**Easy Being Green?**

**The Effects of Environmental Marketing on Millennials Consumer Behavior**

By Elizabeth Dolan, Natalie McKeon, Sarah Mellon

Capstone Faculty Advisor: Bob Turner

Skidmore College Environmental Studies Department

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**ABSTRACT**

*Concern for the environment has been widespread among the Millennial Generation. However, the degree to which this ecological sentiment is translated into purchasing behavior is highly debated. A variety of studies have researched the use of eco-labels and their influence on purchasing behavior. The purpose of this study is to provide a brief review of how the environmentally conscious Millennial consumers responds to eco-labels in their purchasing behavior. A nationwide survey of 278 respondents was made to gather data, supplemented by 150 participant social experiment conducted at two academic institutions, and a 6 member focus group. Results indicate that ecologically conscious Millennial consumers struggle in their ability to identify and interpret eco-labels. More so, this population will be more likely to support green products that are associated with an strong, eco-friendly brand, indicated by clear and visually-appealing imagery.*

**INTRODUCTION**

As the effects of global climate change are becoming more widely felt and recognized, environmental considerations have become a major tenet of today’s popular culture since the “green revolution” of the late 20th century. Companies have begun to recognize an economic opportunity in appealing to a growing trend of political and social consumerism that has created a new consumer segment uniquely focused on their environmental impact. To target this growing consumer group, corporations have begun incorporating “eco-labeling” – displaying environmental certifications and environment-oriented messaging – into their marketing schemes and packaging designs as a means to reach a larger and more diverse consumer base.

Environmental marketing is used as a differentiation strategy to distinguish products that are more environmentally friendly from their competitors in the marketplace. Such schemes have the potential to both provide a competitive advantage for companies and to inform the public about the implications of their consumptive behaviors, leading individuals to align their purchasing behavior with prosocial norms in order to lessen the environmental impacts of individual consumer decisions. However, these marketing schemes are facing increasing scrutiny due to their lack of transparency and common misrepresentation of environmental commitment, creating confusion among consumers and provoking widespread mistrust surrounding the validity of green advertising claims.

Green marketing strategies are commonly designed to appeal to Millennials, a primary target consumer group for environmentally differentiated products. The Millennial Generation, consisting of individuals ages 18-24, has been identified as the population that cares the most about the environment, as a symptom of societal factors including their increased levels of education, technological dependency, and media exposure relative to previous generations. Studies suggest, however, that greater awareness does not necessarily lead to subsequent behavioral changes. Market-based inhibitors such as comfort, convenience, brand loyalty, and price may exert greater influence their choices than environmental considerations.

While research on Millennials’ attitudes and environmental consciousness is expanding, there is little data on the degree to which these attitudes are reflected in their consumer behavior. Existing literature on the degree to which attitudes are translated into behavior is a highly debated issue. Existing literature on this connection is highly polarized concerning Millennials’ true level of environmental commitment. This study presents an analysis of the factors that influence Millennials’ prioritization of the environment within their consumer behavior, assessing whether or not environmental marketing can promote environmentally friendly consumerism within this generation, and whether or not environmental differentiation is a viable strategy to achieve positive, environmentally-oriented behavioral changes.

**Green Consumerism and CSR: A New Market**

The mainstream environmental movement has embraced green consumerism as a cultivating tool for sustainable consumption. The growing allure of “green” products has allowed corporations to harness consumer-buying power through the use of marketing schemes that emphasize environmentally friendly aspects of their products. Despite popular opinion that businesses’ attention is limited to profit maximization, corporations are now a driving force in the green movement. As actors with the best knowledge about markets, products, inputs, production processes, capital, supply chains, and available technologies, corporations can, when properly incentivized, play an integral role in motivating consumers to achieve more sustainable purchasing behaviors (Turner, 2012).

The needs of business and society have become fundamentally intertwined, making Corporate Social Responsibility (CSR) an imperative component of successful business strategies in today’s market. Investing in green product development can improve companies’ reputations and increase the value of their brands. A 2007 global survey found CSR to be a leading indication that corporations can achieve environmental goals (Bonini, 2008). Whereas unilateral focus on profit maximization often requires business decisions that compromise critical social values, CSR considers the health of the environment and community it operates in to be fundamental to the health of the business (Porter, 2011). This reorientation of business strategies has allowed corporations to shape market opportunities by creating a new competitive advantage through environmental differentiation (Bonini, 2008).

Although businesses play a pivotal role in launching sustainable consumption into popular culture, many studies claim that there is nothing promising about green consumerism. Despite the expansion of green marketing techniques to grasp public attention, consumers are not responding by making parallel behavioral changes. Market based inhibitors such as convenience, brand loyalty, and price, which Millennials fail to relinquish, prevent behavioral adaptation.

