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Consumer Actions and Attitudes Regarding Initiatives Directed towards Sustainability: Assessing Gender and Generational Gaps

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ABSTRACT

A demographically and geographically representative sample of 1,243 adult residents of the United States provided input regarding 33 issues germane to both green marketing and green consumption. This diverse array of behaviors and opinions addressed both sides of the buyer-seller dyad. From the buyers' perspective, respondents reported a high propensity to engage in recycling, donate used goods, and purchase products with a longer life expectancy. As for organizational actions, the respondents favored environmentally-friendly actions such as focusing on cleaner and more efficient energy alternatives. There was a strong belief that individuals can make a difference. Comparisons on the bases of gender and generational cohort membership documented significant differences for a number of the 33 issues under scrutiny. Gender produced statistically significant differences between men and women for two of the 11 personal green consumption behaviors. Women were more inclined to purchase second hand items, and from a similar perspective, they were more prone to donate items with a remaining useful life rather than simply discard them in the trash. Regarding the subset of 22 issues related to their attitudes regarding the green issues germane to consumers and marketers, significant differences between the two sexes were in evidence for 15 of the 22 issues. An investigation focusing on generational membership documented 13 issues where there was a significant difference across the five groups. A proposed typology allowed respondents to place themselves in the category that they deemed to best fit themselves. Fully 65.1 percent of the respondents placed themselves in the centrist category – eco-aware. Only 2.0 percent deemed themselves to be eco-destroyers while 9.2 percent, a metric that environmentalists might find somewhat disappointing, placed themselves at the other end of the spectrum – as eco-warriors.

INTRODUCTION

“Consumers around the world are saying loud and clear that a brand’s social purpose is among the factors that influence purchase decisions. This behavior is on the rise and it provides opportunities for meaningful impact in our communities, in addition to helping to grow share for brands.” - Amy Fenton

The above quote by Amy Fenton (2014) provides an excellent segue into the current study. The implication is that green marketing strategies appeal to green consumers, but in reality there are three parties that potentially benefit: the buyer, the seller, and the population at large. Such is the gist of going green. But if going green makes so much sense, why do some buyers and sellers fail to board the proverbial green bandwagon? It has been stated that consumers' response to green marketing, thus green consumption, has not lived up to expectations (McDonald and Oates, 2006), and that the gap between green expectations and green behavior is a mystery (Byus and Deis, 2013).

The popular press is replete with stories of corporate misbehavior when it comes to negative issues germane to the environment. Perhaps none is as onerous as the recent admission by Volkswagen that it was manipulating the on-board software on some of its diesel-powered vehicles so as to create the false impression that they were meeting US-government-imposed emissions standards. The reality was that Volkswagen vehicles were polluting the air. Consumers who thought they were driving "cleaner" vehicles that concurrently did not deplete the global fossil fuel inventory were doing exactly what they had hoped to avoid; that is to say they were polluting the atmosphere and potentially contributing to global warming. Yet their intentions were admirable. Many consumers today are seeking solutions that allow them to fulfil the lifestyle they seek while not imposing negative consequences upon others. They purchase products that conserve resources and don't pollute the air and water. Then they often dispose of products in an environmentally-benign manner. For example, they consider alternatives to the landfill when they dispose of products that have fulfilled their purpose. These consumers might recycle refuse or compost food waste. Or if the product is still useful, they might donate it to a charity so that others can continue to benefit from the use of the products while concurrently not imposing harm on the environment in which we all coexist. There are many terms applied to these individuals, but the most common moniker used over the past few years is *green consumers* (Roberts, 1996; Elkington, Hailes, and Makower, 1990). They seek to help keep our planet green. After all, according to a report published by Euro Monitor International, "the future is green" (Anonymous, 2016a). The current study focuses on this green future. What are consumers doing to protect the planet, and how do they perceive corporate actions purportedly designed to help maintain sustainability? In other words, this study examines both green consumption and green marketing.

It is commonly stated that women tend to adopt a more ethical, thus a more proactive stance on issues regarding ethical dilemmas. Sustainability from the perspectives of green consumption and green marketing has been characterized as ethical decision making by green consumers and green organizations (Moldavanova, 2013). Furthermore, it is commonly articulated that there is a correlation between one's age and their ethical inclination. If such is the case, then one would anticipate that older consumers tend to adopt a more proactive stance in regard to green behaviors. In addition to assessing the behavior and attitudes of the aggregate market, this research will test these two premises regarding gender and age. However, rather than standard age categories, respondents will be grouped on the basis of their generational cohort group. For instance, respondents born between 1925 and 1945 fall into a category commonly referred to as the "Silent Generation." At the opposite end of the continuum is "Generation Z," those individuals born between 1995 and 2012 (Robinson, 2017).

GREEN MARKETING

As earlier noted, there are numerous ways in which green consumers have been characterized. Not only are they green consumers (Cheeseworth, 2015; Roberts, 1996), but they are socially responsible consumers (Balazs and Romeo, 1996), environmentally-conscious consumers (Royne et al, 2016; Brown and Wahlers, 1998), ecologically conscious consumers (Akehurst, Alfonso, and Gonçalves, 2012), eco warriors (Roy, 2015), and eco worriers (Anonymous, 2016a). All of these terms can typically be tied to the goal of sustainability. From an aggregate perspective, they refer to *ethical consumers* (Harrison, Newholm, and Shaw, 2005) and their desire to engage in *ethical consumption* (Lewis and Potter, 2011) by making *ethical purchases* (Jayawardhena, Morrell, and Stride, 2016). In this regard, there has even been a call for Consumer Social Responsibility (CnSR) (Vitell, 2015). The argument is that Corporate Social Responsibility (CSR) cannot be attained without a concurrent move towards CnSR. Both sides of the buyer-seller dyad must be involved. Vitell added a fifth dimension to the Muncy and Vitell (1992) typology of behaviors within the realm of consumer ethics. This dimension which relates specifically to green consumption was labeled *doing good/recycling*; this dimension includes ethical behaviors such as calling attention to a bill that was miscalculated in the consumer's favor as well as the recycling of cans, bottles, and other recyclable materials (Vitell, 2015).

