

# GREEN MARKETING: MILLENNIALS' PERCEPTIONS OF ENVIRONMENTALLY FRIENDLY CONSUMER PACKAGED GOODS PRODUCTS

<sup>1</sup>NICHAYA SUNTORNPITHUG, <sup>2</sup>SUSAN KING INDIANA

University-Purdue University Fort Wayne & Hillsdale College  
E-mail: suntorrn@ipfw.edu&sking@hillsdale.edu

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**Abstract** - This research study sought to examine the influence of the traditional marketing variables, specifically those techniques used to communicate, directly or indirectly, the eco-friendliness of consumer packaged goods (CPG) products to millennials. Of particular interest are how perception and product cues are tied to purchase and how the attitudes of millennial consumers impact satisfaction for and purchases of eco-friendly consumer packaged goods. In addition, the study will discuss the interaction between the climatic/environmental effects of non-eco-friendly CPGs. The results will add to existing literature about the subject and provide direction to businesses interested in targeting pro-environment consumers.

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**Index Terms** - Green marketing, millennials, consumer packaged goods, strategy.

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## I. INTRODUCTION

As the Green Marketing movement has grown, so too have the green product innovations and die-hard green consumers. The millennial generation often claims an overwhelming desire to protect the planet, avoid harsh chemicals, and strive for better conditions for all. However, when they stand in the supermarket and are faced with a higher-priced organic product versus the store brand cheap version, do they really select organic because their green values are strong enough? Furthermore, are all green consumers motivated by such strong green values or do they only make these purchases because a green product is perceived as better or the price is low enough?

## II. LITERATURE REVIEW

### A. Green Marketing Movement

The Green Marketing movement has arisen out of an increasingly deteriorating environment, conservational attitudes and governmental programs, and the growth of the green consumer segment. Smith explores the foundation of the Green Marketing movement when she writes, "Concern for the environment has ancient roots. Guidelines for taking care of the natural environment can be traced to ancient literature, such as the Bible and Koran" (Smith, 438). In the 1960s, environmental issues became world known issues when there was much debate cropped up in the 1960s regarding the severity of the concerns as well as the prioritization of different occurrences (Morel et al., 7). Some concerns were focused on foods prepared using chemicals, insecticide use in farming, and a general focus on protecting the environment among many others (Smith, 440). As a result of the growing concern for the environment, US President Teddy Roosevelt brought environmentalism to the main stage while also leading the creation of many national parks throughout the first ten years of the 20th century (Smith, 438). Some of the major outcomes of this environmentalist

movement were the creation of the Federal Trade Commission and the Environmental Protection Agency.

The new push for conservation and environmental consciousness soon translated into the consumer goods market and affected the way that companies portrayed their products to consumers (Morel et al., 2). Consequently, as these concerns become more important to consumers in the purchase decision process, companies began to introduce Green Marketing as a competitive advantage that enhanced their overall brand image. Since then the market for these products has shown drastic growth. This market's growth is characterized by 458 new products in 2009 and is roughly three times larger than it was in 2008 (Morel et al., 2).

### B. Consumer Package Goods (CPG)

The consumer packaged goods (CPG) industry is on the rise in America and is valued at an estimated \$2 trillion ("Consumer Packaged Goods"). CPGs are used daily and replaced frequently and therefore go quickly from the store to the trash bin. While CPGs and the benefits that come with them are essential to the wellbeing of society, they also have high potential to harm the environment as well as human health. The excessive waste from CPGs fills landfills and oceans all across the world, harming the environment and endangering human health.

Millennials, individuals between the ages of 18 and 34 and are considered to be well educated, demographically diverse and well acquainted with technology (Hood, 2012), is forecasted to spend \$65 billion dollars on consumer packaged goods over the next decade" (Fromm, 2015). This cohort also makes up the majority of the everyday, household, green alternative products market (Vermillion and Peart, 2010).

Millennials appreciate companies that actively work to develop more sustainable methods of production and products that do less harm to the environment; i.e., green marketing. Thus, it is important for companies to target millennials since buying patterns established during these years establishes brand loyalty for these individuals for decades (Pride and Ferrell, 2016, p. 485). One study suggests that the better educated millennials have a heightened awareness of green/environmental benefits and therefore, create an opportunity for firms to embrace production and promotion of green products (Lu et al., 2013). In addition, by creating brands that are associated with sustainability, companies are likely to be able to charge higher price with sustainable brands (McKaskill, 2015).