Several important barriers to this transition include consumers’ general lack of awareness of environmental issues, negative perceptions and distrust surround environmental marketing mechanisms, high costs for environmentally friendly products relative to alternatives, and low availability of green consumer goods. In the past, companies have used green marketing as a means to capitalize upon consumers’ lack of awareness of existing environmental regulations. Companies would advertise environmental product features that were already mandated by law in an attempt to validate claims of environmental and social consciousness. In other instances, marketing would use strategic words and images to imply that a product was eco-friendly, when in fact these labels were entirely meaningless. “Green-washing” as a marketing tool allows companies to reap the benefits of environmental differentiation without making any operational changes, which not only misleads consumers but also serves to blur the line between these and legitimate labels. As a result of these inconsistencies, verified certifications and standards lose their meaning for consumers, creating the general distrust surrounding environmental marketing and labeling.

In addition, environmentally friendly products suffer from ineffective labeling schemes, creating a negative image surrounding the eco-market. Green products have inadvertently acquired a reputation as being of inferior quality to their generic alternatives. According a 2007 study of more than 2,000 Americans, 61% believed that green goods performed worse than conventional items serving the same purpose (GfK, 2007). These barriers have reduced consumer demand for green products in the marketplace, preventing market mechanisms to bring down costs and incentivize further production and innovation.

Despite these barriers to the successful use of environmental marketing and product differentiation, studies have found that today’s social climate in itself provides incentives for consumers to buy green. The proliferation of environmental awareness has established environmental consciousness as a social norm, encouraging consumptive behavior changes to achieve social validation. A 2007 study found that the biggest reason consumers bought environmentally friendly was to appear as responsible citizens in the eyes of their peers, while actual concern for the environment was the least motivational (Maynard, 2007).

**Environmental Marketing Strategies: The Applicability of Green Labeling**

Increasing levels of “eco-consciousness” in individuals has resulted in the formation of new consumer categories, namely the “socially conscious” and the “green” consumer (Fulmer, 2001). The green consumer is defined as “an individual who consumes products that are benign towards the environment” in a socially-conscious effort to take responsibility for individual consumption habits (Rajput, 2012). Green consumerism provides consumers with a way to be both socially and environmentally conscious without be inconvenienced (Fulmer, 2001). Green consumers are often willing to pay more for green products to achieve these goals, demonstrating both the level of awareness consumers have surrounding the consequences of their consumptive behavior as well as the degree to which they are embedded within specific lifestyle habits (Shrum, 1995).

However, environmental concerns are often not reflected in purchasing behavior at all. Attitudes are thus failing to translate into action (Mainieri, 1997). Despite the expansion of green marketing techniques, consumers are not responding in the desired way by making correlated behavioral changes. In order for environmental considerations to become an important factor in mainstream consumer behavior, the disjuncture between consumer attitudes and behaviors must be mended. It is therefore imperative for corporations to evaluate green labeling and its success at the macro-level.

Green labeling, the most common form of green marketing, is the marketing of products that are presumed to be environmentally safe, by focusing on cognitive persuasion strategies (Sarumathi, 2014). Green marketing strategies are primarily seen as an educative medium used to inform consumers about intangible product characteristics (Delafrooz, 2014).

Currently, green marketing strategies are faced with the challenge of how to effectively demonstrate products’ environmental characteristics. This is because green-washing in product marketing has degraded the authenticity of legitimate eco-labels and environmental certifications. In addition, ambiguity surrounding the implications of specific terms, labels, and certifications has lead to a general consensus that the majority of eco-labels are merely “feel-good” slogans designed to trick consumers to paying more for a product with no guarantee of real environmental benefits (Fulmer, 2001).

In the United States, the lack of government-endorsed labels and standardized certification qualifications makes it difficult for consumers to clearly differentiate green products from their competitors (Smith, 2014). The lack of standardization to corroborate products’ green claims leaves the consumer responsible for deciphering between legitimate and conflated labeling implications. The issue thus resides with how Millennials interpret environmental terminology itself. A 2014 study found that consumers are best at defining the terms “biodegradable” and “recycled”, while the terms “eco-friendly”, “green”, and “nature-friendly” are the most ambiguous (Smith, 2014). However, the terms that most strongly convey to consumers that an item is environmentally preferable were found to be “eco-friendly”, “recycled”, and “green”, demonstrating a lack of clarity regarding the definitions of environmental terminology among consumers (Smith, 2014).

Corporations often use labels strictly as a marketing tool, “green-washing” their claims in order to reap the monetary benefits. As such, claims are not verified and the differences between legitimate programs and marketing shams are unclear to consumers. Standards not only lose their meaning, but the label and/or logo becomes inconsistent with meaning from product to product. A 2007 study by TerraChoice Environmental Marketing Inc. examined 1,753 environmental product claims and found that all but one were misleading or just plain false (TerraChoice, 2007). Such distrust was found to be one of five of the major barriers to green consumer purchasing (Bonini, 2008).

Research has also been conducted on the effectiveness of eco-labels in inspiring green consumerism. Studies found that consumers are most likely to buy a green product if it is not too dissimilar to conventional options in terms of function, quality, and price. However, there remains a general lack of consensus on how Millennials respond to green marketing. A 2013 analyzing the effects of various product attributes and their influence on Millennials’ consumptive behavior showed that environmental marketing emphasizing a product’s recyclability, bio-degradability, and positive health benefits had the most potential to increase purchasing intent. Likewise, the study found that price, difficulty in differentiating between green and non-green products, lack of trust in the legitimacy of green claims, and the perceived inferiority of environmental alternatives to be the main inhibitors to green purchasing.