Irrespective of the label applied to these consumers, their presence as a major segment of the market has led to the emergence of so-called *green marketing* initiatives. *Inc.* magazine has referred to green marketing as “a business practice that takes into account consumer concerns about promoting preservation and conservation of the natural environment” (Anonymous, 2016b). Green marketing campaigns highlight the superior environmental protection characteristics of a company's goods and services. Of course this mindset has led to the development of *green products*. To be deemed green, several characteristics must be present. An early assessment of green products stated that they should not: endanger the health of people or animals; damage the environment at any stage of its life (including manufacture, use, and disposal); consume a disproportionate amount of energy and other resources during manufacture, use, or disposal; cause unnecessary waste, either as a result of excessive packaging or a short useful life; involve the unnecessary use of or cruelty to animals; or use materials derived from threatened species or environments (Elkington, Hailes, and Makower, 1990). In this regard, green marketing was recently characterized as *the next big thing* and is seen as one way by which a marketer can gain a differential advantage over its competition (Rajeev, 2016). This logic is consistent with the earlier quote by Fenton (2014) in which she stated that green marketing initiatives will help to grow a marketer's brand share. But green transcends the product decisions comprising an organization's marketing strategy. Nowhere is this more evident than in the financial services industry where *green* typically means statements that are sent electronically rather than on paper that was once a vibrant green tree. And while financial organizations may lead this charge, they are far from alone. Statements regarding one's frequent flier account; one's boarding pass for a commercial airline flight; even the airline tickets that one purchases are likely to be electronic facsimiles. Gone are the hard copy coupons that were once collected by the gate agent. Admission to an entertainment event such as a Taylor Swift concert or a Cleveland Cavaliers NBA game is likely to be granted based on possession of a paper-saving electronic ducat. Your receipt from a brick-and-mortar retailer such as Office Max may be sent

electronically. Even the Social Security Administration has declared on its Website that it is “going green” (Anonymous, 2018a). Starbuck’s packaging of hot chocolate mix states that it is “made from ethically sourced cocoa” (Anonymous, 2018b) while McDonald’s recently announced a goal of using renewable, recyclable, or certified materials in all of its packaging while seeking to place recycling bins in all of its restaurants by 2025 (Geier, 2018). Nestle is reportedly seeking to expand its list of sustainable bottling facilities for its Perrier brand of bottled water to 20 by the year 2020 as Danone announces its plan for its Evian brand to go carbon-neutral. (Gretlar and Williams, 2017). Marriott Hotels have placed placards in their rooms stating that “commitment meets conservation.” But many question if such initiatives are truly a prevailing green philosophy or simply a way to reduce costs in a way that impacts a self-proclaimed green organization’s bottom line in a positive way.

Recent research documented the presence of a relationship between one’s purchase intention and the consumers’ corresponding perception of an organization’s efforts to engage in so-called green behavior. Based on these companies’ claims, it was found that consumers indicated a greater propensity to purchase from marketers who claimed their products and the production processes were ecologically positive, that pollution was reduced, that energy was conserved, and the carbon footprint was minimized (Huang, Huang, and Lee, 2015). Furthermore, corporate image can be positively impacted by an organization’s application of green marketing in their efforts to appeal to potential customers (Yadav, Dokania, and Pathak, 2016). A more recent study documented findings in South Africa where a significant proportion of consumers indicated a preference to patronize retailers that were considered to be socially responsible (Govender and Govender, 2016). Yet the reality is that consumers are often skeptical of firms claiming to be green (Ulusoy and Barretta, 2016). Firms that make such claims without those claims matching reality are said to be *greenwashing*, a tactic that is truly disdained by green consumers (Kewalramani and Sobelsohn, 2012). In this regard, it has led to a phenomenon referred to as *green skepticism* (Leonidou and Skarmeas, 2017).

While the ultimate objective of the current project is to develop a new typology of green consumers, one recent study looked at the other side of the buyer-seller dyad. From this opposite perspective, that study focused on the green marketing strategy used by the sellers rather than the green consumption behavior of the buyers. As such, it addressed a seller’s stakeholders and how they might influence the green strategy implemented by the organization. The four stakeholder groups were designated accordingly as: Market Stakeholders; Social Pressure Groups; Immediate Providers; and Legal Stakeholders (Rivera-Camino, 2007). The implication is that there are different strategies which can be used to appeal to the four different groups of stakeholders. In this regard, there is evidence that both sides of the buyer-seller dyad have exhibited concern regarding the environmental impact of their actions. From the sellers’ side, in 2009, a neighborhood in Atlanta became a so-called carbon-neutral zone. Seventeen businesses had their carbon footprint measured, then pledged to partner with the Valley Wood Carbon Sequestration Project in an effort to neutralize any negative impact resulting from their operations (Auchmutedy, 2009). The intent was to appeal to the green consumer. This seems only logical given a 2008 study by Yankelovich which indicated that 22 percent of the American consumers believed that they alone could make a difference for the environment (Murray, 2007). So now the focus on the buyers - that is to say on the *green consumers* - will intensify.

THE LITERATURE ON THE GREEN CONSUMER

Regarding green consumer behavior, there is an ongoing belief that some consumers, but certainly not all, are willing to pay a premium for products that meet their expectations regarding a lack of harm to the environment. One study performed in five highly-developed countries found that approximately one-third of the survey's respondents indicated a willingness to do so. But also noteworthy is the fact that this willingness varied significantly across the five countries (Grande, 2007). This cross-national difference was also documented in a more recent study that focused on consumers in China, Greece, and Turkey (Yilmazsoy, Schmidbauer, and Rösch, 2015). Likewise, a report by A.C. Nielsen stated that "Fifty-five percent of global online consumers across 60 countries say they are willing to pay more for products and services provided by companies that are committed to positive social and environmental impact" (Kilkenny, 2014). Regarding the aforementioned willingness to pay (WTP) more for green products, an even more recent study reported that the mere presence of an ecological message claim enhances the strength of the relationship between the consumer's WTP and their purchase intention (Ayadi and Lapeyre, 2016). Similarly, citing a reduction in waste, consumers have expressed a willingness to pay for *eco-certified refurbished products*; however, the WTP for such products is low (Harms and Linton, 2016). And despite this stated willingness, it has been reported that so-called environmentally-conscious purchase behavior comprises only one to five percent of the marketplace expenditures in the American market. But despite this paltry number, the author of that study posited that "it is already making a difference" (O'Rourke, 2012).

Consider a study of younger, more highly educated consumers in India. The authors reported that green purchase behavior was correlated to – in descending order of importance – social influences, attitudes towards green purchase behavior, perceived knowledge about the environment, self-reported recycling behavior, eco-labelling, and the extent to which they are exposed to environmental messages via the media (Joshi and Rahman, 2016). So while some research offers the premise that consumers of certain socio-demographic groups are more prone to engage in behavior aimed at sustainability, such findings are far from unanimous. Of particular note in the aforementioned study is the fact that social influences exerted the greatest influence on a consumer's decision to purchase green products. Thus the role of reference groups should not be underestimated. For example, social influence was viewed as a factor that influenced the decisions of young Indian consumers to purchase organic clothing (Varshneya, Pandey, and Das, 2017). Another recent study indicated that there were certain conditions (or situational factors) under which pro-environmental attitudes were more important in the task of predicting sustainable consumption behaviors. In fact, when looking at the purchase of food products, there was significant variation across categories. Yet the authors of that study still reported that one's level of education was a key predictor of an aggregate measure of sustainable consumption (Panzone, Hilton, Sale and Cohen, 2016). Another factor which is related to an individual's propensity to engage in green consumption is the "conspicuousness" of the behavior. If it is easily observable by others, then the consumer is more likely to behave in an environmentally-friendly manner (Aagerup and Nilsson, 2016). Once again, there is evidence that one's reference groups influence an individual consumer's overt behavior. This premise is supported by the findings of another study, but while green consumption was found to be peer

related, the overarching influence was found to be an individual's concern for the environment irrespective of any peer influence (Welsch and Kühling, 2016).