### III. HYPOTHESES

This study was adapted, in part, from a similar study by Morel & Kwakye (2012) and Smith (2010). These models suggested that the four marketing mix variables, (4 Ps of product, price, place, promotion) along with other factors such as word of mouth and satisfaction, resulted in purchase decisions for environmentally friendly CPG products. Based on these prior studies and other literature review findings, the following hypotheses were formed and tested for this study:

One problem the CPG industry is facing today is the over-packaging of products in order to keep products safely shelved in stores and during transportation. In the US alone, 3.2 million tons of household waste comes from the packaging of CPGs ("Food Packaging Wastes and Environmental Impacts"). The most common materials used in packaging are paper, glass, aluminum, steel, plastic, and fiberboard ("Food Packaging Wastes and Environmental Impacts"). Many of the materials used to package and process CPGs, especially plastic, lead to excessive use of oil, contamination of Earth's oceans, and endangerment of animal and human health.

The methods and appearance of packaging can have an extremely significant impact on the promotion of green products. In a study regarding green packaging, "Almost 40% of the respondents consider a product's name or pictures of nature on the package as depicting the degree to which a product is environmentally friendly" (Smith, 443-4). Also contributing to the success of environmentally friendly packaging is printing the word "organic" on the package. It is shown that, "...the term 'organic' and organic labels have strong emotional resonance with consumers in terms of personal wellbeing and health and in the wider context of benefits to the environment" (Padel et al., 609). Furthermore, when shopping for environmentally products, "...52 percent [of consumers] claimed that they look for the word 'organic' on the label" (Padel et

al., 610). Still, there is still a definite need and request from consumers for more clearly identifiable symbols to simplify selecting environmentally friendly products. Therefore, we hypothesize that:

**H1:** Packaging is likely to play critical roles in creating consumer awareness and establishing consistent purchase intentions.

Although some of the problems with the Green Marketing movement persist and display themselves in the form of hindering promotion's success, there is still overwhelming evidence that the success and brand awareness for any company in the green product market rely heavily on their advertising campaign and word-of-mouth reach. Instances when consumers report purchasing a product solely due to the advertising is a testament to the value of green advertising. Some consumers even purchase products solely due to labels that ensure environmental safety or a biodegradable rating for the product (Morel et al., 48).

**H2:** Promotion is likely to play critical roles in creating consumer awareness and establishing consistent purchase intentions.

Word-of-mouth promotion has a dramatic impact on consumers in this segment as it helps them to develop trust with brands and products. This form of promotion is successful in convincing consumers, increasing chances of purchase, developing longer lasting attitudes, and initiating impulse purchases. The majority of consumers believe what they hear from word-of-mouth advertising. Word-of-Mouth involves a component of trust about the information of a product that is transmitted to a receiver and in turn helps them make a purchase while also solidifying the beliefs of the transmitter (Morel et al., 50). Word-of-Mouth promotion helps convince others to purchase green alternatives while also strengthening the beliefs of those spreading the promotions through their discussion of said alternatives. This form of promotion also greatly increases the chances that consumers will follow through with their purchase intentions as, "...80% of all of our buying decisions are influenced by someone's direct recommendations" (Morel et al., 50). As the recommendations of others establish strong purchase intentions, they also begin to develop a longer lasting attitude in consumers about the brands and products that they're purchasing. People are less likely to just read and forget advertising if their group regularly shares their opinions and thus cultivates different attitudes about those products (Morel et al., 50-1). The added benefits of word-of-mouth promotion don't stop with convincing consumers about certain products but can actually encourage them to go shopping to browse for items and make impulse purchases. A study shows that many people enjoy shopping for its own sake and this level of casual browsing can lead to product interest, knowledge, and further word-of-mouth promotion (Bloch et al., 119).

**H3:** Word-of-mouth is likely to play critical roles in creating consumer awareness and establishing consistent purchase intentions.

**IV. METHODOLOGY**

The study sought millennial responses to an online questionnaire focusing on green marketing initiatives. Rather than selecting participants representing the entire population, the participants for this study were selected on the basis of convenience sampling. This group represented a total study of the entire population (census) of an existing database of millennial individuals between the ages of 18 and 23. Specifically, the target group consisted of 1,403 students from a small private Midwestern college.

This college student base was chosen for several reasons. First, it provided a significantly large group fitting the defined demographic profile. Second, a Midwestern college provided a less biased group of cohorts than a group from either US coast which may tend to lean toward being more environmentally conscious. Third, this database was readily available to the research student.

The survey data were collected through Qualtrics, an online survey software site, utilizing a cover message including a link to the survey delivered to the recipients via their school email accounts. To encourage a high return of completed surveys, a \$5 Amazon gift card was offered to the first 50 respondents with a drawing for a \$50 Amazon gift card as the grand prize to all remaining respondents.

