Green Consumerism and Ecological Packaging

Authors-

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Abstract

In the rapidly urbanizing world of emerging countries, environmental conservation is increasingly becoming a part of a larger agenda. So, this paper experimentally explores Indian consumers' attitudes towards the environment in general. A user perspective test was used to test the effects of packaging appearance and a better eco-label on consumers' responses. We demonstrate that having a high ecolabel score has a beneficial impact on the perceived sustainability of both sustainable and traditional packages, as well as choice intentions. Both quantitative and qualitative methods were used in the paper to segregate the high, neutral, and low concern groups and interview people to understand the packaging-related aspects respectively. Research shows that the majority of the respondents have a positive attitude towards the environment. This research will help the Indian government in developing effective environmental policies necessary for long-term sustainability. Furthermore, businesses will gain insight into how to identify green consumers in India. Designers can also use the findings of this article to positively affect how sustainable packaging is evaluated and chosen.

Keywords - Ecological, Eco-label, Sustainable packaging, Green consumerism, environmental conservation.

Introduction

Consumers have become more aware of environmental and social products in recent years as a result of increased education and exposure to environmentally friendly products. Consumer awareness of natural resource extinction and depletion due to idle activities has broadened the scope of environmental protection, consumption patterns, and procurement activities (Sharma & Iyer, 2012). Green consumers are those who are concerned about the environmental impact of their purchasing habits but are unwilling to change their purchasing habits (Ritter et al., 2015). Green consumers, according to Euromonitor (2008), are individuals who buy a product that has a low environmental impact on a regular basis.

These buyers may be interested in environmentally friendly product lines or companies that engage in fair trade or environmental practises. Furthermore, Nik Abdul Rashid et al. (2009) state that the purpose of purchasing raw materials is based on the likelihood and willingness of a person who prefers to acquire products with environmental features over non-green products in his purchasing decisions. In the contemporary environment of green marketing research, green consumers' decision to buy raw products has become a major topic.

The consumer's desire to support environmentally friendly companies (Laroche et al., 2001), who perform purchasing activities (Mishra & Sharma, 2010), who use a continuous use pattern (Young et al., 2010), and who are willing to spend more money to obtain products can all influence their purchasing decisions. Increased environmental consciousness and green purchase practises have emphasised the crucial need for consumer research in this expanding sector, according to Hasan and Ali (2015). Growing consumer knowledge of



environmental issues has resulted in a shift in usage patterns toward more environmentally friendly products and services (Yang, 2017).

As consumers become more conscious of environmental issues, they are more likely to purchase raw materials (Sinha, n.d). Furthermore, past research has shown that consumers are more likely to buy environmentally friendly items due to their environmental and social benefits, and are prepared to pay extra for sustainable products (Sinha, n.d). Raw materials are purchased by consumers to reduce negative environmental consequences by conserving natural resources, lowering energy consumption and waste, and increasing health and safety (Chan, 2001). Eco-friendly items include those with minimal or no packaging, those created from natural substances, and those that do not pollute the environment (Sinha, n.d.). To protect natural resources and ensure long-term growth, green technology and raw materials must be promoted (Yusuf and Fatima, 2015).

Green or environmentally friendly items are those that have a low environmental impact, are recyclable, and can be reused (IFIC (International Food Information Council), 2002). According to Albino et al. (2009), a green product is one that is designed to have the least amount of environmental impact over its whole life cycle, from raw material acquisition to distribution to purchase and post-purchase activities. Non-renewable resource consumption is reduced, harmful materials are avoided, and renewable resources are used in accordance with their replenishment rate. Environmental concern and brand awareness are considered to be two important elements that impact consumers' willingness to buy green items (Wheeler et al., 2014).

Packaging provides numerous operational advantages in terms of product protection and transit efficiency. Consumers utilise packaging to test items and products, especially in the case of fast-moving consumer goods, in addition to these practical benefits (Bloch, 1995; Garber, Burke, & Jones, 2000; Hertenstein, Platt, & Veryzer, 2005; Orth & Malkewitz, 2008; Rettie & Brewer, 2000; Schoormans & Robben, 1997). The worst part about packaging is that it is frequently discarded after a product has been used, increasing its environmental impact. Using organically constructed containers is another approach to lessen this natural weight.

Ecological design (Boks & Stevels, 2007; Esslinger, 2011) is a dynamic term that refers to a design that supports sustainable efficiency and the environment. It is especially relevant in circumstances where actual use patterns are uncontrollable (Koenig-Lewis, Palmer)

As consumers become increasingly concerned about environmental issues, introducing sustainable packaging appears to be a realistic business approach (Olsen, Slotegraaf, & Chandulala, 2014). For instance, 96% of European citizens agree that businesses should do more to reduce plastic waste and improve recycling (European Commission, 2014). Furthermore, Tobler, Visschers, and Siegrist (2011) discovered that consumers believed that eliminating excessive packaging had a substantial impact on the environment when it came to natural food consumption.