In addition to the aforementioned article focusing on India (Joshi and Rahman, 2016), it was also the country of interest in a study examining the intention to purchase organic clothing (Varshneya, Pandey, and Das, 2017) as well as the impact that green initiatives have on the corporate image of hotels (Yadav, Dokania, and Pathak, 2016). Green research has focused on numerous other countries – sometimes with a broad perspective, other times addressing a single product category. Park and Lee (2017) took a broad look at the American market while an early study by Todd (2004) focused solely on the purchase of personal care products sold in America by eco-friendly marketers (Burt's Bees, The Body Shop, and Tom's of Maine). Green behaviors such as recycling in addition to the purchase of green products among Australian consumers were examined (Sharma, Gadenne, Smith, and Kerr, 2017). The propensity of Mexican consumers (Felix and Braunsberger, 2016) and Taiwanese consumers (Lu, Chang and Chang, 2015) to purchase green products in general were likewise examined whereas a second study in Taiwan looked at the impact that green marketing initiatives had on the consumers' intention to patronize so-called green restaurants (Wang, Chen, and Chen, 2016). Similarly, Koreans' motives regarding the purchase of organic coffee were found to be tied to health and environmental protection as well as pricing (Lee, Bonn, Cho, 2015). Customer satisfaction was measured in a study of Jordanian consumers (Wahab and Wahab (2016). Conversely, Muposhi and Dhurup (2016) focused on organic products in South Africa; Chowdhury, Salam, and Tay (2016) addressed the purchase of automobiles in Sweden; and Barbarossa and Pastore (2015) examined Italian consumers' decisions regarding the purchase of eco-friendly toilet paper. Referring to the *eco-sustainability factor*, Russo, Morrone, and Calace (2015) assessed how Italians responded to green initiatives in their efforts to sell automobiles. Referring to *ethical purchases* in their assessment of the purchase of green goods, Jayawardhena, Morrell, and Stride (2016) put consumers in the UK under scrutiny. A comparative study of green consumption behavior of Korean and Chinese consumers' based on their purchase of green leather was recently completed (Jung, Kim, and Oh, 2016). As documented in this paragraph, research on the green consumer has been quite varied. Some of the research looks at a single produce while other studies have incorporated a broader range of products such as a product category or simply green products in general. There have been numerous studies that have assessed green consumption in a single country, and cross-national studies have begun to emerge. The implication emanating from this section of the literature review is that there are cultural dynamics that impact both attitudes and overt behavior regarding sustainability.

On a disconcerting note, while consumers seem willing to embrace sustainable behavior, the reality is that much like research on consumer ethics has shown, there is a likely gap between what they say and what they do (Yilmazsoy, Schmidbauer, and Rösch, 2015). In 2011, this phenomenon was characterized as the *green gap* (Nielsen, 2011). In an examination of the *green purchasing gap*, Barbarossa and Pastore (2015) found that higher prices along with the inadequate availability of green products in the marketplace were the primary barriers to the purchase of green products, even when the consumer possessed a comparatively strong environmentally conscious mindset. This finding was also supported in a study that explored the gap between consumers' rhetoric and their actual purchase behavior (Johnstone and Tan, 2015).

In that same study, the authors identified three barriers to green behavior: *it is too hard to be green, a green stigma, and green reservations*. In essence some consumers shy away from green behavior because they have unfavorable perceptions of both green consumers and green messages. Perhaps this reluctance can be traced back to greenwashing, a behavior earlier described as businesses proclaiming to be green when in reality they are not (Kewalramani and Sobelsohn, 2012). Yet another study found that many men shy away from green behavior because they view it as “unmanly.” That study of 2,000 American and Chinese consumers documented a psychological link between eco-friendliness and perceptions of femininity (Brough and Wilkie, 2017). Hence, the presence of a green stigma appears to be supported in the literature.

As is common when the focus is on consumer behavior, typologies have been devised based upon differences across groups of consumers. From the simplest perspective, consumers have been placed into two segments: *Green* or *Non-Green* (Barbarossa and De Pelsmacker, 2016; Holmbom *et al*, 2013). Taking this process one category further was an earlier assessment of green consumers that identified three segments: *the Uncommitted, the Green Activists, and the Undefined* (Finisterra do Paço, Raposo, and Filho, 2009). Another study that identified three groups delineated *Translators, Exceptors, and Selectors* (McDonald *et al*, 2012). Based on a number of demographic and psychographic considerations, Byus and Deis (2013) identified four clusters of consumers based on what they referred to as the four shades of green. These four clusters were: *the Green-Greens; the Green-Must-Wait; the Greenish-With-A-Cough; and the Greenish-Without-A-Cough*. Combining micromarketing and macromarketing perspectives, one typology identified four segments of green consumers. These four segments are: *the Blind Green Consumer; the Individual Green Citizen; the Collective Green Consumer; and the Collective Green Citizen* (Prothero *et al*, 2010). Another interesting typology reported by Kreidler and Joseph-Matthews (2009) identified four segments; they were designated as *Lohas* (acronym for Lifestyles of Health and Sustainability), *Nomadics, Centrists, and Indifferents*. Yet those authors also offered their own classification for green consumers; it comprised *True-Blue Green, Lean Green, Surface Green, and Craven Green* consumers. Another more discriminating typology of green consumer behavior identified five categories of sustainable behaviors. These five categories were related to an array of demographic variables, but more importantly, they were predicated upon the consumers’ concerns regarding energy, food, water, waste, and eco-friendly behaviors such as concern for wildlife (Royne, *et al.*, 2016). As a final example of segmentation, consider the five-segment typology put forth by Yankelovich; the five segments were the *Greenthusiasts, Greenspeaks, Greensteps, Greenbits, and Greenless* (Makower, 2007). Obviously there is no shortage of typologies for green consumers, but equally obvious is the reality that there is no consensus regarding one singular typology for all interested parties to use. Still, these typologies represent a marked improvement over the simple identification of motives among various segments defined on the bases of common demographic and psychographic variables.

