

ENVIRONMENTAL MARKETING: A MODEL OF CONSUMER BEHAVIOR

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ABSTRACT

This article is a literature review on environmental marketing. Additionally, the author proposes a model and hypotheses of how input (i.e. values, beliefs/knowledge, needs & motivations, attitudes, and demographics) and intervening variables (i.e. eco-labels and consumer backlash) influence consumers' purchase intentions and purchase decisions for eco-products.

INTRODUCTION

Beginning in the 1970s, a significant amount of research has been conducted on consumer behavior for environmentally friendly products. Many variables were shown to drive consumer choice in regards to purchasing environmentally friendly products. These variables can be grouped into values, beliefs/knowledge, needs & motivations, attitudes, and demographics. Moreover, a number of intervening variables affect consumers' intention to pay more for an environmentally friendly product, grouped into eco-labels and consumer backlash. This paper summarizes the results of past research and presents a model showing the relationship between these variables and consumer purchases of environmentally friendly products.

VARIABLES THAT DRIVE CHOICE

Values

Values influence behavior (McCarty and Shrum 1994). Consumers must value protecting the environment before they can have the intention of buying environmentally friendly products. Peattie (2001) argued that consumers must feel that, when they purchase an environmentally friendly product, they will make some sort of material difference. So far, studies have found consumers' perceived level of self-involvement toward protection of the environment to be relatively low; hence the reason why consumers are less likely to engage in ecologically favorable behaviors (Wiener and Sukhdial 1990). As part of the solution, Bei and Simpson's (1995) study suggested that emphasizing the importance of environmental issues can motivate consumers' environmental behavior. Therefore, marketers should communicate to the target audience that buying green products could have a significant impact on the welfare of the environment (Laroche, Bergeron, and Barbaro-Forleo 2001).

Beliefs/Knowledge

In regards to how knowledge affects consumers' ecological behaviors, findings have been contradictory. In most cases, knowledge was found to be significantly related to how consumers gather, organize, and evaluate products (Alba and Hutchinson 1987), as well as being a

significant predictor of environmentally friendly behavior (Vining and Ebreo 1990; Chan 1999). Because knowledge influences all phases of the decision-making process, the wrong information can cause consumers to make a less perfect choice. For example, most consumers assume that soapsuds clean their clothes better; when in actuality, soapsuds are only there to give the “impression” that your clothes will be cleaner - when in fact, soapsuds only harm the environment (Crane 2000).

In addition, it has been widely argued that consumers perceive most recycled materials as being inferior to non-recycled materials; the consumers generally assume the performance of most recycled products to not be on par with that of non-recycled products. And as Rao (1974) found, consumers are either uncertain or would not buy if non-polluting products were of poorer quality.

Needs & Motivations

In self-reported behavior surveys, consumers report that they are willing to spend extra money for a socially desirable concept like environmentalism, but purchasing data suggests that “green” matters very little when compared to price, quality and convenience; therefore, businesses have become skeptical about consumers’ responses to such surveys (Mainieri, Barnett, Valdero, Unipan, and Oskamp 1997). The explanation that many researchers have put forth for this setback is that of “social over-reporting” of environmental concern among consumers (Peattie 2001). In addition, Hume (1991) concluded that consumers do not always act in accordance with their social reporting about the environment. When green purchases involve some sort of tradeoff that may include paying a green premium, accepting a lower level of technical performance, and/or traveling to non-standard distribution outlets, researchers and marketing experts have some explanation for these findings (Peattie 2001). McCarty and Shrum (1994) also found that the perception of inconvenience has a great influence on consumers’ action. As a result, even when using social-environmental benefits as a major selling point, any product that requires a significant amount of compromise is not likely to succeed. This shows us that consumers in general are not willing to forgo comfort and quality lifestyles for the betterment of the environment and society.