Based on the foregoing, we believe that consumer reviews of biological packaging and their environs incorporating objects that testify to their inherent friendliness would be quite beneficial. Different design features, such as colour, shape, and materials, have been demonstrated to affect consumer testing in a variety of ways, according to studies. For example, the usage of a specific form can boost product visibility while also assisting with product categorisation (Schoormans & Robben, 1997). Product information may suffer as a result of new natural package designs. The bundle must also be classified as reliable by the purchasers in order to have a favourable impact on the purpose of the purchase.

As a result, positive attitudes emerge (Carrus, Passfaro, & Bonnes, 2008; Ellen, 1994; Fraj & Martinez, 2006; Kilbourne & Pickett, 2008; Koenig-Lewis et al., 2014; Meneses, 2010). It is necessary to have a thorough understanding of how consumers test natural packages in order to persuade them to buy sustainable packages. This article looks at how customers perceive and trust the aspects of a particular environmental package, as well as how these characteristics influence the purchase's purpose. Consumer testing of package materials when visual and verbal components exhibit resilience is the topic of preliminary research. In this study, we take into account consumers' environmental concerns and show how they influence attitudes that influence buying decisions.

Literature review

Governments, the media, and environmental activists put ongoing pressure on marketers to care for the environment and incorporate environmentally friendly aspects into their products, as well as minimise environmentally damaging ones (Jain and Kaur, 2004). As a result, it has become critical for marketers to manufacture and advertise green products as effectively as possible. Green products are those that are energy efficient, recyclable, environmentally friendly packaging, non-toxic materials, biodegradability, and so on (Mangun and Thurston, 2002; Bearse et al., 2009; Chen & Chang, 2013).

Throughout their entire life cycle, these items are intended to be designed and manufactured using energy-efficient techniques and processes that use less physical resources (Dangelico and Pontrandolfo, 2010; Massawe and Geiser, 2012). Due to a lack of economies of scale and the sluggish adoption of cutting-edge green technology, green products are currently pricey. As a result, there is a pressing need to uncover characteristics that impact consumers' willingness to pay a premium for environmentally friendly items.

Researchers from all across the world have looked into the subject from diverse angles. A number of studies have been conducted and explored the relationship between demographics (mainly gender, age, education, and income), environmental variables (environmental concern, eco-literacy, perceive environmental responsibility, and so on) and non-environmental (interpersonal influence, religiosity, collectivism, and individualism) variables since the 1970s (when the term environmental marketing was first used) (Laroche et al., 2001; Rice, 2006; Lee, 2008; Lee, 2009, Cheah and Phau, 2011; Awad, 2011).

Researchers have been attempting to pinpoint the antecedents of the green attitude (Laroche et al., 2001; Cheah and Phau, 2011). Some academics look at the impact of green marketing tactics including green labelling, green packaging, green branding, green advertising, and so on on consumer perceptions of green products (Juwaheer et al., 2012; Rahbar and Wahid, 2011; Mourad, 2012; Raska and Shaw. 2012; Nath et al, 2013). From the mid-1990s forward, a new study agenda evolved, focusing on broader and more conceptual challenges concerning marketing's physical sustainability (Peattie, 1999). During this new phase, academics concentrated on a broader range of concerns than had previously been considered (Chamorro et al, 2009).

Researchers have been studying customers' green attitudes and behaviour academically since the 1990s, providing managerial insights to green marketers to help them promote their green ideas and products more efficiently. Chamorro et al. (2009) examined the key characteristics of green marketing research articles published between 1993 and 2003.

The study found that around 26% of the research papers under review were theoretical in nature, while 74% were empirical studies; the most common data collection technique was the survey; the majority of the empirical studies were conducted at the national level or lower; the empirical studies used a wide range of



statistical techniques, with regression analysis and structural equation models being the most widely used, followed by descriptive statistics.

Packaging is an important factor to consider while reducing a product's environmental footprint (Magnier & Schoormans, 2015). We define packaging sustainability in this study as an endeavour to lessen a package's environmental footprint (Magnier, Schoormans & Mugge, 2016). Despite the fact that packaging has a significant environmental impact, it is unlikely to be phased out due to the numerous benefits it brings (e.g. conservation and preservation, transportability, improved usability of products). In order to meet the sustainability and circularity standards set forth by various governments, businesses and manufacturers must innovate in this area. At the same time, consumers frequently identify packaging as a significant environmental burden, and businesses must demonstrate their commitment to addressing this issue in order to remain competitive (Magnier & Crié, 2015).

As a result, designers must consider the practical features of packaging, as well as how to make it less harmful to the environment. Consumers must choose these sustainable packages to genuinely have a beneficial impact, hence it is critical to understand packaging sustainability from a consumer perspective. Indeed, modifications in packaging design must be carried out with caution, as it remains an important factor in the evaluation and purchase of fast-moving consumer goods (Jakupov & Kacalov, 2003).

Because most consumers are unfamiliar with sustainable packaging concepts and terminology, and because most consumers fail to make sustainable packaging choices when there is no explicit information about the package's environmental consequences (Rokka & Uusitalo, 2008), it is critical to communicate packaging environmental friendliness in a way that consumers can understand.