**Millennials and the Green Consumer**

Green marketing became a noticeable trend in the 1990s when companies began using general social awareness and concern over publicized environmental issues as a basis for profit generation. While originally deemed a fleeting fad, green marketing successfully attracted a substantial consumer base that demanded a more environmentally responsible product (Smith and Brower, 2012). The Millennial generation, born roughly between the 1980s and the turn of the century, are widely recognized as a target group for green marketing schemes because of the unique conditions of the period they grew up in. The Millennials, aged approximately 18-24, were socialized during a period of rapid technological development, and as a result are not as receptive to traditional media channels as preceding generations (Vermillion and Peart, 2010). This generation is also highly educated, making them acutely aware of social and environmental issues affecting them and the world they live in. As a result, environmental consciousness has become a prominent social norm among Millennials, leading to the assumption that the generation is inherently more concerned with, and concerned about, the environment (Smith and Brower, 2012). However, studies have shown that social desirability plays a much larger role in influencing Millennials’ purchasing decisions than does environmental concern. This explains the discrepancy between how Millennials represent themselves in surveys and their actual consumer behaviors (Furlow and Knott, 2009). However, increased education has also served to raise awareness among Millennials of the benefits of green consumption, leading to the growth of the “green” consumer base (Lu et al, 2013).

The green consumer has several characteristics that coincide with Millennial beliefs and values, which is why Millennials are a valuable target group for green marketing initiatives. Green consumers are generally younger, better educated, and have higher earning potential than consumers unconcerned with the environment (Vermillion and Peart, 2010). All of these attributes similarly describe the Millennial generation. While these characteristics create a threshold for the environmentally conscious consumer, they also expose the three main reasons why consumers often choose not to buy “green”: namely, cost, quality, and transparency. Vermillion and Peart (2010) found that 74% of consumers find green products to be too expensive, 61% find green products to be of lower quality than generic counterparts, and 55% of consumers find green advertising to be misleading or misrepresentative of a product’s true environmental impacts and benefits. These issues directly affect the purchasing decisions of the Millennial Generation, despite their predisposition towards “green” consumption.

Although it is widely argued that the Millennial Generation is more environmentally conscious than previous generations (Gaudelli, 2009), and therefore the most susceptible to green marketing strategies, there are several important caveats to this assumption. Several studies have found that Millennials are genuinely interested in supporting environmental causes (Lu et al, 2013), however it has yet to be seen that this awareness has lead to any significant behavioral changes. Despite higher levels of environmental education and exposure to the reality of environmental issues through the media, Millennial consumers do not consider themselves responsible for changing their lifestyle habits to practices that positively impact the environment, and are overall less inclined to choose environmental benefit over personal comfort or convenience (Head, 2013).

The Millennials’ exposure to environmental problems has centered around mass media and coverage of issues that engage different social groups with environmental concerns. For this reason, being “green” is now widely considered to be more of a lifestyle choice that has minimal adverse environmental impact (Furlow and Knott, 2009). Under these circumstances, consumers’ perceptions of the real-world impact of their purchasing decisions is the best predictor of future environmentally conscious consumption. In other words, consumers who are able to see the direct results of their buying decisions are more likely to invest in environmentally friendly products (Furlow and Knott, 2009). Millennial consumptive behaviors are also influenced by individual consumer values and beliefs (Smith and Brower, 2012), which are largely shaped by social relationships. This generation sees buying “green” as their effort to demonstrate their environmental consciousness, a value that is often used as a form of social validation (Vermillion and Peart, 2010). The Millennial generation is aware of the importance of ecological sustainability and environmental protection; Smith and Brower (2012) state that 47% of Millennials would be willing to pay more for environmentally beneficial products and services. However, while concern for the environment does foster green consumer values, Millennials are accustomed to certain standards of convenience, availability, quality, and performance that they are not necessarily willing to forego in order to achieve intangible benefits (Lu et al, 2013). Social influence among younger consumers creates group norms that put pressure on green purchasing behaviors, and as a result consumers are unwilling to sacrifice quality or lifestyle standards simply to “go green” (Lu et al, 2013).

The trend of green consumerism remains on the forefront of contemporary purchasing habits, with Millennial consumers emerging as the most committed generation to date. However, there remains a general lack of research on how Millennials respond to and engage with green marketing. According to a 2014 Tork survey of 2,000 U.S. adults, Millennials continue to represent the core support of green products and services, and are even willing to pay more for green products (Tork, 2014). Millennials represent a growing $54.3 billion opportunity, constituting a profitable market opportunity that businesses should not overlook (McKay, 2010). As such, enterprises must reorient marketing strategies to be more in tune with this generation’s demands by successfully communicating “green” messages.