Interest in consumers’ behavior inevitably leads to efforts to build theory by which behavioral outcomes can be explained and predicted. Other efforts seek to apply existing theory to the issue at hand. For example, the Theory of Planned Behavior was applied in an attempt to explain the decision to purchase a green product (Lee, Bonn, and Cho, 2015) as well as an effort to

develop a better understanding of green behavior such as recycling rather than the purchase of a particular green product (Sharma, Gadenne, Smith, and Kerr, 2017). The Theory of Consumption Values was likewise applied in an effort to better understand the purchase of organic products (Gonçalves, Lourenço, and Silva, 2016; Muposhi and Dhurup, 2016). An application of Image Theory was said to provide a theoretical basis for understanding consumer choices as they relate to fair trade and green goods (Jayawardhena, Morrell, and Stride, 2016). The effect of the color green on packaging in conjunction with a marketer's green claims were examined using the Persuasion Knowledge Model in an effort to measure consumer trust and their intention to purchase green products (Onel and Ozcan, 2017). Even Maslow's Hierarchy of Needs has served as a theoretical underpinning for the satisfaction of *green needs* (Narula and Desore, 2015). A recent article that provided rudimentary theory was predicated upon the findings from a survey in Taiwan that the consumers' personality traits impact their ethical predisposition and that this ethical predisposition impacts their intention to purchase green products (Lu, Chang, and Chang, 2015). That study also incorporated culture as a construct that directly impacts that green intention. Another proposed model posited that social influence, attitudes, and green consumption values had a direct impact on the intention to purchase organic clothing; that study also incorporated a cultural perspective as the authors offered insight germane to collectivist societies (Varshneya, Pandey, and Das, 2017). Another more comprehensive model of the attributes that influence green consumption included six components that impact such behavior by consumers. These six predictor variables are: knowledge and awareness; green consumer value; willingness to act; past environmentally-related behavior; attitudes; and one's emotional affinity towards nature (Taufique, Siwar, Talib, and Chamhuri, 2014). The aforementioned article by Jung, Kim and Oh (2016) provided a model for the readers' to consider. That model essentially indicated that conspicuous value, utilitarian value, and hedonic value all influence one's pro-environmental beliefs which ultimately impact their attitudes towards a particular eco-friendly product. Another study used Structural Equation Modeling in an effort to assess the theoretical basis for causal relationships among four constructs: green marketing initiatives, green cognition, brand image, and purchase intention (Wang, Chen, and Chen, 2016). What is evident is that researchers are seeking to delineate the theoretical bases that underpin consumers' attitudes, but more importantly their purchase decisions, specific to green consumption behavior.

A synopsis of the literature provides the basis for understanding several key aspects of the broad segment of green consumers. First, green consumers are not a new phenomenon. Second, there is a meaningful segment of these consumers who express concern over how the behavior of businesses and consumers impacts the environment in an adverse way. Third, there are a significant number of consumers who reportedly behave in a more eco-friendly manner. Fourth, the segment of green consumers continues to grow. Fifth, there is a need to develop a theoretical model that explains green behavior. Finally, there is an array of demographic and cultural dimensions that are inextricably tied to both the attitudes and overt consumer consumption behavior associated with green production, marketing, and consumption. Despite the reality that green consumers are not a new group, the philosophy continues to evolve. Thus, more research is needed so as to gain a better understanding of what the green phenomenon means to practitioners. This project addresses that deficiency.

RESEARCH OBJECTIVES

There are three specific outcomes that are being sought in the current study. First and foremost is the objective of determining consumers' tendencies to engage in an array of green consumption behaviors. These initiatives address the overt behavior of consumers regarding purchase, consumption, and disposal decisions. Beyond the consumer, focus will also be directed towards issues important to the aspiring or active green marketer. So, this objective not only assesses consumers' self-reported green consumption behaviors, it addresses these same consumers' attitudes towards green consumption on the part of the general consumer marketplace, attitudes regarding global warming, how to protect the planet, and green practices on the part of the marketer. Thus, it will simultaneously scrutinize both sides of the buyer-seller dyad. The implication is that both parties can play a role in the quest for sustainability.

Second is the objective of identifying differences across the various segments based on gender and the generational cohort group to which they belong. So, this research is looking at age from a somewhat different perspective. This objective emanates from the literature which would lead the casual observer to believe that women and older consumers are more likely to exhibit a green inclination in regard to their own behavior as well as their attitudes regarding the behavior of other consumers and business organizations.

Third is the objective of assessing a broad-based typology based upon the respondents' self-image. After being presented with an array of issues regarding sustainability, how do these respondents tend to view themselves? The proposed typology will be examined in regard to the distribution of respondents across the five pre-determined categories of consumers. Aligned with this third objective is the determination of the criteria where these groups differ. What do they do, and what do they think? How are they different?

METHODOLOGY

The research was initiated with a review of the pertinent literature in order to determine the salient issues germane to sustainability as they relate to both entities in the marketplace – the consumers and the marketers. This review led to the development of the initial draft of the survey. That survey sought responses to a number of items addressing attitudes, knowledge, and behavior. It also included a basic set of demographic identifiers. However, the primary focus was on psychographics. This emphasis is consistent with the assertion by Kreidler and Joseph-Mathews (2009) that segmentation of green consumers would be more valuable if the focus was on psychographics rather than the more traditional socioeconomic considerations. Upon the completion of an exploratory study that focused on 208 university students, significant changes were made to the questionnaire. Some questions were dramatically reworded; some were slightly modified; seven scales comprising 23 items that address the green phenomenon were added; and there was some shifting in the order of the questions in order to facilitate a logical flow on the part of the respondent. Pertinent demographic questions were added since this portion of the study looks at the adult population of the United States, not students. The more comprehensive set of questions regarding respondent demographics included gender, age, income, relationship status, family size, and educational attainment. The result was an instrument that: was far more

extensive than the original questionnaire; reflected the intent to draw data from the aggregate adult population of the United States; was worded in a more understandable manner; was reordered to reflect a logical flow for the respondent; was designed for the Internet-based sampling procedure; and facilitated the achievement of the research objectives specific to this study as well as a series of objectives that will be the focus of subsequent research using the same database.

The final survey comprised eight distinct components. The initial series of questions focused on respondent demographics. The rationale for placing demographic questions first was the desire to make the sample as representative of the American adult population as it could be. The placement at the beginning allowed for the tracking of respondents and the subsequent tailoring of invitations to the next wave of respondents based upon which demographic group needed to be augmented. This set of demographic questions included age, gender, education, relationship status, household size, and income. Section two focused on providing consumers with definitions of green marketing and green consumption. It then sought feedback regarding their familiarity with green marketing and whether they understood the concepts well enough to respond to a survey on the topics of green marketing and green consumption. Those who said they were not comfortable were thanked, partially compensated for their time, and dropped from the extended data collection process. Component three focused on the frequency in which they, personally, engaged in 11 specific green consumption behaviors. Frequency was measured using a six-point scale anchored by “always” and “never.” Next, the focus shifted to behavior on the part of business and other organizational entities. Respondents were asked to indicate their level of agreement or disagreement regarding actions and underlying motives for engaging in green marketing initiatives. The respondents’ level of agreement was indicated using a balanced six-point itemized rating scale anchored by “strongly agree” and “strongly disagree.” Component five used the same scale to assess the respondents’ attitudes regarding the behavior of consumers in general as it related to seven specific issues. The sixth section of the survey returned to the respondents’ own green personality by seeking their level of agreement regarding five issues tied to sustainability. Section seven focused on seven scales that will be used in future efforts to develop a model using structural equation modeling (SEM). It again used the six-point itemized rating scale that sought their level of agreement on 23 items that comprised the seven scales under scrutiny. The seven scales were: (1) Feedback; (2) Advocacy; (3) Tolerance; (4) Emotional Affinity towards Nature; (5) Social Influence; (6) Green Consumption Values; and (7) Green Attitudes. The final section of the survey contained a single question. It asked the respondents to consider their answers on the survey and, based upon their own interpretation, to classify themselves into one of the five categories germane to their behavior and their attitudes towards green consumption. The five categories ranged from eco-destroyers to eco-warriors.