Magnier & Crié, 2015; Magnier & Schoormans, 2015; Steenis et al., 2017) have shown that the aesthetic appearance of a package has a considerable influence on customers' perceptions of packaging sustainability. Consumers must be able to make the correct classification in order to choose a sustainable package, specifically, is the package sustainable or not? Only when there are obvious indicators showing that the package is sustainable can consumers appropriately categorise it (Magnier & Schoormans, 2015). As a result, unless the box is given an ecological character, it is doubtful that a buyer will recognise a conventional-looking package as a sustainable package. Designers can give the box an eco-friendly feel by using recycled materials or including an eco-label (Magnier & Crié, 2015).

A package with a sustainable appearance is defined as one that is composed of organic materials and has a sustainable appearance (for example, packaging made of paper) (Lindh, Olsson & Williams, 2016). Consumers evaluate packaging sustainability based on material look, and organic materials with a cardboard-like appearance are frequently deemed the most sustainable, according to research (Magnier & Schoormans, 2015). However, not all environmentally friendly packages are clearly identifiable. Some packages are designed to be environmentally friendly, but their physical look makes it impossible to tell. Packaging constructed of recycled plastic or packaging with less plastic due to advances in gas injection are examples of environmentally friendly packaging with a traditional appearance (Magnier & Schoormans, 2015).

Many studies have looked at the impact of eco-labels on package sustainability perceptions (Magnier & Crié, 2015; Bickard & Ruth, 2012; Magnier & Schoormans, 2015; Rettie & Brewer, 2000; Obermiller & Spangenberg, 1998; Thgersen & Nielsen, 2016; Van Dam & De Jonge, 2015). Packaging sustainability is not solely determined by its look. When package sustainability is not readily apparent, graphical and informational cues, such as eco-labels, can assist customers in recognising it (Rettie & Brewer, 2000; Magnier & Crié, 2015). Consumers, on the other hand, are frequently dubious of eco-labels. According to Thgersen and Nielsen



(2016), eco-labels that use a traffic light system and objective numerical information appear to improve customer comprehension and acceptability.

Furthermore, higher quality and, as a result, a higher price are frequently related with package sustainability (Magnier & Crié, 2015; Magnier, Schoormans & Mugge, 2016). As a result, we anticipate that the sustainable and unconventional packaging will be seen as more expensive than traditional packaging. Consumers, on the other hand, are willing to pay a greater price for products that feature sustainable information because they feel that higher production costs are linked to sustainability initiatives (Meise, Rudolph, Kenning, & Phillips, 2014).

As a result, we assume that a high score on an eco-label that allows comparison between packages will have a positive impact on the perceived expensiveness of packages. When just considering the packaging's sustainable appearance, consumers may face trade-offs between enhanced perceived packaging sustainability on the one hand and lower perceived usability on the other (Magnier & Schoormans, 2017). (Mugge & Schoormans, 2012; Mugge & Dahl, 2013). we expect no substantial change in purchase intention between the sustainable and traditional bundles.

The package design provides consumers about the product category, product quality, or product personality from a holistic approach (Orth & Malkewitz, 2008). A graphical approach to analysis methodologies demonstrates how various design aspects (such as colour, shape, size, images, logos, and claims) impact consumer reactions (Schoormans & Robben, 1997; Cooper & Kleinschmidt, 1987; Hoegg & Alba, 2011; Silayoi & Speece, 2004; 2007). This last strategy, in particular, isolates package components in a variety of ways. Although Underwood (2003) divides them into specific categories (colour, typing, shapes, and images) and structural elements (e.g., type, container size, materials), Sililai and Speece (2004; 2007) propose two: package viewing elements (e.g., graphics, colour, shape, and size) and information package viewing elements (e.g., graphics, colour, shape, and size) (information provided and technology). Rettie and Brewer (2000) propose a slightly different classification of word package features (e.g., claims and descriptions) and visuals (e.g., appearance, images). We stick to this category since customer responses have been reported to be influenced by both visual and verbal packaging signals (Kauppinen-Rais, 2014; Naylor, Droms, & Haws, 2009; Orth & Malkewitz, 2008; Wansink, Sonka, & Hasler, 2004). Consumers pay attention to visual symptoms first, which is why they are critical for attracting attention and identifying the following products (Rettie & Brewer, 2000; Schoormans & Robben, 1997).

OBJECTIVE OF THE STUDY

The rise in environmental consciousness has had a significant impact on consumer behaviour, with the green product sector rapidly rising. Consumers in the United States and Western Europe are becoming more ecologically conscious in terms of their personal habits and lifestyles, according to evidence (Shamdasani et al., 1993; Ottman, 1998). In India, consumers' environmental concern has received very little attention. Measures developed in Western countries have not been validated, particularly in India, a country with several environmental issues and a growing awareness of the need of becoming green among its citizens (Rice, 2006; Tantawi et al., 2006a; b; Mostafa, 2007a; b). According to several academics, the most important determinant of consumers' green consciousness is their attitude toward the environment (Bohlen et al., 1993; Bohlen, 1994;

Rannikko, 1996; Schlegelmilch et al., 1996). As a result, this study experimentally explores Indian consumers' attitudes about the environment in general, i.e., customers' concern about environmental quality.