**METHODS**

We used three different research methods to effectively triangulate the information we needed to answer our research questions. Our primary mode of data collection was through an electronic survey, designed to gain insight about the importance of environmental considerations in Millennials’ purchasing decisions and their perceptions of environmental consciousness and awareness of green labeling in the marketplace. Our second method was an experiment designed to test the effects of green labeling on Millennials’ purchasing decisions in the absence of other market considerations identified as important, such as price and quality. Finally, we conducted a focus group to add qualitative information to the conclusions drawn from our qualitative data.

*Survey*

A survey was distributed nationwide among consumers identified as Millennials, ages 18-24, to gather information regarding individual environmental consciousness and awareness, how these values are reflected in purchasing behavior, and the overall effects of green marketing strategies on purchasing behaviors and general environmental consciousness. The survey was distributed throughout the month of March 2015. The total number of respondents was 279, consisting of 93 (33.3%) males and 186 (66.7%) females. Participants resided in 212 different postal zip codes, representing 25 states across the country.

The survey itself was created and released using Qualtrics Online Survey and Insight Engine. We then distributed the survey via email and various social media platforms to ensure we reached the widest sample population possible. Participation relied upon self-selection, giving us a simple random sampling of both males and females.

*Unique Approach*

 There is a wide debate within the literature over whether or not Millennials are in fact the “greenest” generation. Proponents of this argument cite Millennials’ increased awareness of current environmental issues as well as their willingness and tendency to make environmentally responsible consumer decisions to achieve social goals. Opponents, however, argue that these values are not mirrored in Millennials’ actual purchasing behaviors. This discrepancy stems from the different research methods used in the literature; positive associations between Millennials and green consumerism are primarily found in research utilizing surveys that ask participants to evaluate their own levels of environmental commitment, while research challenging these findings tended to be based on observational or experimental data of Millennials’ consumptive habits.

Our survey was designed to address this current inconsistency by measuring the degree to which Millennials’ self-identified environmental attitudes were reflected in their purchasing behaviors. To do so, we created a survey unique from those used in past studies in two important ways. First, we presented the survey as a study on product marketing and brand association, instead of acknowledging the environmental focus outright. We supplemented questions targeting environmental inquiries with “filler” questions[[1]](#footnote-1) unrelated to our research questions to further obscure the main purpose of the study. The use of filler questions helped us to avoid associative priming, thereby leading respondents to answer based on what they perceived was expected of them instead, creating a confirmation bias.

Second, our survey is differentiated by its formatting. To more closely replicate the actual shopping experience, we used a combination of text-based and image-based questions[[2]](#footnote-2). By offering visual cues we aimed to more accurately represent the types of market-based purchasing decisions consumers face in real life. This technique allowed us to more effectively gauge which marketing strategies were the most compelling, and offered insight as to marketing incentives driving consumer behavior. Previous studies have relied solely upon textual questions to assess the influences of different marketing techniques on purchasing behavior. A 2009 survey designed by Katherine Smith relied on this method to examine what specific marketing techniques were most effective in communicating a product or brand’s level of environmental commitment (Smith, 2009). She found that the most influential factors on consumer perceptions were the company’s environmental reputation, as well as their targeted advertising schemes (Smith, 2009). The survey used an image-based format, derivative of standard text-based questions, in order to better replicate how consumers behave in actual purchasing scenarios.

*Social Experiment*

A two-phase social experiment was conducted to test two hypotheses:

*H1: The use of product labeling changes purchasing behaviors.*

*H2: Environmental marketing and product labeling influence Millennials to purchase eco-friendly products*

We conducted the experiment at two different sites, Skidmore College and SUNY Albany, to reach a more representative sample population of Millennials in the United States. Our participants were randomly chosen using self-selection, and consisted of a combination of Skidmore College students and SUNY Albany students. Each phase had a sample population of 75 participants.

The first trial phase served as a control trial: participants were offered to choose between three different types of chocolate (Hershey’s Kisses, Lindt and Equal Exchange) without the influence of any distinct marketing strategy. The chocolates were combined in a bowl and presented without any additional packaging displaying labels or any other marketing tools, other than their individual wrappers. In the second trial phase, the manipulated variable was the presence of labels as a marketing tool: the three choices were separated and differentiated using the distinct marketing and labeling tools presented by each company in an actual market setting.

In both trials, we controlled for other market variables that could potentially impact purchasing decisions by standardizing traits such as size, quality, and price, to ensure our data could be used to test our hypotheses.

*Focus Group*

A focus group was conducted in order to further triangulate our findings. Six participants were randomly chosen using self-selection by responding to anonymous flyers posted around campus requesting participants needed for a focus group discussion. We chose not to inform participants of the topic of our study prior to discussion so as to attract a more diverse sample. Participants were all students at Skidmore College with ages ranging between 19-21. Gender distribution was split equally between males and females.

The forty-five minute long discussion session was co-conducted by two researchers, who moderated and facilitated dialogue using pre-established guiding questions to steer the direction of the conversation onto topics related to our research questions. Our discussion questions consisted of broad inquiries regarding personal environmental consciousness, individual awareness of green marketing schemes and their perceived impact on the decision-making processes, and confidence in eco-label identification. The primary goals of the focus group discussion were to validate the findings of both our survey and social experiment, and to provide complimentary qualitative data.