Attitudes

In regards to the effects of environmental attitudes on behavior, findings suggest that attitudes are the most consistent predictor of pro-environmental purchasing behaviors (Schlegelmilch, Greg, and Diamantopoulos 1996). What is key is whether attitudes predict actual behavior. Generally, studies have found positive correlations between environmental concern (i.e. attitude) and environmental friendly behavior (Van Liere and Dunlap 1981; Roberts and Bacon 1997). Simmons and Widmar (1990) found a significant relationship between environmental concern and ecologically responsible behavior in the case of recycling. Berger and Corbin (1992) found that green consumers’ behavior could be influenced by their consumer perceived effectiveness (i.e., attitude) towards the protection of the environment. Others have found weak or insignificant relationships between attitudes and behavior or substantial differences between intention and actual behavior (Wicker 1969). Targeting a category of eco-

concerned consumers is thus much harder than marketers expected; findings are still relatively inconclusive in regards to the impacts of attitudes on behavior.

As a way to enhance the validity and reliability of research outcomes, researchers have suggested that, instead of using single behavioral measures of attitude, researchers should use multiple measures. Ajzen and Fishbein (1977) recommended that, to strengthen the relationship between attitude and behavior, researchers should include other probable intervening variables, such as different attitude representations towards different objects, and matching the specificity of attitude and behavior measurement. In addition, Weigel (1983) suggested that attitude-behavior studies might benefit from the examination of multiple factors, incorporating situational characteristics to verify if these factors affect behavior. Moreover, Straughan and Roberts (1999) suggested that a mixed model incorporating a range of both demographics and psychographics should be preferred to the traditional demographic profiling methods in examining environmental concern as a correlate of environmental behavior because psychographic variables provide stronger profiles of green consumption. Finally, Roozen and De Pelsmacker (1998) recommended that conjoint analysis should be used to test attitudes and behavior because this method can provide information on where consumers stand on the perceived “environmentally friendliness” of specific behaviors.

Demographics

Although much research has been done on the demographic profiles of green consumers, findings are still relatively mixed with some demographic characteristics showing more consistent results than others. Based on past demographic profiling, green consumers generally fall in the following category: educated, pre-middle aged females earning mid to high-incomes.

Education. In regards to education, demographic profiles done in the past show that education is linked to green consumers’ attitudes and behaviors. Most demographic profile studies done on the relationship between education and the behaviors of green consumers have been positively correlated (Arbuthnot 1977; Schwartz and Miller 1991; Newell and Green 1997). Because most studies have found positive correlations between green consumers’ education and attitude and/or behavior, we can expect that future findings will be consistent.

Age. In general, the socially responsible consumers’ demographic profile is young and/or pre-middle age (Anderson and Cunningham 1972; Weigel 1977; Roberts and Bacon 1997). But results have been far from conclusive. Roberts (1996b) found the relationship to be significant and positively correlated. Van Liere and Dunlap (1981) found that the relationship between age and green sensitivity and behavior is significant and negatively correlated – green consumers being older than the average. In contrast, McEvoy (1972) found no significant relationship between age and green attitudes and behavior. In summary, the demographic profile of green consumers in regards to age is still uncertain.

Gender. Gender-related studies between males and females in regards to the environment are also inconclusive. In general, researchers argue that females are more likely than males to be ecologically conscious (Banerjee and McKeage 1994). In regards to the relationship between gender and environmental concern, MacDonald and Hara (1994) found the relationship to be

significant. Moreover, results from Laroche, Bergeron and Barbaro-Forleo's (2001) studies showed that gender influences consumers' willingness to pay more for green products in a statistically significant way. On the other hand, Samdahl and Robertson (1989) found the relationship between gender and environmental concern to be insignificant. Thus, the demographic profile of green consumers in regards to gender is still questionable.

Income. The same case holds true for the demographic profile on the income of green consumers and the environment; the results of studies of the relationship between income and environmental concerns have been conflicting. While Zimmer (1994) found significant relationships between income and environmental attitudes and behavior, Roberts (1996b) found no significant relationship between income and environmental concerns. Once again, in regards to the demographic profile of green consumers in relation to income, the results are far from being conclusive.