The survey was distributed via Rewards Now. Using their Internet protocol, potential respondents in their panel were sent an email asking them to participate. By monitoring the age, gender and educational demographics, invitations in the latter stages of the data collection process were directed towards the segments that were underrepresented. Ultimately, 1,243 completed surveys were returned. The sample was determined to be an extremely close representation of the population of adults residing in the United States. The original database of 208 students surveyed for the exploratory study was not incorporated as part of this final sample.

Analysis involved simple measures of central tendency to assess the frequency of one's green behavior and the perceived effectiveness of the array of issues specific to their own behavior as well as that of business entities and other consumers (components three through six of the survey). For the initial objective, simple means and frequency distributions were used to assess the respondents' own green consumption behavior. For the second objective, mean scores provided the requisite insight regarding the respondents' level of agreement (or disagreement) for each of the 22 issues related to sustainability. To identify difference across the various groups, depending upon the number of groups, either a t-test or One-way Analysis of Variance was used. A probability of .05 or less was required to reject the null hypotheses of equal means across the groups under scrutiny.

The initial development of the eco-typology was based on a self-reported classification. This typology was developed, in part, based upon a cross-national study that identified four segments ranging from "least green" to "greenest" consumers (Yilmazsoy, Schmidbauer, and Rösch, 2015). For the current study, the rationale is to gain a better understanding of how consumers view themselves. The typology which incorporates five segments was tested in the exploratory study of university students which preceded the current study.

RESULTS

A total of 1,243 completed surveys were collected over the 12 days devoted to data collection. Based on year-of-birth information, a new variable which represents each respondent's generational cohort group was created. The net result was that each respondent was placed into one of the five relevant generational cohort groups represented in this study. While there is no universal agreement as to the years of birth used to define a generational cohort group, most typologies tend to be similar. For this study, the categories as defined by Michael Robinson (2017) of Career Planner were used as the basis for the categorization process. These five generational cohort groups and their corresponding birth-years are as follow:

- The Silent Generation 1925-1945
- Baby Boomers 1946-1964
- Generation X 1965-1979
- Millennials 1980-1994
- Gen Z 1995-2012.

The initial objective was that of determining the market's positions regarding an array of green initiatives. The initial focus was on 11 specific behaviors that are best characterized as green consumption on the part of the consumer. Responses regarding the tendency to engage in each of the 11 green behaviors in question were measured on a six-point itemized rating scaled anchored by the polar adjectives of "always" and "never." Based on this assessment, the three most common behaviors in which the respondents chose to act were: to recycle used products, packaging, and paper; the overt decision to evaluate a list of alternatives in a product category then purchase the one that is projected to last the longest; and to donate used items rather than simply discard them through a regular trash collection service. Conversely, at the other end of the spectrum, the three environmentally-friendly behaviors in which the respondents indicated

the lowest propensity to engage were: to compost food waste; to purchase organic food; and to purchase used/second-hand items. These findings are generally supported by both the mean scores and the corresponding frequency distributions for the 11 behaviors. Table 1 provides an overview of the results addressing the buyers' behavior. It is important to recall that the mid-point of this scale is 3.50 and that lower mean scores are associated with a greater frequency for engaging in the behavior under scrutiny.

TABLE 1
Overview of Tendency to Engage in 11 Environmentally-Friendly Behaviors

BEHAVIOR	Mean	% Always/Very Frequently
Recycle	2.47	56.1
Buy "longest lasting" product choice	2.61	50.9
Donate used items rather than throw in trash	2.73	48.8
Seek energy efficient solutions	3.02	36.6
Buy environmentally-safe cleaning products	3.03	37.7
Buy products in packaging that can be recycled	3.07	37.6
Buy environmentally-safe personal care products	3.28	33.2
Buy products made from recycled materials	3.32	28.6
Purchase used/second hand products	3.55	26.1
Buy organic food	3.53	25.7
Compost food waste	4.30	20.0

The second sub-component of objective one was to determine the prevailing attitudes regarding an array of 22 different green marketing considerations. These considerations include behaviors, attitudes, and motivations for green behavior on the part of the buyers and sellers as well as general concerns about the environment. As such, these concerns might be addressed by marketers seeking to capitalize on issues deemed important to the consumers. For example, recycling is viewed very positively by the respondents. In order to capitalize on this reality, a marketer might benefit by initiating a recycling program and promoting it to the consumers. That strategy is similar to what Delta Airlines has done in an effort to address concerns about its carbon footprint. For these questions, a six-point Likert scale anchored by "strongly disagree" and "strongly agree" was employed.

For these 22 items, there were two items with means exceeding 5.0 on the six-point scale with over 95 percent of the respondents indicating some level of agreement. These issues were the impact of recycling and the idea that products should be made to last longer. Conversely, there were three items with a mean below the 3.5 midpoint. However, for each of these three items, disagreement, as reflected in a mean below 3.5 reflects a higher level of concern regarding sustainability. For example, one of these three items reflects the belief that the respondent does not worry about their own actions because they alone cannot make a difference. Given the wording of the question, disagreement actually corresponds to a higher level of concern; therefore, the adjusted mean of 4.06 (based on reverse coding) is more appropriate when assessing this issue. The 66.6 percent who disagree with the statement believe that they can make a difference. For the three items that are worded in a way that agreement represents a positive

outcome, adjusted means are provided in Table 2. From a similar perspective, but looking at others' behavior rather than their own, with an adjusted mean of 3.93, respondents exhibit modest support that despite what companies do to degrade the environment, individuals can still have a positive impact. Therefore, by disagreeing, the respondents are indicating that individuals can in fact make a difference – the onus is not solely on the seller. Just above the scale's midpoint with a mean of 3.88 is the modest support for the premise that companies go green out of a genuine concern for the environment.

Table 2

Overview of Attitudes Regarding 22 Issues Germane to Green Marketers & Consumption

ISSUE	Mean/Adj. Mean	% Agreeing (4-6)
Recycling is environmentally-responsible	5.23	95.1
Products should be made to last longer	5.16	95.7
Buying energy efficient items good for environment	4.98	94.2
Switch to alternative energy (wind, solar) is good	4.91	89.6
Composting waste is good for the environment	4.67	89.2
Buying used products is environmentally-good	4.62	88.3
Product testing on live animals is unethical	4.60	80.0
Need stricter government regulations	4.57	84.6
I am more likely to purchase from EF companies	4.54	85.8
I worry about global warming	4.51	81.3
Planned obsolescence	4.34	79.3
Consumers as much as business to blame for GW	4.33	79.6
Buying organic foods is good for environment	4.26	78.2
Evoked set always includes green alternative	4.12	74.7
Pay more for environmentally-friendly goods	4.10	73.7
Fashion causes premature discard of good clothes	4.10	70.3
I cannot make a difference, so I don't worry	4.06* (2.94)	66.6* (33.4)
Companies act green for profit rather than environment	4.03	71.8
Switch to nuclear energy is positive change	3.94	66.4
Corporate behavior trumps individual acts	3.93* (3.07)	57.8* (42.2)
Companies go green because of genuine concerns	3.88	65.0
Acceptable to invest in harmful companies	3.51* (3.49)	49.8* (50.2)

* Mean and % agreeing adjusted for items when lower mean score, thus disagreement, represents higher environmental concern (adj. mean and % disagreeing reflected in primary listing)

Table 2 provides an overview of these results. The mid-point of the scale is 3.5 with higher means reflecting a greater level of agreement with the issue. Two statistics are presented in Table 2. In addition to the mean response, the percentage of respondents who indicated any level of agreement with the statement is provided. The two statistics pretty much tell the same story as they are strongly correlated. It is important to note that the issues as they are described in Table 2 reflect the authors' efforts to describe them to the readers of this report. In other words, it may not reflect the actual wording on the survey. For example, the terms "planned obsolescence" and

“evoked set” did not appear on the survey; rather they are being used to summarize the issue that was described on the survey.