- 1. To understand consumers buying intention with respect to green products
- 2. To determine whether sustainable packaging has any influence on the consumer purchasing behaviour
- 3. To study the role of eco packaging promoting sustainability

Hypothesis- The environmental conscious individual will have a positive attitude towards perceived sustainable packaging

Null Hypothesis- Environmental conscious consumers will have a neutral attitude towards perceived sustainable packaging

Methodology

A large-scale structured survey was randomly disseminated among Indian consumers for this study. To establish the scale's reliability and allow for final changes, a pilot test with 65 participants was conducted. In this investigation, stratified random sampling was performed. It combines the benefits of both random and probability samplings. Random sampling ensures that each sampling unit in a clearly defined population has an equal probability of being included in the sample. Probability sampling is mostly employed in quantitative studies with the goal of obtaining representativeness. The attitude scale (see appendix) is made up of 38 fivepoint likert phrases that try to capture respondents' concerns about environmental quality (1="Strongly disagree," 5="Strongly agree"). The thirty-eight attitude statements include: Thirteen statements were chosen from the attitude scales of Bohlen et al. (1993) and Bohlen (1994) and were found to be highly reliable and valid; one statement was chosen from Dunlap et al. (2000)'s New Environmental Paradigm Scale (NEP); and twenty-four statements were derived from Tantawi et al. (2006a; 2006bqualitative)'s studies and explore Indian consumers' green consciousness. The Scale's Reliability The constancy of a concept's measure is referred to as reliability (Bryman, 2004). It shows how immune a scale is to random mistake (Pallant, 2001). The attitude scale's dependability was examined, yielding a Cronbach's alpha of 0.809. "The figure 0.80 is frequently used," according to Bryman (2004, p.72). "The figure 0.80 is typically employed as a rule of thumb to denote an acceptable level of internal reliability".

Table 1

Number of Scale Items	Cronbach's alpha
38	0.809

Table 2 illustrates the demographic profile of the sample. It can be noticed that female samples are more than male samples. Age is constituted by: youth who represent 78% of the sample. Respondents with high educational level (university graduate, post graduate or professional degree) represent 85% of the sample.

Table 2

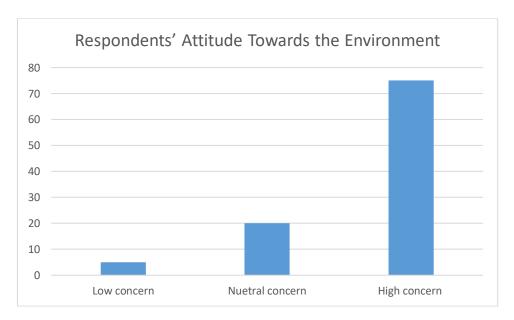
Demographics	Classification	Score	Percent
Age	18-24	50	78%
	25-34	9	14%
	Above 35	6	8%
Gender	Male	25	37%
	Female	40	63%
Educational Level	Post graduate Student	55	85%
	Working Professional	10	15%

Figure 1 shows that the majority of respondents have a positive attitude towards the environment i.e., they have a high level of concern about quality of the environment. They represent 75% of the sample. Respondents who do not show a positive or a negative attitude towards the environment represent 20%. However, those who have low or almost no concern about the quality of the environment are only 5% of the sample.

Table 3

Level of Concern	Score	Percent	
Low concern	130 and below	5%	
Neutral Concern	140 and below	20%	
High Concern	Above 140	75%	
Total	190	100%	

Figure 1



Hence, Indian consumers have a positive attitude toward their environment (which ranges from medium to high degrees of care). They are concerned about the environment's quality.

The primary goal of this study is to acquire a better understanding of consumer perceptions of sustainable packaging in order to determine the current state of affairs. To obtain greater information, it will be necessary



to determine which features consumers use to differentiate different packaging in general, as well as which attributes are significant for the perception of sustainability. Also, how do customers view the long-term viability of various packaging options? Which packaging benefits are most essential when evaluating products, and how important is sustainability for consumers?

In this study, a purposive sample strategy was used (Patton, 2002b). Both genders were represented in the sample. The following were the selection criteria: (1) persons who are concerned about environmental quality.

In this study, the interviews lasted 20 to 30 minutes. Because of the tiny sample size, the interviews were kept anonymous, with just the gender and age range disclosed. The vast majority of in-depth interviews were conducted in an unstructured manner, with open-ended inquiries (S. J. Taylor & Bogdan, 1998). They were versatile, dynamic, and non-directive, with the capacity to switch up queries and go deeper when needed (Robson, 1993). In-depth interviews should resemble a conversation between equals, allowing for an open and honest debate even when the topic is contentious, much like a casual conversation between friends or acquaintances (Anastas, 1988; S. J. Taylor & Bogdan, 1998).