In conclusion, researchers have found that using demographics alone to profile and segment green consumers is not as effective as expected (Straughan and Roberts 1999). Roberts (1996a) claimed that the demographic profile lacks the ability to predict socially responsible consumer behavior and suggests that marketers identify and incorporate relevant attitudes and behaviors, personality characteristics, and purchase intentions into their research. In addition, past attempts to extend environmental marketing initiatives from one ecologically conscious behavior to another have been relatively ineffective. Ecologically conscious consumers try to protect the environment in different ways (Suchard and Polonski 1991); therefore, there are different categories of eco-concerned consumers. A consumer who recycles aluminum may not be the same consumer who cares about recycling plastic or about air pollution. Due to these findings, marketers and policy-makers are more cautious when attempting to target ecologically conscious consumers.

Intentions

Intention is defined as a course of action that one intends to follow. Generally, before actually purchasing an environmentally friendly product, the consumer must have the intention to buy environmentally friendly products. So far, many studies have shown a considerable difference between intention and actual behavior (Laroche, Toffoli, and Muller 1996). Moreover, market researchers and experts have found that people's stated intentions of paying a price premium for environmentally friendly products do not necessarily translate into action, in the case of sustainable energy source, for instance (Nakarado 1996). In addition to the disparity between stated intentions and actual environmentally friendly purchasing behaviors, intervening variables – eco-labels and consumer backlash - also affect consumers' intent to pay more for an environmentally friendly product.

INTERVENING VARIABLES AFFECT CONSUMERS' INTENTIONS

Eco-labeling

In regards to eco-labeling, many experts have suggested that consumers are confused due to inappropriate labeling. Research has shown that consumers do not always understand

environmentally friendly labels attached to products (Kangun and Polonsky 1995). Eco-labels such as 'biodegradable,' 'sustainable,' 'fair wage/fair trade,' 'environmentally friendly,' and 'recyclable' are usually unfamiliar and/or unknown to consumers. Additionally, merely recognizing a label does not mean that one understands the meaning of that label (Morris, Hastak, and Mazis 1995). Consumers must know and trust a label before they can use it to make purchasing decisions. Menon (1999) suggested using The Body Shop's marketing tactic: environmental information promotions used throughout the store. An integrated marketing communications approach and/or a holistic approach, using eco-labels, may better educate consumers on the social and environmental impacts of their consumer purchasing decisions. What companies must remember, however, is that environmental labeling schemes are only a supplement to – not a substitute for – general environmental awareness and educational efforts (Thøgersen 2000). In addition, studies have shown that, in making purchasing decisions, consumers use labels only when he/she trusts the message conveyed; therefore, labels should be promoted in a way that conveys trust.

Consumer Backlash

The increase in unsubstantiated and/or inappropriate product claims in the 90's helped create the gap that exists between potential purchasing decisions based on the welfare of the environment. Not surprisingly, these unprincipled actions deeply impacted consumers' cynicism towards green product claims and the way businesses advertise their green products. According to Fierman (1991), the Environmental Research Association found that 47 percent of consumers dismiss environmental claims as "mere gimmickry". Moreover, 63 percent of consumers are suspicious of manufacturers' green product claims (Ottman 1995) and 5 percent described manufacturers as "believable" compared to 89 percent for leading environmental groups (Einsmann 1992). Studies have also found that consumers have difficulty in adopting products that manufacturers claim to be environmentally safe and useful (Brown and Wahlers 1998). Due to unsubstantiated product claims, regulatory guidance on the use of green claims in marketing, such as ICC and ISO, has come into existence (Kuhre 1997). In addition, the media, environmental groups, and governmental agencies are now exposing those companies that make misleading or irrelevant environmental claims (Brown and Wahlers 1998).

Businesses have become more cautious about their products' green claims because they know that they must ensure that their information is based on solid foundations - to minimize potential consumer backlash. Some businesses are more skeptical than others about using product claims as a way to market their products. Some companies are under the perception that green branding is sure to backfire in their markets due to the problems of backlash. One reason is that the media is more inclined to attack companies on the basis of any shortcomings, rather than to highlight the relatively poor eco-performance of their rivals (Peattie 2001). Thus, rather than attempting to use the environment for presenting an overtly positive corporate image, and thereby motivating favorable purchase behavior, firms prefer not using the environment as a major selling point to avoid development of any 'negative' corporate associations or dissatisfaction (Crane 2000).