With objective one now achieved, the focus shifts to the second objective – that of determining differences across different gender and generational cohort groups. Based on historical precedent, one would anticipate that women and older consumers would be more environmentally concerned. This thinking turned out to be only partially true. Regarding gender, for the 11 specific environmentally-friendly behaviors, only two differences were documented: the propensity to purchase second hand items and the act of donating items with a useful life to a cause such as Wounded Warriors rather than simply discarding those useful items in the trash. In each case, women were shown to possess a greener mindset. Table 3 summarizes these results. It is essential to recall that these behaviors were measured on a six-point scale with lower means representing a greater propensity to engage in the behavior under scrutiny.

Table 3
Behaviors Where Women Were Found to be More Environmentally-Inclined

ISSUE	Male Mean	Female Mean	Sig.
Donate used items; not throw in trash	2.92	2.55	.000
Seek to purchase used/second hand items	3.64	3.46	.021

Next was the examination of the 22 opinions regarding the actions of consumers and business organizations as well as overarching concerns about the environment and global warming. For the 22 items under scrutiny, significant gender-based differences were documented for 15 of them. In 14 of the 15 cases, women were deemed to express more concern. Recall that these items were measured on a six-point scale with higher means representing a greater level of agreement with the issue in question. Table 4 summarizes the results. Note that disagreement with an item can represent either a negative or positive perspective depending upon the wording. An asterisk next the description of the issue indicates that a lower mean, thus stronger disagreement, is associated with a stronger green mindset. Also of note is the statistical reality that with a sample this large (1,243), a relatively small absolute difference may be statistically significant, but it may offer little value to organizations seeking to develop marketing strategies that resonate with target markets that are defined on the basis of gender. So, while there may be statistical significance, there may be little managerial significance unless the gap between the segments is of some meaningful magnitude. The issues are listed in order of the difference between the two segments’ mean scores

The biggest disparities between the sexes were the opinions regarding the use of animals to test products, a willingness to pay higher prices for environmentally friendly products, and the act of investing (such as purchasing stock) in companies that are known to create environmental harm. For 14 of the issues delineated in Table 5, including the three just noted, women expressed greater concern. Unlike the earlier assessment, the unadjusted means for the respondents (rather than adjusted metric) are provided in Table 4. The only case where men plausibly possess a greener opinion is the statement regarding why companies engage in green practices. But that is subject to interpretation. While both sexes agreed that companies do so because of profit

motivation rather than an environmental focus, men were not as adamant as were women. Thus, men may be more prone to accept the belief that companies are not motivated solely on a profit motive. But that reality could be interpreted as greater concern by women that companies are not truly environmentally concerned and that these companies should reprioritize their objectives with more emphasis directed towards sustainability.

Table 4
Issues Where One Gender Expressed Greater Concern Regarding Sustainability

ISSUE	Male Mean	Female Mean	Sig.
Product testing on live animals is unethical	4.33	4.88	.000
I am willing to pay more for EF products	3.98	4.42	.002
<i>*Acceptable to invest in harmful companies</i>	3.67	3.30	.000
I worry about global warming	4.36	4.67	.000
<i>*I cannot make a difference, so why bother?</i>	3.09	2.79	.000
Composting waste is good for the environment	4.52	4.81	.000
Need stricter government regulations	4.43	4.70	.000
<i>*Corporate misbehavior questions why consumers bother</i>	3.18	2.95	.008
I am more likely to purchase from EF companies	4.43	4.66	.000
Buying organic foods is good for environment	4.15	4.36	.002
My evoked set always includes green alternative	4.02	4.23	.002
Recycling is environmentally responsible	5.14	5.33	.000
<i>*Companies go green for profit, not environment</i>	3.96	4.11	.027
Buying used products is good for environment	4.55	4.69	.020
Buying energy efficient items is good for environment	4.91	5.04	.018

**Lower means and disagreement reflect greater concern about the environment (in italics)*

Before proceeding to the assessment of generational cohort groups, it is important to note that the survey was distributed to consumers who were at least 18 years of age. Therefore, only a small portion of Generation Z actually met a key criterion required to qualify to complete the survey. Gen Z includes individuals born between 1995 and 2012. Therefore, only those who indicated a birth year between 1995 and 1999 were allowed to complete the survey. So discussions about Gen Z apply to the adult members rather than the entire cohort group.

Differences across the five generational cohort groups were more abundant than what surfaced when the focus was on gender. This assessment begins with the 11 overt green behaviors undertaken by the respondents. One-way ANOVA was used to identify those items where significant differences across the five generational groups were present. Recall that each item was measured on a six-point scale ranging from “Always” (1) to “Never” (6) and that a .05 measure of significance was the benchmark for rejecting the null hypotheses of equal means. For those items where the null hypothesis was rejected, the Scheffé Method of Multiple Comparisons – likewise using .05 as its benchmark – was used to compare the contrasts thereby providing insight into the groups that exhibited disparate means. Of the 11 green behaviors under scrutiny, significant differences were identified for eight. The three actions where no differences were

documented were the seeking of energy efficient solutions to run one’s household, purchasing products that are packaged in materials that can be recycled, and purchasing the product alternative that is projected to have the longest life. For each action where age, as represented by one’s membership in a particular age-based generational cohort group, was found to exhibit a relationship with a specific green consumption behavior, it is evident that older consumers tend to engage in those behaviors less frequently than do their younger counterparts. As indicated in Table 5, the Silent Generation was the least likely generational group to engage in six of the eight identified actions. In each of these six cases, the generational group expressing the greatest propensity to engage in the green consumption behavior in question is either the Millennials or Gen Z. So, unlike the research on ethics, there appears to be an inverse relationship between age and behavior directed towards sustainability and protection of the environment. Yet, this finding is not universal. As also seen in Table 5, there are two green consumption actions where it was the oldest generation that indicated a greater propensity to engage in these actions whereas the youngest generation was the least likely to engage in these green behaviors. Of particular interest here is the fact that both of these behaviors involve an environmentally friendly way of discarding used products rather than a purchase decision. Older consumers are far more likely to engage in recycling and to donate used items with some remaining life expectancy rather than simply throwing them out with the trash. Table 5 summarizes the eight issues where behavioral differences across the five generational groups were documented.