**FINDINGS**

**Millennials have strong environmental values**

Our survey revealed that Millennials self-identify as having strong environmental values. 43.40% agreed and 45.50% strongly agreed with the statement “preserving the environment is important to me”. While overall, a total of 88.9% of respondents agreed to some level that preserving the environment was of personal importance, we used these categories to divide our sample population into two distinct groups. Respondents who strongly agreed that environmental preservation was important to them are designated as “Environmentalists”. This is the segment of our sample population that we believed to be the most likely to use environmental considerations in their consumer behavior, based on self-evaluation of their level of environmental commitment. Environmentalists constitute 45.50% of our sample population, while the remaining 54.50% are designated as “Non-Environmentalists”.[[3]](#footnote-3)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **I am more willing to purchase a product from a company with a strong commitment to the environment** | **I am able to determine the environmental commitment of a company from its product’s label** | **Preserving the environment is important to me** | **I am willing to pay extra for a product that is better for the environment** |
| Strongly Disagree | 3.90% | 11.50% | 3.60% | 6.10% |
| Disagree | 5.40% | 40.10% | 1.40% | 10.80% |
| Neither Agree nor Disagree | 19.40% | 30.50% | 6.10% | 28.30% |
| Agree | 46.20% | 16.50% | 43.40% | 36.20% |
| Strongly Agree  | 25.10% | 1.40% | 45.50% | 18.60% |

Table 1: Environmental Consciousness

The survey also indicated that Millennials’ environmental consciousness is a significant factor in their purchasing decisions. 25.10% of respondents claimed to strongly agree they would be more willing to purchase products from a company with a strong environmental commitment, and 54.8% of respondents agreed to some level that they would be willing to pay extra for an environmentally friendly product. However, only 1.4% strongly agreed that they could identify representative environmental commitment from labels, while 70.6% were either unsure of their ability or disagreed.

**Environmental Considerations Variably Factor into Purchasing Behaviors***.*

 Environmental tendencies in purchasing behaviors vary widely between Environmentalists and Non-Environmentalists. Overall, Environmentalists were more likely to purchase green products across product categories than were Non-Environmentalists. 55.1% of Environmentalists indicated that environmental considerations were very important when purchasing food, 53.5% said they were very important when buying cars, and 44.1% said they were very important when buying cleaning supplies. However, only 14.2% of Environmentalists considered environmental factors to be very important when buying clothes. Non-Environmentalists’ value of environmental importance followed similar trends across product categories, with 28.9% indicating environmental considerations to be especially important when buying cars, 22.4% when buying food, and 17.8% when buying cleaning supplies.[[4]](#footnote-4)

**Millennials put little consumer pressure on companies to go green.**

Despite 2510% of respondents strongly agreeing that they would be willing to pay more for products with strong environmental brand association, and 18.60% of respondents strongly agreeing that they would be willing to pay more for eco-friendly products, only 7% of the sample population said that they always buy green products.

When Millennials are pressured to reveal the reality of their green consumption habits, they no longer appear to be as environmentally conscious as prior results may indicate. In comparing the two Millennial groups, Environmentalists are more likely to buy specifically green products. However, analysis of this group in isolation reveals that they are in fact less green than they claim. The majority of Environmentalists, 44.9%, stated that they buy green products if it is convenient, but it is not a priority. Only 13.4% of Environmentalists always buy green products. On the other hand, less than 1% said they don’t usually or never buy green products. Environmentalists are more likely to buy green products than not, but it is not a consistent behavioral trait. Non-Environmentalists were less likely to buy green in general: 64.5% said that they will buy green if it is convenient, but that it is not a priority; 11.8% said that they don’t usually buy green products; 2.6% said they never buy green products; only 0.7% said that they always buy green products.[[5]](#footnote-5)

 **Brand Loyalty Matters**

When presented with an artificial purchasing scenario, environmental concerns are rarely reflected in purchasing behaviors of both the Environmentalists and the Non-Environmentalists. The survey asked respondents to rank their preferences for different brands of cookies and laundry detergent that represented different market niches, including a mainstream well-known brand, a well-known environmentally friendly brand, lesser-known environmental brands, and a generic low-cost brand. For the entire sample population, purchasing tendencies favored the mainstream well-known brands for both cookies and detergent: 68.2% of respondents chose Oreos as their first choice, and 56.3% chose Tide.[[6]](#footnote-6)

Results showed there was no significant difference between the tendencies of Environmentalists and Non-Environmentalists in choosing the environmentally-friendly cookie options. 365, Back to Nature, and Newman-O’s are three cookie brands that engender an equal degree of environmental consciousness. The preferences of both Millennial groups were relatively evenly distributed across the three brands. Environmentalists exhibited a slight preference to Back to Nature: 45.7% of Environmentalists chose this brand as either their first or second choice, while only 33.8% of the Non-Environmentalists did. This small difference may be due to the fact that Back to Nature uses the term “Natural”, implying an association between the product and the environment.[[7]](#footnote-7)