All emails were sent out in mid-March, 2017 to active email addresses along with a follow-up reminder email several days following the initial emailing. Of the 453 responses received (32 percent), 73 respondents failed the initial screening question and therefore skipped usage questions within the survey. In all, 380 (27 percent) surveys were considered fully complete and used in all analysis. This yielded a sample error of 5.14 percent.

All statistical analysis was performed using Microsoft Excel with the XL Data Analysis add-in feature and SPSS.

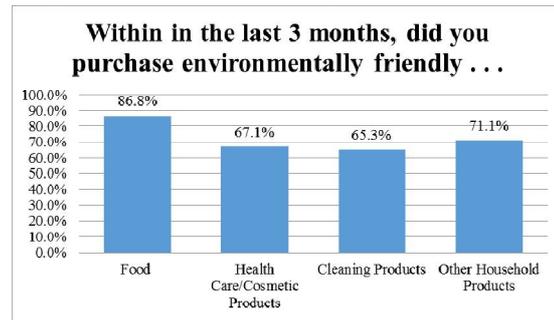
**V. RESULTS**

**A. Screening Question**

The survey began with a categorical (nominal), dual-choice question administered to determine if the respondents purchased environmentally friendly goods within the last 3 months. As such, this question was used as a screening question.

Data suggests 86.8 percent of respondents purchased environmentally friendly food CPG products. This compares to other health care/cosmetics (67.1 percent), cleaning CPG products (65.3 percent) and other household CPG products (71.1 percent). In all cases, more respondents had recently purchased

environmentally friendly CPG products from all listed categories than had not made purchases.



**Fig 1. Environmental Friendly Product CPG Purchase**

**B. Level of Satisfaction with the Purchases**

If responding they had made purchases within the last 3 months, respondents were then asked their level of satisfaction with those purchases. The food category had the best evaluation score with an average of 1.9 or “somewhat satisfied” followed by the other categories with slightly poorer evaluations (2.3 to 2.2) but still close to somewhat satisfied assessment. Overall, data suggests millennials appear to be somewhat satisfied or neutral with CPG products they believe to be environmentally friendly.

Average(s) Analysis Results - Question 2					
Variable	Average	Standard Deviation	Minimum	Maximum	Sample
Level of satisfaction with environmentally friendly product - Food	1.9	0.9	1	5	351
Level of satisfaction with environmentally friendly product - Health Care/Cosmetic CPG products	2.2	0.9	1	5	283
Level of satisfaction with environmentally friendly product - Cleaning CPG products	2.3	0.9	1	5	276
Level of satisfaction with environmentally friendly product - Other Household CPG products	2.3	1.0	1	5	308

Extremely satisfied (1) Somewhat satisfied (2) Neither satisfied nor dissatisfied (3) Somewhat dissatisfied (4) Extremely dissatisfied (5)

**Fig 2. Environmental Friendly Product CPG Purchase**

**C. Opinions Toward Environmentally Friendly Product They Had Purchased.**

A series of Likert (interval) questions was asked to discover respondent opinions toward environmentally friendly product they had purchased.

Respondents somewhat agreed with the statement that environmentally friendly purchases of CPG products makes them feel ecologically responsible and they are satisfied with the performance of environmentally friendly CPG products (2.3 on a 5-point scale). There was less agreement with the statement that purchasing environmentally friendly CPG products made the respondent feel trendy/fashionable (3.3 on a 5-point scale). Respondents somewhat disagreed with the

statement that purchasing environmentally friendly CPG products made them appear ecologically responsible to others (3.8 on a 5-point scale).

Average(s) Analysis Results					
Variable	Average	Standard Deviation	Minimum	Maximum	Sample
I am satisfied with the performance with most environmentally friendly CPG products I purchase	2.3	0.9	1	5	383
Purchasing environmentally friendly CPG products makes me feel like I'm being ecologically responsible	2.3	1.1	1	5	383
I feel trendy/fashionable when I purchase environmentally friendly CPG products	3.3	1.2	1	5	383
I purchase environmentally friendly CPG products because I want to appear ecologically responsible to other people	3.8	1.2	1	5	383

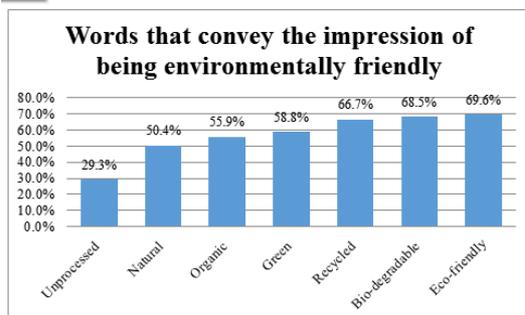
Strongly agree (1) Somewhat agree (2) Neither agree nor disagree (3) Somewhat disagree (4) Strongly disagree (5)

**Fig 3. Respondents' Opinion toward Environmental Friendly Product CPG Purchase**

This data suggests purchases of environmentally friendly CPG products have more of an impact on internal esteem than external affirmation.