Table 5
Behaviors Where Generational Cohort-based Differences Were Documented

ISSUE	Environmentally-Inclined Cohort Groups	
	Most (Mean)	Least (Mean)
I recycle	Silent Gen (1.93)	Gen Z (2.65)
I donate used items rather than throw in trash	Silent Gen (2.21)	Gen Z (2.92)
I buy environmentally-safe cleaning products	Millennials (2.90)	Silent Gen (3.62)
I buy environmentally-safe personal care products	Mill/Gen Z (3.09)	Silent Gen (3.93)
I buy products made from recycled materials	Millennials (3.15)	Silent Gen (3.83)
I buy organic food	Millennials (3.18)	Silent Gen (4.55)
I purchase used/second hand products	Gen Z (3.17)	Silent Gen (4.17)
I compost food waste	Gen Z (4.00)	Silent Gen (5.00)

With the behavioral component of Objective 2 complete, the focus now shifts to the 22 items reflecting the respondents’ opinions regarding the behavior of organizations, consumers in general, and their own green personality. Fully 13 of the 22 issues exhibited significant differences across the five generational cohort groups. The nine issues where no differences in the group means were documented addressed:

- Attitudes towards composting food remnants,
- Buying used/second hand goods,
- Companies engage in green behavior out of concern for the environment,
- Companies engage in green behavior for profit,
- Switching to solar/wind energy sources,

- Switching to nuclear energy sources,
- Testing products on live animals,
- Role of planned obsolescence, and
- Who is responsible for global warming (businesses or consumers).

An overview of the 13 issues where generational differences were documented is presented in Table 6. As with the overview focusing on green behavior, only the two groups that exhibited the greatest and the least concern regarding the issue under scrutiny are identified. However, for most of the issues, multiple differences across the five group means were in evidence.

For seven of the 13 items where significant differences were identified, it was the Silent Generation that exhibited the least concern, that is to say the lowest propensity to support green initiatives or otherwise express concern about the future of the environment. Somewhat paradoxically, for the remaining six items where differences were in evidence, it was Gen Z that exhibited the weakest green perspective. Depending upon the issue in question, it was either the youngest or the oldest generation that exhibited the least green personality. Thus, when the question of which cohort group exhibits the greatest concern regarding sustainability, the results are mixed. Regarding the question of which generation exhibits the greenest personality, there is no universal answer. The Silent Generation is the most environmentally-inclined group for five of the issues. They are followed closely by the Millennials who were the most concerned generational group for four issues. Next was Generation Z who topped the list three times followed by Baby Boomers who were the most concerned group on a single issue. Of note is the reality that Generation X tended to exhibit more centrist attitudes; they did not rank either first or last for any of the issues where statistically significant differences were in evidence.

Some of the specific outcomes merit attention. The oldest consumers are far less likely to either worry about global warming or to pay a premium for environmentally-friendly products. Conversely, the youngest consumers are less likely to acknowledge the potential benefits of recycling while being less open to energy solutions that could benefit the environment. These findings appear to support the premise that older consumers are more likely to embrace sustainability. Unfortunately, the results are far from unanimous in this regard. For instance, the Silent Generation is the least likely cohort group to recognize the potential positive impact associated with the purchase of organic food products, to support environmentally-friendly marketers by purchasing their green products, to support the idea of paying a premium for green products, and to include a green choice when considering the alternatives leading to their ultimate purchase decision. They are also the least likely generational group to endorse stricter government regulations regarding green standards while they are less inclined to worry about the environment because they feel that they alone cannot make a difference. This oldest segment is also the only group to approve the consumers' decision to invest in companies that engage in questionable behavior. An overview of these results is presented in Table 6.

Table 6
Opinions Where Generational Cohort-based Differences Were Documented

ISSUE	Environmentally-Inclined Cohort Group	
	Most (Mean)	Least (Mean)
Recycling is environmentally-responsible	Silent Gen (5.48)	Gen Z (5.07)
Products should be made to last longer	Silent Gen (5.34)	Gen Z (4.90)
Energy efficient items are good for environment	Silent Gen (5.24)	Gen Z (4.83)
Switch to alternative energy (wind, solar) is good	Silent Gen (5.10)	Gen Z (4.61)
Need stricter government regulations	Millennials (4.66)	Silent Gen (4.24)
I am more likely to purchase from EF companies	Millennials (4.68)	Silent Gen (4.28)
I worry about global warming	Gen Z (4.71)	Silent Gen (4.00)
Buying organic foods is good for environment	Millennials (4.36)	Silent Gen (3.62)
Evoked set always includes green alternative	Gen Z (4.32)	Silent Gen (3.62)
Pay more for environmentally-friendly goods	Millennials (4.28)	Silent Gen (3.28)
I cannot make a difference, so I don't worry*	Boomers (2.50)	Gen Z (3.33)
Corporate behavior trumps individual acts*	Gen Z (3.57)	Silent Gen (2.52)
Acceptable to invest in harmful companies*	Silent Gen (3.17)	Gen Z (3.81)

Objective three addressed the task of having respondents self-assign themselves to one of five eco-groups representing a potential typology of green consumers. The respondents tended to place themselves in the centrist category with fully 65.1 percent of the valid responses indicating a belief that they were best classified as *eco-aware*. However, 20.9 percent of the respondents placed themselves in one of the two categories that reflect a higher degree of concern for the environment. Conversely, the remaining 14.0 percent of the respondents placed themselves in one of the two categories where members could be inferred to possess little or no concern for the environment. These results are summarized in Table 7.

Table 7
Self-classification in a Tentative Typology of Green Consumers

Category	% of Respondents
Eco-Destroyer	2.0
Eco-Indifferent	12.0
Eco-Aware	65.1
Eco-Worrier	11.7
Eco-Warrior	9.2

The final component of the third objective addressed the task of identifying differences across the five segments of green (or not-so-green) consumers. Statistically significant differences were documented for eight of the 11 self-reported behaviors. In general, as one might anticipate, the eco-worriers and eco-warriors were more inclined to proactively engage in these environmentally-friendly ways than were the eco-indifferents. The eight behaviors where these differences were in evidence are:

- I recycle,
- I donate used products rather than throw them in the trash,
- I buy environmentally-safe cleaning products,
- I buy environmentally-safe personal care products,
- I seek energy efficient solutions,
- I buy products made from recycled materials,
- I buy organic food products, and
- I buy products in packaging that is recycled.

When the focus shifts to attitudes regarding business and other consumers' behaviors, the differences were less pronounced. For the 22 issues delineated in the data collection instrument, only four statistically significant differences were in evidence. As with the overt behaviors just discussed, the eco-worriers and eco-warriors were more inclined to adopt a green position than were the eco-destroyers and the eco-indifferents. The four items where differences were documented were:

- Corporate misbehavior trumps an individual's proactive efforts,
- The government should impose stricter environmental laws,
- Corporations purposely engage in planned obsolescence, and
- People should be OK with paying higher prices for EF products.