There was a significant difference between the two Millenial groups when it came to eco-friendly detergent choice. 33.9% of the Environmentalists chose Seventh Generation as either their first or second choice, whereas only 8.6% of the Non-Environmentalists chose this option. There was less of a gap between the two groups in their purchasing of Mrs. Meyer’s: 18.1% of Environmentalists and 13.2% Non-Environmentalists chose Mrs. Meyers as their first or second choice.[[8]](#footnote-8)

Fewer respondents were able to recognize Meyer’s as a verified environmentally friendly product, indicating that they are less likely to purchase the brand. In comparing Seventh Generation, a well-recognized eco-friendly brand, to a green-washed brand, it its evident that companies were successful in their ability to differentiate their product by creating a strong brand. The implications of this result are beneficial to the way corporations implement long-term green marketing strategies. If a company is able to distinguish itself as a reputable green brand while maintaining superior quality and a strong image, they will be able to successfully appeal to green consumers and the Millennial Generation.

 **Millennials struggle to idenitfy and interpret environmental labels.**

Corporations are increasingly using labels and certifications to convey environmental commitment, as opposed to conventional text-based advertisements. The environmental community has placed great stock in labeling of products as a way to put consumer pressure on companies to improve their environmental commitment. Our survey sought to test the effectiveness of these labels by gauging respondents’ ability to identify the image. Surprisingly, we found Millennials to be even less knowledgeable than expected. When presented with a compilation of both legitimate and green-washed certification labels, respondents were far from confident in their ability to successfully differentiate between the two. For example, only 27.7% of respondents were able to confidently identify the USDA Organic Seal, one of the most widely used and recognized of eco-certifications. Similarly, only 5.4% of respondents strongly agreed that both the Leaping Bunny Certification and the Marine Stewardship Council labels were verified eco-labels – both these labels represent the same level of environmental commitment as the USDA seal. To make matters more concerning, only 1% (or less) of respondents strongly disagreed that the green-washed labels (GreenList, 100% Natural, and Eco-Friendly) represented legitimate environmental commitment, thereby correctly interpreting the false claims. Perhaps the most alarming finding concerning Millennials’ identification of certification labels was the number of respondents who chose “don’t know” for the legitimate certification labels. 36.8% of respondents chose “don’t know” for the Leaping Bunny Certification; 36.4% of respondents chose “don’t know” for the Marine Stewardship Council certification. This means that more people did not recognize these lesser-known certifications than were able to confidently identify some of the most commonly used certification labels on the market.[[9]](#footnote-9)

**Labeling Does Not Significantly Change Millennials’ Purchasing Behavior**

Our social experiment was designed to test whether or not labeling significantly affected Millennials purchasing behavior when differentiating between product options of the same type. Without the presence of labeling, 29.3% of participants chose Hershey’s Kisses, 36.0% chose Lindt, and 34.7% chose Equal Exchange. When the choice was offered with differentiating labels, 25.3% of respondents chose Hershey’s Kisses, 38.7% chose Lindt, and 36% chose Equal Exchange.

|  |  |  |
| --- | --- | --- |
| **Frequency Distribution of Trial 1: Control** |   | **Frequency Distribution of Trial 2: Manipulation** |
|   | *Count* | *%* |   | *Count* | *%* |
| Hershey's Kisses | 26 | 0.346666667 | Hershey's Kisses | 27 | 0.36 |
| Lindt | 22 | 0.293333333 | Lindt | 19 | 0.253333333 |
| Equal Exchange | 27 | 0.36 | Equal Exchange | 29 | 0.386666667 |
|   |   |
| Sample Size (N) | 75 |   | Sample Size (N) | 75 |   |
| Mean |  2.01333 |   | Mean |  2.02667 |   |
| Median |  2 |   | Median |  2 |   |
| Mode |  3 |   | Mode |  3 |   |

To test our first hypothesis, we ran a t-test, assuming equal variance, to determine if there was a statistically significant difference in purchasing decisions when labels are present versus when they are not. Our data showed that there was not a statistically significant difference in average choice between the two trials, indicating that the presence of labels in general does not have an effect on Millennials’ purchasing behaviors.

|  |
| --- |
| **Comparing Means [ t-test assuming equal variances ]** |
| *Descriptive Statistics* |
| *VAR* | *Sample size* | *Mean* | *Variance* |
|  | 75 | 2.01333 | 0.71604 |
|  | 75 | 2.02667 | 0.75603 |
| *Degrees Of Freedom* | 148 | *Hypothesized Mean Difference* | 0.E+0 |
| *Test Statistics* | 0.09522 | *Pooled Variance* | 0.73603 |
|   |   |   |   |
| *Two-tailed distribution* |
| *p-level* | 0.92427 | *t Critical Value (5%)* | 1.97612 |