Green Washing and Perception Trust

Greenwashing has eroded customer faith in most forms of green marketing, including eco labelling (Aji & Bayu, 2015). The findings of this study demonstrate consumers' scepticism about eco-labels. Participants also want eco-labels to identify eco-friendly products because they want to be eco-friendly but are sceptical of the current standards. Many of the participants expressed their belief that the sustainability designations were not genuine and were being used as a business scheme by corporations. Participants revealed their feelings of being a marketing victim. Much of this can be attributed to greenwashing, which has eroded consumer trust and led them to believe that the primary objective is to profit from the green movement.

Because of this widespread conception of eco-labels as a kind of marketing, many participants defined ecolabels in these terms. This creates a tough scenario for businesses that have true sustainability goals for their brand and may be overlooked as a result of this misunderstanding.

"It's not always easy to understand what Eco Labels mean. So, like you might see it has like a certain "Oh, this is eco-friendly" Or this is you know environmentally friendly. Like, is it from the way you make your product, or you ship it?" (Female 25 years)

"You can't really trust these because I feel like half of them just don't mean anything" (Male 24 years)

Packaging is strongly associated with the product itself

The overall qualities of a package can highlight a product's individuality and originality. Product attributes that are represented in its packaging have an impact on quality; for example, if the box conveys high quality, the product will be assessed to be of good quality as well. The same can be said for the inverse. Simply put, packaging communicates a product's favourable or unfavourable inferred connotation (Silayoi & Speece, 2004). As a result, it's no surprise that numerous research have been conducted on customers' perceptions of general packaging.

According to a study conducted by Ampuero and Vila (2006) on consumers' perceptions of packaging in general, distinct graphical components (colour, font, form, and illustration) are connected with varied product

positioning. Magnier and Crié (2015) claim that colour can influence taste perceptions and judgments, product evaluation, purchase intention, customer beliefs, and attitudes in their article. Red packaging is connected with safe and reliable items, according to Ampuero and Vila (2006). Certain colours will be associated with distinct product categories by consumers (Grossman & Wisenblit, 1999).

"Packaging of the product attracts me the most since I look for aesthetic appeal in any product which I am buying." (Male, 22 years)

Consumer Perception and Package Sizing

Consumers assess packaging's sustainability mostly based on its material and returnability, however they only consider trash after consumption and neglect production's environmental effects (Van Dam 1996). When it comes to packaging materials, van Dam's research shows that glass is the most environmentally friendly, followed by paper, and tin cans and cardboard drinking containers are in the middle. Despite the fact that plastic is widely regarded as the least environmentally friendly material, a deposit-based return scheme improves perceived environmental friendliness. Although smaller packaging is thought to be less environmentally friendly than larger packaging, there was no influence of size (Van Dam 1996). The exception is glass packaging, which is seen as equally sustainable in both large and small bottles.

According to the findings of the same study, standard-size packaging is considered to be more environmentally friendly than smaller portion-sized packaging. The size has an effect on product purchase as well (Magnier & Crié, 2015). There has been less research on customers' perceptions of sustainable packaging, despite the fact that respondents prefer environmentally friendly package options to non-recyclable packaging (Rokka & Uusitalo, 2008). Consumers' environmental awareness and attitude are linked to eco-friendly beverage purchase and disposal decisions, according to Van Birgelen et al. (2009) and Koenig-Lewis et al. (2014).

"Yes, I do prefer eco-friendly products with package sizes that are easily recyclable" (Male, 24 years)

Price consideration on eco-friendly products

According to a new Accenture survey, more than half of consumers are prepared to pay more for sustainable products that can be reused or recycled. While customers are still primarily concerned with quality and affordability, the research revealed that 83 percent believe it is important or extremely important for companies to produce products that can be reused or recycled. Consumers across all regions, income levels, and categories are willing to spend more for green items, according to a Nielsen study.

More than 80% of consumers are willing to pay more for products from companies that care about society and the environment. Millennials (ages 22 to 35) and generation Z (ages 16 to 21) in developing countries, on the other hand, are willing to pay the greatest costs. Consumers frequently identify green marketing with terms such as phosphate-free, recyclable, reusable, ozone-friendly, and environmentally favourable.

"Since I have recently started earning, I don't mind paying extra money for eco-friendly products" (Female, 22 years)

"I am willing to pay more because eco-friendly products may also have a higher sticker price, but I will definitely look at them because they last longer, so quality is a must to consider. It is an investment that will pay off" (Male, 26 years)

Discussion & Conclusions

The goal of this study was to learn more about how customers feel about sustainable packaging. According to the findings, respondents differentiate packaging based on convenience and ease of use, container type, and sustainability. Further investigation into the sustainability traits reveals that environmental friendliness is the most important theme, followed by packaging amount, recyclability, re-usability, and biodegradability.

According to the findings, customers value sustainability, since it was the third most mentioned theme, after packaging type and convenience and usage (Steptoe et al., 1995). Future studies should play with with colours to see how they affect people's perceptions of sustainability. The consequences of this paper are obvious. Consumer perceptions of sustainability 24 provide manufacturers with information that allows them to build products that better fulfil the needs of their customers, thereby giving them a competitive advantage.