Today, many managers still believe that it will take at least an entire generation before firms restore consumers' trust in environmental product claims. In the mean time, firms are

shifting from green promotions alone to forming green alliances and ensuring that their green marketing activities are integrated holistically (Polonsky and Rosenberger 2001). The reason for the green alliance approach is that studies have found that environmental information provided by public sources is trusted by consumers more than environmental information provided by producers (Eden 1994/95). In addition, firms have learned that they cannot tactically use the environment to promote their corporate image. If a company wants to promote itself as being an environmentally friendly company, it must approach these efforts holistically, because if consumers become skeptical of a firm's motives (i.e. tactical approaches), its efforts may actually backfire (Polonsky and Rosenberger 2001).

PROPOSED MODEL

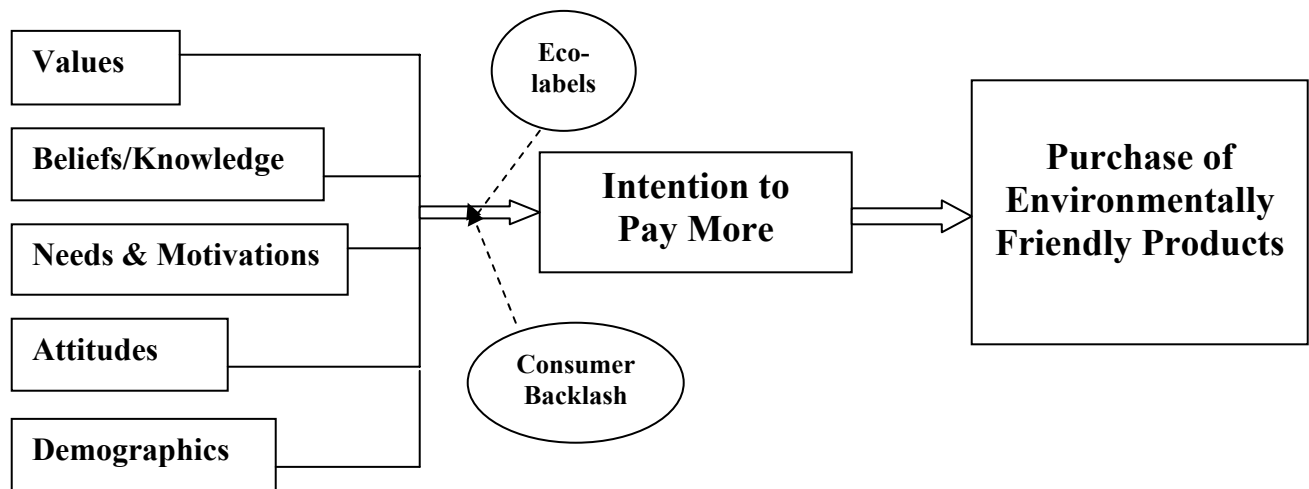
Input and intervening variables influence consumers' purchasing decisions of eco-products. Below is a proposed model of how these variables affect purchase intentions and purchase decisions for environmentally friendly products.

Model: Variables that Drive Consumer Choice

Inputs

Intervening Variables

Output



HYPOTHESES

- H1:** People who value the environment will have a greater intention to pay more for and will be more likely to purchase environmentally products.
- H2:** People who have more knowledge about the environment will have a greater intention to pay more for and will be more likely to purchase environmentally products.
- H3:** People who are willing to forgo comfort and quality life style for the betterment of society and the environment will have a greater intention to pay more for and will be more likely to purchase environmentally products.
- H4:** People who trust the information conveyed on eco-labels will have a greater intention to pay more for and will be more likely to purchase environmentally products.

H5: Demographics will impact the intention to pay more for and the purchase of environmentally friendly products.

- People with higher levels of income will have a greater intention to pay more for and will be more likely to purchase environmentally products.
- People with a higher level of education will have a greater intention to pay more for and will be more likely to purchase environmentally products.
- Females will have a greater intention to pay more for and will be more likely to purchase environmentally products.

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