**The Use of Green Labels Does Not Influence Millennials to Prefer Eco-Friendly Products**

We ran another t-test testing our second hypothesis, to determine if the presence of labeling, specifically environmental certifications and eco-labeling, influenced participants to choose the environmentally friendly option over similar alternatives. Our findings revealed that preference for eco-friendly products was not increased, nor even significantly affected, by the presence of eco-labeling.

|  |
| --- |
| **Comparing Means [ t-test assuming equal variances ]** |
| *Descriptive Statistics* |
| *VAR* | *Sample size* | *Mean* | *Variance* |
|  | 75 | 2.01333 | 0.71604 |
|  | 75 | 2.02667 | 0.75603 |
| *Degrees Of Freedom* | 148 | *Hypothesized Mean Difference* | 0.E+0 |
| *Test Statistics* | 0.09522 | *Pooled Variance* | 0.73603 |
|   |   |   |   |
| *One-tailed distribution* |
| *p-level* | 0.46213 | *t Critical Value (5%)* | 1.65521 |

Initial survey results indicated that overall, Millennials are willing to buy products designated as environmentally friendly over conventional alternatives at least some of the time. When asked about their likelihood to buy specifically “green” products, 7% of respondents said that they always buy green products, while 28% said they consistently buy green products from specific [product] categories. Self-identified environmentalists were even more likely to adhere to these trends, as 13.4% said they always bought green products and 40.9% said they consistently bought green products depending on the [category]. However, these findings were not supported by the results of our social experiment, which showed that not only does labeling not significantly affect purchasing behavior, but also that marketing strategies using environmental differentiation are not effective in influencing Millennials to choose the environmentally friendly option.

 These findings evince a large gap between how Millennials’ self-identify their level of environmental commitment and their actual purchasing behaviors. This dichotomy speaks to the influence of external market factors such as brand loyalty and price that have a greater affect on consumer behavior within this generation. In addition, although environmental consciousness is considered socially desirable within Millennial culture, this aspect is trivialized by larger norms prioritizing comfort, convenience, and quality. As a result, environmentally conscious consumer behavior is most often used as a mechanism for social validation among Millennials, allowing them to prioritize other standards that they have been conditioned to value while maintaining their image as an increasingly eco-conscious consumer cohort.

**Discussion**

Interpreting results with a high regard for uncertainty and complexity is overwhelmingly difficult. Data analysis has multiple facets and approaches, and depending on the angle of interpretation counter arguments showing other outcomes can be synthesized. We have chosen to take these complex phenomena with a straight and honest approach by objectively interpreting results and briefly outline the implications for corporations and policy decisions.

 Currently, there exists an extensive amount of research regarding the purchasing behavior of the Millennial generation. This research, however; is an extremely complex phenomena, composed of inconsistent and fragmented findings causing it to be a highly debated topic. On one side of the argument are optimists that the Millennial generation is the greenest yet. They point to factors such as Millennials’ increased levels of environmental education and awareness, as well as the social desirability to appear “green” that has become a cultural norm, to support this viewpoint. On the opposing side of the debate, the skeptics believe this generation is no more green than previous ones. This is apparent in the disjunction between Millennial consumers’ environmental perceptions and purchasing behaviors. Our study sought to gauge just how green the Millennial generation truly is by employing a host of different methodologies. Our results found Millennials to be a generation in which the majority care about the environment and who will support green products, but struggle deeply in their ability to identify and interpret eco-labels.

*Corporate Behavior*

Legitimate government certifications, based on official environmental criteria established in consultation between government, industries, and environmental groups, exist for corporate use. Corporations are recognizing the benefits gained by incorporating these labels as an integral part of strategic marketing. As such, companies are increasingly competing for the attention of “green” consumers by developing their own propriety labels as means of differentiating themselves in the market place. Due to limited disclosure regulations this strategy has become an appealing option for many companies. As a result, a proliferation of false, convoluted, claims that lack transparency have become an impediment to continued progress in the green industry. This poses significant implications to both policy and corporate responsibility. More effective policies are needed to govern how each industry sector improves and communicates environmental performance of products. Meanwhile, corporations must actively seek ways to revamp consumer trust in the environmental credentials of their claims. Together corporations that adhere to more stringent regulations that discourage greenwashing can encourage further green product innovation and commercialization.

 This study’s findings revealed the degree to which Millennial consumers base purchasing decisions off of brand loyalty and recognition. This was especially clear in the cases of Tide and Oreo. Consumers are more likely to select a brand of familiarity than their green counterpart. Sustainable markets are relatively small compared to total mainstream markets, which makes it increasingly difficult for companies to compete with the large, established brands. As this market niche develops and the competition among companies for domination increases, it is becoming more imperative for sustainable marketers to be creative in their marketing mix to address areas that may be perceived as deficient compared to traditional goods. The tendency for the Environmentalists to choose Back to Nature and Seventh Generation over their green competition illustrates this necessity. Millennials want to choose the eco-friendly options, but simply do not know how. Clear labeling indicating the product is green is essential for companies to successfully capture the attention and market share of Millennials.