Consumers' reactions to the package's visual look and verbal sustainability promises are influenced by their level of environmental concern, according to the findings of this initial study. The importance of these visual and verbal features on emotional attitude and purchase intention of eco-designed packaging is next discussed. The most important finding is that consumers with LEC have a worse opinion of a traditional-looking product with a spoken sustainability claim. Some customers may misinterpret ecological verbal claims as a form of greenwashing, especially if the claims do not match the package's aesthetic look. The few research on greenwashing demonstrates that talking about the environment, in particular, can harm brands.

When brands try to persuade clients that their actions are sustainable when they aren't, they are known as "green talking" (Walker & Wan, 2012). This notion summarizes customers' subjective views regarding a brand's moral inclinations toward society and tries to explain consumers' perceptions of a company's morality. Indeed, green talking is unethical, and customers have been shown to perceive firms that participate in unethical activity adversely. Consumers, on the other hand, tend to reward brands that behave ethically (Du, Bhattacharya, & Sen, 2007; Trudel & Cotte, 2009). In conclusion, we believe that the effect of the visual appearance, the verbal sustainability promise, and EC on purchase intention will be mediated by inferences about brand ethicality based on package perception.

The findings also found that when the ecological verbal sustainability claim was consistent with the package's visual look, both LEC and HEC consumers were more positive. There was a significant difference between the two types of consumers when the visual appearance and verbal sustainability claim were incompatible. When presented with incongruent verbal and visual information, HEC consumers were overall more positive when there was a verbal sustainability claim, even if it was presented on a conventional looking package, whereas LEC consumers were clearly less positive when presented with incongruent verbal and visual information.

In this context, the persuasion knowledge model (Friestad & Wright, 1994) appears to be particularly relevant, as our findings confirm that LEC consumers are more sceptical of companies' environmental claims than HEC consumers (Bickart & Ruth, 2012; Chang, 2011), and that inconsistency between the verbal sustainability claim and visual appearance leads to a decrease in affective attitudes toward the package and behavioral intention (Bickart & Ruth, 2012). These findings are important for eco-innovation development efforts because they show that modifying the levels of analytical factors available to consumers can influence the evaluation of affective sentiments toward an eco-designed alternative, as well as brand ethicality in general.



We found that people who have a strong opinion on a topic are more likely to believe information that supports that opinion. In our study, HEC consumers evaluated the visual appearance and verbal sustainability claim as ecological whether they were congruent or not, but LEC customers tended to downgrade packages with contradicting visual and verbal information. We believe that companies who engage in greenwashing by making false environmental claims on their packaging will be perceived as having low ethical brands, and that this will reduce purchase intent. The findings reveal that the positive and negative effects of combining visual and verbal ecological aspects have a strong relationship with brand ethicality, which influences purchase intention.

In other words, brand ethicality served as a mediator between visual appearance, verbal sustainability claims, and EC on the one hand, and purchase intention on the other. This study offers marketers, package managers, and designers valuable insight into how customers react to environmentally friendly packaging. First and foremost, marketers and packaging managers should be extremely clear about their target audience in their briefs, as the impact of ecological design components on consumer preferences is highly dependent on the level of environmental care.

"I don't think I feel pressure, but I think I feel it like a personal responsibility. That's why I feel so responsible. Like maybe like again and everything plays a role" (Female 25 years)

To date, firms have relied more heavily on textual content to communicate the environmental friendliness of their packaging. This is most likely due to the fact that a significant change in the visual look of a package tends to impact opinions of the company's positioning. The findings suggest that when an option has an ecological visual aspect and is backed up by an environmental textual assertion, both HEC and LEC customers are more likely to believe and prefer it. A tailored strategy, on the other hand, may be an intriguing alternative for organisations who do not want to significantly modify the aesthetic appearance of their package. Because HEC customers are more inclined to believe and prefer options that display a verbal assertion, even if the visual appearance is typical, such a technique is effective.

When marketing to LECs, however, packages without an environmental claim may be even more effective, as inconsistency between visual appearance and spoken content appears to reduce emotional and conative reactions. In other words, this mix of package features appears to be harming the brand and the product. To offset this negative effect, actual proofs of arguments should be stressed, and a pre-test should be conducted to guarantee that such aspects are credible.

This research has significant managerial implications since it informs decision-makers and marketing managers about the factors that influence a customer's long-term behaviour. According to research, there are two motivational elements that can impact the decision to buy ecological packaging: saving money by recycling and safeguarding the environment. The expensive cost of eco-packaging, as well as a lack of information on the benefits of using it, are cited as reasons for not buying it. As a result, one of the most important implications of this research is the need to educate customers about the long-term benefits of using eco-packaging.

Managers must understand what benefits and barriers consumers see when selecting green packaging in order to design strategies for shifting consumer behaviour toward sustainability. Companies must take the following steps in order to change the Indian consumer's mindset and behaviour:

• Educating the public about the environmental implications of ecological packaging through public awareness initiatives that educate consumers and encourage eco-friendly consumption patterns;



• Product information based on labelling schemes ("eco-labeling") to assist consumers by providing facts on product and packaging environmental performance and to encourage them to purchase environmentally friendly items.