**D. Terms that Conveyed Environmentally Friendly Impression**

When provided a list of possible “green” terms, respondents were asked to identify those that conveyed



an impression of being environmentally friendly (selecting all that applied).

Top responses included eco-friendly (69.6 percent), bio-degradable (68.5 percent), and recycled (66.7 percent). At only 29.3 percent, “unprocessed” was the lowest scoring term. Note there may be some bias in the eco-friendly term since a similar word was used in the actual question.

As a “select all that apply” question, percentage totals will equal more than 100 percent.

**E. Linear Multiple Regression Analysis**

A significant and positive relationship exists between level of satisfaction of CPG environmentally friendly products and attitudes, word of mouth, the 4 Ps, along with features which would increase the likelihood of purchase.

“Multiple regression analysis is appropriate when the

researcher has more than one independent variable that may predict the dependent variable under study. With multiple regression . . . there is a different slope for each independent variable, and the signs of the slopes can be mixed . . . Moreover, with standardized beta coefficients, you can gain understanding of the phenomenon as it is permissible to compare these to each other and to interpret the relative importance of the various independent variables with respect to the behavior of the dependent variable,” (Bush and Burns, 2012, p.339).

The R-square value is the squared correlation coefficient between the independent and dependent variable and ranges from 0 to 1. It is used to assess the degree of influence of the independent variables on the dependent variable. The closer R-squared is to 1, the stronger is the relationship.

The level of satisfaction for environmentally friendly food CPG products has a statistically significant positive relationship with supermarket availability, willingness to pay a price premium, the product is made by a brand/company trusted and the product is made from fresh, natural and/or organic ingredients. Overall, these variables explain 22 percent of the variability of the level of satisfaction with environmentally friendly food CPG products.

Linear Regression Analysis						
Results: Least Squares Method of Regression				Statistical values		
Dependent Variable	Total Cases			F	dReg	dTot
Level of satisfaction with environmentally friendly product - Health Care/Cosmetic CPG products	260			14.0	3	256
				0.00	0.14	0.82
Independent Variable(s)	Coefficient	Standardized	Significant?*	t	Sig	
If CPG products that use recycled materials, I am likely to tell others about them	0.14	0.18	Yes	2.9	0.004	
If the CPG products are made by a brand/company that I trust, I am likely to purchase	0.21	0.17	Yes	3.0	0.003	
Environmentally friendly CPG products have quality/performance as good as conventional CPG products	0.18	0.21	Yes	3.4	0.001	
Intercept	1.07		Yes	5.6	0.000	

\*95% level of confidence

**CONCLUSION**

Not surprisingly, the millennial respondents in this study had overwhelmingly purchased environmentally friendly CPG products from all listed categories within the last 3 month and were satisfied with these product purchases. Respondents seem to purchase environmentally friendly CPG products for internal esteem rather than external affirmation.

For those who had recently purchased, traditional advertising has the lowest level of influence (2.5 on a 5-point scale) while the brand’s reputation played a more important role in the perception of the product

being environmentally friendly. As far as product packaging or other promotional cues, the top three elements identified as conveying an environmentally friendly product were a simple package design, the use of a green colored package, and the recycling symbol. For conveying an environmentally friendly CPG product, packaging and/or promotional messaging should include the following terms if applicable: eco-friendly, bio-degradable, and recycled.

Overall, responses fell into the “neither likely nor unlikely” to promote CPG products through word of mouth suggesting this avenue may not be the most effective way respondents communicate environmentally friendly CPG products to others. Respondents had the strongest level of agreement (“somewhat agree”) was with the statement that environmentally friendly CPG products are healthier options (2.1 out of a 5-point scale). Other statements related to product performance (good taste/smell- 2.4, quality comparable to conventional CPG products- 2.5) scored similarly as did availability and promotion statements (2.3 and 2.4 respectively).

However overall, respondent results suggest a more neutral attitude toward promotional options for environmentally friendly CPG products relying more on the brand’s health/wellness reputation, product trust and “natural” ingredients to influence the likelihood of environmentally friendly CPG product purchase (1.8, 1.8 and 2.0 respectively on a 5-point scale).

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