Seventh Generation, one of the first companies founded upon sustainability principles in the US, has established itself as a leader in sustainability market. As of 2011, it was a $150 million brand selling across the nation (Creative Commons, 2012). As a result of the company’s strategic marketing, the corporation has been successful in creating a brand that an increasing amount of consumers are becoming loyal to. Seventh Generation employs a host of different labeling strategies to make it clear to consumers that their product is environmentally friendly; the product bottles consist of natural imagery such as leaves and the name itself is an environmental metaphor. If you take a look at Mrs. Meyers; however, it becomes clear the brand lacks clear and effective labeling indicating it is eco-friendly. Because of this, the brand was significantly less successful in its ability to market to Millennial consumers.

The gains associated with green color schemes and natural imagery was illustrated again regarding eco-certifications. Respondents were unable to distinguish the legitimate labels from their fictitious counterparts. For example, a significant percent of Millennials were confident there was an environmental commitment associated with Greenlist, a bogus certification introduced by the Clorox Company. To mask this ingenuity, the label incorporates the word “green” it the name, uses a natural green background and is overlaid by the outline of leaves and a stem. These characteristics can be found within the other green-washed labels as well. Dissimilarly, the Marine Stewardship Council certification, whose environmental commitment was recognized by a minimal percent of respondents, lacks all of these qualities. The implications of these findings are that greenwashing *does* in fact work, and certain features can be engineered in such a ways as to win over consumers.

Research shows the environmental movement has faith in labels, but consumers are too clueless to use them effectively. This brings forth the questions to business: is green marketing a wise investment? Long-term sustainability should be central to a business’s strategic development process in order to build long-term value. In today’s market, increasing amounts of pressure are put on corporations to “go green”, posing the formidable challenge to managers on how to do so most effectively. More managers are recognizing the need to boost corporate environmental records in order to maintain a competitive enterprise in the industry. The corporations who have been successful in differentiating themselves based on environmental qualities focused on creating a strong brand image conveyed through clear labeling. Corporations may find it beneficial to incorporate labeling strategies that green-washed products often employ. Characteristics like natural coloring schemes and images associated with nature are attributes that consumers associate with degrees of environmental commitment. Reorienting marketing strategies so they are more in aesthetically in line with what green consumers are looking for have the potential to yield high rewards for corporations. The successful outcomes derived by clear marketing provide corporations a large incentive and drive to produce green products and meet the increasing consumer demand.

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**APPENDIX 1: FIGURES**

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| Figure 1: Example Filler Question |
| *“I can identify the brand associated with this logo:”*Macintosh HD:Users:nataliemckeon:Desktop:Screen Shot 2015-04-17 at 11.09.57 AM.png |

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| Figure 2: Survey Questions in Text-Based and Image-Based Formats |
| Macintosh HD:Users:nataliemckeon:Desktop:Screen Shot 2015-04-17 at 2.02.26 PM.png*Text-Based from (Smith, 2009); Image-Based from (Dolan, McKeon, and Mellon, 2015)* |

**APPENDIX 2: CHARTS**

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| Chart 1: Self-Identified Millennial Groups |
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| Chart 2: High Importance of Environmental Considerations for Product Specific Purchases |
| *“How important are environmental considerations in buying the following categories of products?” – Very Important* |

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| Chart 3: Environmental Purchasing Tendencies Among Environmentalists and Non-Environmentalists |
| *“How likely are you to buy specifically “green” or environmentally friendly products?”* |

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| Chart 4: Top Cookie and Detergent Choice for the Sample Population |
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| Chart 5: Cookie Choices Between Environmental Brand Options |
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| Chart 6: Preferences of Environmentally Friendly Detergent Brands Among Environmentalists and Non-Environmentalists. |
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| Chart 7: Millennials’ Identification of Environmental Certification Labels |
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| Chart 8: Millennials’ Identification of Illegitimate Certification Labels |
| Macintosh HD:private:var:folders:tz:yz83bc2d6rq6p281dbty5rqc0000gn:T:TemporaryItems:Graphic.jpgMacintosh HD:private:var:folders:tz:yz83bc2d6rq6p281dbty5rqc0000gn:T:TemporaryItems:Graphic.jpgMacintosh HD:private:var:folders:tz:yz83bc2d6rq6p281dbty5rqc0000gn:T:TemporaryItems:Graphic.jpgMacintosh HD:private:var:folders:tz:yz83bc2d6rq6p281dbty5rqc0000gn:T:TemporaryItems:Graphic.jpg |

1. See Figure 1 in Appendix 1 [↑](#footnote-ref-1)
2. See Figure 2 in Appendix 1 [↑](#footnote-ref-2)
3. See Chart 1 in Appendix 2 [↑](#footnote-ref-3)
4. See Chart 2 in Appendix 2 [↑](#footnote-ref-4)
5. See Chart 3 in Appendix 2 [↑](#footnote-ref-5)
6. See Chart 4 in Appendix 2 [↑](#footnote-ref-6)
7. See Chart 5 in Appendix 2 [↑](#footnote-ref-7)
8. See Chart 6 in Appendix 2 [↑](#footnote-ref-8)
9. See Charts 7 and 8 in Appendix 2 [↑](#footnote-ref-9)