"I find this is a helpful guide because I always like to look for eco-labels. I like to buy things that I can recycle. It's a guide" (Female, 23 years)

The information that customers expect to read and that would inspire their belief in recycling the packaging relates to the efficient use of source materials in packaging manufacturing, as well as the consumer's health and safety. According to Sharma, companies can approach their green communication campaigns in three ways: at the start of educational communication, the focus should be on the content, then on environmental concerns, then on the fact that firms modified production procedures to promote a green lifestyle, and finally on the fact that communication indicates the image of an environmentally responsible firm.

Consumers' willingness to utilize durable packaging can be influenced by proper content and communication that aims to modify their attitudes about sustainability and affect their purchase decisions. Consumer knowledge, which is related to market maturity, but also cultural values that this study did not investigate, influences how this information is received and understood. Another hurdle identified by the study is low customer money, which prevents them from paying more for organically packaged items.

"I would like to be eco-friendly, but I don't know if I'm willing to pay 30% more 50% more for product" (Female, 24 years)

Companies might offer financial incentives to customers who purchase items packaged in organic packaging to encourage them to do so. The study examines customers' perceptions of environmentally friendly packaging, as well as the factors that influence the purchase of packaged goods in organic packaging, as well as possible explanations for the inconsistencies in green purchasing behaviour.

Furthermore, because it is based on the findings of numerous earlier investigations, it provides a synthesis of existing literature. Based on our findings, researchers can build a platform for additional in-depth research into consumer sustainable behaviour with respect to organic packaging. Studies involving product and package perceptions are problematic from the standpoint of limits since each respondent can feel the difference, and their emotions can impact their responses. Finally, the limited sample size is a limitation.

References

Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Behaviour. Englewood Cliffs. NJ: Prentice Hall.

Azzone, G., & Bertele, U. (1994). Exploiting Green Strategies for Competitive Advantage. Long Range Planning, 27(6), 69-81.

Amos, C.; Pentina, I.; Hawkins, T.G.; Davis, N. "Natural" labeling and consumers' sentimental pastoral notion. J. Prod. Brand Manag. 2014, 23, 268–281

- Bohlen, G. M., M. (1994). Environmental Consciousness: The Construct and Its Application in an Industrial Setting. Swansea: A dissertation submitted to European Business Management School, University of Wales.
- Bohlen, G., Schlegelmilch, B.B., & Diamantopoulos, A. (1993). Measuring Ecological Concern: A Multi-Construct Perspective. Journal of Marketing Management, 9, 415-430.
- Charter, M., & Polonsky, M. (1999). Greener Marketing: A Global Perspective on Greening Marketing Practice. Sheffield: Greenleaf.
- Clark, C. F., Kotchen, M. J., & Moore, M. R. (2003). Internal and External Influences on Pro-Environmental Behaviour: Participation in A Green Electricity Program. Journal of Environmental Psychology, 23, 237-246.
- Cherian, J. and Jacob, J. 2012. Green marketing: A study of consumers' attitude towards environment friendly products. Asian Social Science, 8(12): 117-126.
- Demirel, P., Kesidou, E. (2019). Sustainability-oriented capabilities for eco-innovations: Meeting the regularlatory, technology, and market demands. Bus Strat Env, 28, 847-857. Doi: https://doi.org/10.1002/bse.2286
- Ethan, P., Lindsay, M., Noseworthy, T. (2017). Isolated environmental cues and product efficacy penalties: The color green and eco-labels. Journal of Business Ethics, 143(1), 159-177. doi:10.1007/s10551-015-2764-4
- Green, T., & Peloza, J. (2014). Finding the Right Shade of Green: The Effect of Advertising Appeal Type on Environmentally Friendly Consumption. Journal of Advertising,43(2), 128-141. doi:10.1080/00913367.2013.834805
- Grimmer, M., Woodley, M. (2014). Green marketing messages and consumers' purchase intentions: Promoting personal versus environmental benefits. Journal of Marketing Communications, 20(4), 231-250. doi:10.1080/13527266.2012.684065
- Grimmer, M., & Woolley, M. (2012). Green marketing messages and consumers' purchase intentions: Promoting personal versus environmental benefits. Journal of Marketing Communications, 1-20.
- Gupta, S., & Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. Journal of Consumer Marketing, 26(6), 376-391.
- Hamid, S. A. R., Ghafoor, H. A., & Shah, T. Z. (2012). Analysis of attitude towards green purchase: Pakistan in context. International lournal of business and social science, 3(6), 112-115.
- Hasan, D., Akif, S., Subhani, M. I., & Osman, M. (2012). The crux of green marketing: an empirical effusive study. European Journal of Social Sciences, 27 (3), 425-435.

