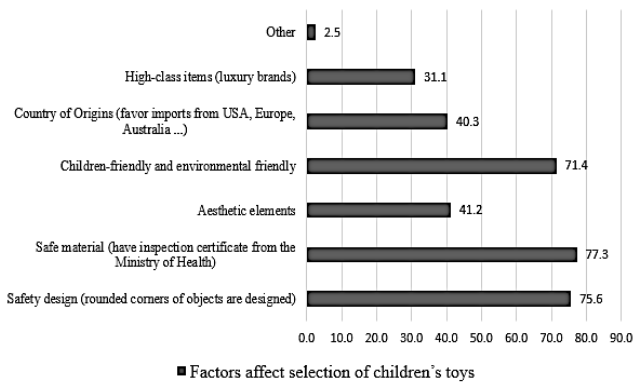


Fig. 1. Factors affect selection of children's toys.

#### IV. DISCUSSION

The above information shows that consumers' attitudes towards green products and their level of interest in the current environmental situation are very positive. Respondents showed that they were extremely concerned about environmental issues such as the global campaign to call for "Restrict use of plastic products" and most importantly, they really pay attention to "recycling". Next, in order to get an evaluation of the respondents' knowledge and intention to buy green products, the author continued to interview about famous plastic recycling programs. 70.9% of respondents knew that Adidas uses recycled plastic to make fashionable shoes, 47.8% of respondents knew that Japan turns rubbish into clothes and as a material to build roads. About 20% of them have information about recycling parks in Rotterdam, the Netherlands; and Russia has adopted technology to turn waste into gasoline and Austria's recycled PET products etc. Therefore, we can conclude that respondents not only answered that they care about the environment in general, but they did understand the concept of "green products" in detail and they pay much attention to famous recycle campaigns and recycle products.

Next, we discuss about the consumers' attitudes towards plastic children's toys and environmentally friendly children's toys. In addition to the two most important criteria

that the respondents mentioned are safety design and safe materials, the children-friendly and environmentally friendly factors are also highly appreciated by the respondents. They expressed willingness to participate in environmental protection campaigns with their children. They also propose daily practical actions to educate children to be environmentally conscious and responsible. For instance, educating children through images, video clips etc. about environmental protection activities, teaching children about waste separation, helping children learn the importance of recycling. And most importantly, more than 70% of the respondents think that we can create a habit for children to use environmentally friendly items, such as using stainless steel straws, or made from paper or rice instead of plastic straws; and teach children to dispose of garbage at designated places. It can be seen that people begin to have positive attitude towards eco-friendly products, especially for children's products.

#### V. CONCLUSION AND RECOMMENDATIONS

Environmentally friendly children's toys, also known as green toys, got a lot of attention recently. The trend of environmentally friendly products has influenced the toy world for some time. And this led manufacturers to many great toy innovations. Green toys must be products that do not harm the environment in any way. That toy also be able to teach our children how to protect natural resources, environment and our planets. Toy manufacturers are now finding better solutions to environmental awareness and they need more information about customer research. Based on the rationale, survey results and discussion above, we conclude that consumers' attitudes towards green products and their level of interest in the current environmental situation are very positive. Most importantly, we can prove the high consumer awareness of environmentally friendly plastic toys. Therefore, we propose green marketing activities for children's toy companies with the goal of transmitting positive energy on environmental protection to children through a life cycle story of product; children's toys are made of recycled plastic.

With regard to green marketing mix elements, firstly, the company should focus on their product. We suggest recycling, reuse of the product or part of it, reducing packaging, make products more durable, repairable, compostable, healthy and safer in shipment. Moreover, it can be seen that a successful green strategy depends upon a good communication which included a specific, real, and useful environmental claims that might have greater effectiveness than vague messages; since it is very important to educate and inform consumers. So, the most essential part of our recommended marketing activities is the promotion; which is to convey the message and educate values, positive energy on environmental protection for children through a story about recycled plastic toy products. This might delight green consumers with green products and gain a competitive edge by applying green values and benefits by dominating the market, managing demand for sustainable products in the process and address environmental priorities. In the short and medium term, the company needs to reach its target customers, raise brand awareness for children's toys as

a high-class product line using 100% recycled plastic materials for Vietnamese citizens by using targeting green marketing strategy. In the long term, the company could develop a national business strategy by expand a multinational market for plastic children's toys and establish a distribution and marketing system in Vietnam by using segmentation green marketing strategy. The most important part is the position of this brand in the heart of the target audience and become the leading recognized brand in the line of environmentally friendly children's toys, which do not contain toxic metals; this only can be done by using positioning and differentiation green marketing strategy. But this story does not stop here, it is just the beginning, opening a new era for future preschools. Children will be educated about plastic and inspire them to care about the future of our beautiful planet.

Towards the goal of sustainable development, green consumption of households is becoming more and more popular in Vietnam. This is clearly shown in the Green Growth Strategy 2011 - 2020 and Vietnam's vision to 2050 of Vietnam Prime Minister, Decision No. 432 / QD-TTg dated 12/4/2012; with a focus on greening production; reduce the intensity of greenhouse gas emissions per unit of GDP and increase the rate of using renewable energy; greening lifestyles and sustainable consumption. Local authorities need to actively communicate to help people become aware of the dangers of environmental issues. It can be seen that, Vietnam currently ranks number 4th in the world in terms of the total amount of plastic waste produced annually, so the appearance of eco-friendly children's toys in the Vietnamese market with the desire to contribute a small part by bringing customers high-quality children's products, safe for children and completely does not harmful for the environment.

Although there are certain limitations of the survey structure, the sample size as well as the limited knowledge of the author, this study can be applied in assessing the importance of children's toys which are environmentally friendly products in Ho Chi Minh City, Vietnam. Also, children's toy companies could apply our green marketing activities to become the leading recognized brand in the line of environmentally friendly product. Future research can investigate more to find the effective integrated marketing communication programs and factors that influence the attitudes of green consumers with environmental concerns. This allows in-depth analysis, and most importantly, rather than simply reporting past achievements, forward-looking insights can create the potential for green marketing activities of children's toy companies.

#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

#### AUTHOR CONTRIBUTIONS

There is only one author for this work.

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