DISCUSSION

Based on the mean scores reported in Table 1, it is apparent that American consumers tend to engage in an array of green behaviors with some degree of frequency. However, two issues that would be disconcerting to green advocates are in evidence. Only two actions were reported to be frequently or always used by more than 50 percent of the respondents. Perhaps more problematic is the fact that there are five actions in which less than a third of the respondents reached that usage level (always or frequently). Thus, consumers need to be convinced that their own green behavior will benefit myriad people, including themselves.

Practitioners now have additional evidence that gender plays a role in both green activities on the part of the consumer and their attitudes regarding green initiatives undertaken by the marketer. It is common knowledge that women tend to possess a stronger ethical predisposition, thus it should not come as a surprise that women are more likely to engage in green consumption behavior, exhibit greater concern about global warming, and more strongly embrace the green marketing initiatives undertaken by business entities. Armed with this insight, marketers need to implement marketing strategies based on the realization that men and women often comprise two separate target markets. This reality is especially true in regard to the purchase of second hand items and the decision to donate used items rather than simply relegate them to the trash heap. Women also exhibit a much higher level of disdain for testing products on live animals, something of which marketers of cosmetics and other products tailored to women should be aware. But marketers also need to be aware of the fact that there are a multitude of behaviors and opinions that do not differ across genders. Therefore, the decision to segment based solely on gender may well be unnecessary. Marketers need to do their due diligence in order to better

understand when gender-based segmentation is appropriate. Women may represent the easier group to convince regarding the benefits of green consumption and green marketing, but men may, in fact, represent the greater opportunity.

When the marketer's focus shifts to age, there is one caveat which they need to recognize. Research on ethics consistently delineates a positive correlation between one's age and their ethical predisposition. In regard to green behavior and opinions, that relationship cannot be presumed to exist. While respondents did provide their exact age, they were subsequently placed in one of five generational cohort groups. In some cases, older consumers, that is to say the Silent Generation, were less likely to engage in green consumption behaviors while concurrently exhibiting less concern for the environment. Thus, there is an inverse relationship between age and green concerns. Conversely, there are issues where it is indeed the older generation that exhibits the greatest level of concern. The actions on the part of the older consumers generally involve the discarding of used products rather than the thought process regarding the purchase of those same items. So, the marketer cannot assume there is a general positive correlation between the two variables. Again, when putting together a marketing plan, the organization needs to understand the role that age plays. Different generational cohort groups tend to exhibit different green philosophies. This study reports some of these differences, but there is an abundance of additional information regarding each of the five generations that will impact the effectiveness of a select green strategy. As with gender, marketers need to do their due diligence so as to best implement age-based green initiatives.

Green is a situational phenomenon. Some solutions are embraced more vigorously than are others. Not everyone has the same mindset in regard to both green consumption and green marketing initiatives. While it is evident that women tend to be more concerned virtually irrespective of the issue at hand, age presents a more unique scenario. For example, the Silent Generation exhibits the greatest concern for seven of the green phenomena while simultaneously exhibiting the least concern for another five. Conversely, Gen Z is the most concerned regarding three of the issues while concurrently exhibiting the least green concern for six of the issues under consideration.

As illustrated in the preceding paragraph, this study looked at groups based on gender; it also looked at groups based on age. But perhaps the most interesting groups were based on the respondents' self-classification into one of the five "eco-groups." Eco-Warriors and Eco-Worriers are more proactive than are their less concerned peers. Eco-Warriors engage in green behavior; they worry about the environment; and they appreciate an organization's efforts to implement environmentally-friendly initiatives. These advocates represent potential spokespersons that spread word of mouth advertising. They can be a company's friend or enemy depending upon their perception of the firm's behavior. At the opposite end of the eco-continuum, 2.0 percent of the 1,243 respondents self-classified themselves as Eco-Destroyers. Thus, there is evidence that a small segment of society is likely to never be converted to a green consumer. It is this segment that may never represent a target market for the green organization, or at least not via the implementation of green initiatives and green promotions. However, it is the centrist segment that creates a substantial opportunity. Fully 65.1 percent of the respondents classified themselves in the centrist category of Eco-Aware. They engage in some green

consumption behaviors and they have a varied green personality. Some issues concern them; others do not. They represent opportunities for green marketers, but only if their acknowledgement can be translated into a positive green personality. So, not only do marketers need to promote their own green behavior, but consumers also need to be convinced that they as individuals can play a role in global sustainability. It would behoove today's green marketers to actively engage this segment. Besides being almost two-thirds of the market, they represent a great chance for conversion. Add them to the 20.9 percent comprising the aggregation of the Eco-Worrier and Eco-Warrior segments and there is a substantial customer base for which the green marketer can create and exploit a differential advantage. In fact, it represents 86 percent of the total market.

Society and government are likely headed in a green direction. Marketers would be wise to board the green bandwagon now in order to be among the first to reach out to consumers with their green message while remembering that greenwashing is universally disdained by consumers who possess a green personality. More research is needed on these five eco-groups so as to determine what the key issues are that drive them in one direction or the other. What defines the eco-destroyer; what defines the eco-warrior?

While this study looked solely at consumers in the United States, other countries likely possess an even greener culture. New Zealand and Singapore may come to the readers' minds. Thus there is an inherent need for research of this ilk in other countries. Marketers and academicians alike can help develop a better understanding of how green initiatives will be viewed from a multinational perspective. This insight will help green marketers create and nurture the green segments that continue to grow, especially in those countries with a strong economic foundation. As more information becomes available regarding marketers' behavior – good and bad – it is no longer an environment predicated upon a philosophy of *caveat emptor*. Green marketers need to accept this reality while concurrently taking advantage of the green opportunities that the evolving consumer market is presenting.

CONCLUSIONS

The results of this study are drawn from a large sample of 1,243 adults residing in the United States. Care was taken in the data collection process to assure that the sample is a good demographic and geographic representation of the target population. Therefore, the results are generalizable and can be used by academicians and practitioners to provide a perspective on how different segments act and think in regard to green initiatives and to provide insight for a future research agenda. If green is the future, then the results of this study are of critical importance.

From the American consumers' perspective, Green Marketing has its advocates; however, it is far from universal. Yet it is apparent that green consumers are attempting to engage in consumption behaviors that are best characterized as environmentally-friendly. These consumers concurrently believe that an individual's positive actions can make a difference. The issue of global warming is still subject to question although the respondents did indicate a modest concern for the phenomenon. Differences were found regarding both overt behavior and opinions regarding environmental issues when comparing men to women, the five generational-cohort

groups, and the five eco-categories of consumers. The green issue presents obstacles while concurrently creating opportunities. It allows for the identification of target markets based on an array of phenomena. In which green behaviors do consumers engage? How do they perceive corporate actions? What is the right thing for other consumers to do? Is global warming a real concern? How do women and men differ? Is age related to any of these phenomena? If so, in what way? How do consumers view their own green personality? Where do the five eco-groups of green consumers differ? This research has answered all of these questions. Furthermore, it has laid a foundation for future research, particularly research that is cross-cultural in scope.

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