- Hekkert, P., Snelders, D. and Van Wieringen, P. C. (2003), "Most advanced, yet acceptable': Typicality and novelty as joint predictors of aesthetic preference in industrial design", British journal of Psychology, Vol. 94 No. 1, pp. 111–124.
- Kahle, L. R. and Gurel-Atay, E. (Eds.) (2013), Communicating sustainability for the green economy. ME Sharpe.
- Khachatryan, H.; Rihn, A.L.; Campbell, B.; Yue, C.; Hall, C.; Behe, B. Visual attention to eco-labels predicts consumer preferences for pollinator friendly plants. Sustainability 2017, 9, 1743.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. Journal of consumer marketing, 18(6), 503-520.
- Lee, K. (2008). Opportunities for green marketing: young consumers. Marketing intelligence & planning, 26(6), 573-586.
- Meise, J. N., Rudolph, T., Kenning, P. and Phillips, D. M. (2014), "Feed them facts: Value perceptions and consumer use of sustainability-related product information", Journal of Retailing and Consumer Services, Vol. 21 No. 4, pp. 510–519.
- Mugge, R. and Dahl, D. W. (2013), "Seeking the ideal level of design newness: Consumer response to radical and incremental product design", Journal of Product Innovation Management, Vol. 30, pp. 34–47.
- Magnier, L., & Crié, D. (2015). Communicating packaging eco-friendliness: an exploration of consumers' perceptions of eco-designed packaging. International Journal of Retail & Distribution Management, 43, 4-5.
- Mostafa, M. M. (2007a). Gender Differences in Egyptian Consumers' Green Purchase Behaviour: The Effects of Environmental Knowledge, Concern and Attitude. International Journal of Consumer studies, 31, 220-229.
- Mostafa, M. M. (2007b, May). A Hierarchical Analysis of the Green Consciousness of the Egyptian Consumer. Psychology and Marketing, 24(5), 445-473.
- Nordin, N., & Selke, S. (2010). Social aspect of sustainable packaging. Packaging Technology and Science, 23, 317-326.
- Ottman, J. A. (1998). Green Marketing: Opportunity for Innovation. 2nd ed., Chicago, IL: NTC Business Books.
- Ottman, J. A., Stafford, E. R., & Hartman, C. L. (2006, June). Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products. Environment: Science and Policy for Sustainable Development, 48(5), 22-36.
- Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. Business Strategy Series, 12(2), 73-83.
- Rettie, R. and Brewer, C. (2000), "The verbal and visual components of package design", Journal of product & brand management, Vol. 9 No. 1, pp. 56–70.

- Rokka, J. and Uusitalo, L. (2008), "Preference for green packaging in consumer product choises Do consumers care?", International Journal of Consumer Studies, Vol. 32, pp. 516–525.
- Rundh, B. (2005), "The multi-faceted dimension of packaging: marketing logistic or marketing tool?", British food journal, Vol. 107 No. 9, pp. 670–684.
- Rützler, H. and Reiter, W. (2014), BioFach Organic 3.0: Trend and potential analysis of the future of organics", Viena: Zukunftsinstitut Österreich GmbH
- Rogan, D., Piancentini, M., and Hopkinson, J. (2018). Intercultural household food tensions: a relational dialectics analysis. European Journal of Marketing, 52(12), 2289-2311. DOI: 10.1108/EJM-10-2017-0778
- Royne, M., Martinez, J., Oakley, J., Fox, A. (2012). The effectiveness of benefit type and price endings in green advertising. Journal of Advertising, 41(4), 85-102. doi:10.1080/00913367.2012.10672459
- Saxena, S. (2015). Are they really green: Flipping the second side of green marketing coin- A critical analysis using green selected cases? Amity Global Business Review, 10, 110-113, Retrieved from https://search-ebscohostcom.ezproxy.net.ucf.edu/login.aspx?direct=true&db=buh&AN=101518089&site=eds-live&scope=site
- Sustainable Packaging Coalition. (2011), Definition of sustainable packaging [online]. Available at: https://sustainablepackaging.org/wp-content/uploads/2017/09/Definition-of-SustainablePackaging.pdf (Accessed Mar. 2018).
- Thøgersen, J. and Nielsen, K. S. (2016), "A better carbon footprint label", Journal of Cleaner Production, Vol. 125, pp. 86–94.
- Tantawi, P., O'Shaughnessy, N., & Gad, K. (2006a, July 10-13). Exploring Environmental Consciousness among the Egyptian Consumers. Paris, France: paper presented at Academy of World Business, Marketing and Management Development Conference
- Van Dam, Y. K. and De Jonge, J. (2015), "The positive side of negative labelling", Journal of consumer policy, Vol. 38 No. 1, pp. 19–38.
- Widyastuti, S., Said, M., Siswono, S., Firmansyah. (2019). Consumer trust through green corporate image, green marketing strategy, and social responsibility: A case study. European Research Studies Journal, 22(2), 83-99. Retrieved from https://www.um.edu.mt/library/oar//handle/123456789/4300
- Yang, D., Lu, Y., Zhu, W., Su, C. (2015). Going green: How different advertising appeals impact green consumption behavior. Journal of Business Research, 68(12). 2663- 2675, doi:10.1016/j.jbusres.2015.04.004
- Young, W.; Hwang, K.; McDonald, S.; Oates, C.J. Sustainable consumption: Green consumer behaviour when purchasing products. Sustain. Dev. 2010, 18, 20–31.