

Environmental Purchasing: From the Perspective of Claims, Involvement, and Societal Structure

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ABSTRACT

One of the major issues in marketing today is green marketing, or environmental consumption. This study examined whether environmental claims, societal structure, and consumer involvement in environmental issues influence positive consumer attitudes toward the environment and affect purchase decisions. A sample of 460 individuals was included in this study. Data were collected using a multiple-item scale developed to address all of the variables of the study. Data reduction was conducted using factor analysis. Seven factors were identified with alpha values that met the threshold level of 0.7, and total variance explained exceeded 65%. The association between favorable consumer attitudes toward the environment and independent variables was found to be significant. High and low environmental involvement, substantive claims, associative claims, message framing, collectivism, individualism, and favorable consumer attitudes were found to be significant predictors of willingness to perform an environmental purchase decision. Managerial implications highlight the importance of directing environmental issues toward the young and creating platforms that inform, educate, and convert markets into green consumption. An enormous opportunity exists for green consumption, and practitioners should translate this knowledge into a profitable model.

Keywords: Environmental purchasing, involvement, claims, message framing, collectivism, individualism.

INTRODUCTION

Today's marketing field involves numerous environmental issues, such as the popular green revolution. As a result, marketers are focusing on finding ways to make their offerings appear environmentally friendly or green, and they are attempting to reach consumers in the strongest way possible. Industries are investing effort in helping consumers understand and accept this new philosophy. Environmental purchasing is primarily influenced by three factors. The first is claims, which provides information on how a product improves or degrades the environment (Ricky et al., 2006). This information can be provided by advertising the product or by associating the advertised product or its advertiser with positive environmental messages (Polonsky et al., 1997; Ricky et al., 2006). Although environmental claims have been used by practitioners, academics have paid limited attention to the effectiveness of these claims (Ricky et al., 2006). The second factor is consumer involvement (Chan, 2000), which may affect the effectiveness of communication. According to a study by Kim (2005), environmental claims enhance the communication effectiveness of advertisements for both high and low environmentally involved products and services. The third factor is societal structure; each society has a different structure. Structures are built on individualism or collectivism and on person-level tendencies, which appear to influence individuals' motivation to engage in environmentally conscious behaviors (McCarty and Shrum, 2001). Kim (2005) suggests that collectivism influences green buying behavior. Because collectivistic individuals expect other members to engage in the same behavior, they believe that they can make a difference by engaging in this behavior at the aggregate level even though the action is performed at the individual level (Kim, 2005). Further, if the relationship is strengthened among claims, involvement, and societal structure, influencing consumers' decisions may result in favorable attitudes toward rebuying (Kim, 2011). Although consumers have environmental concerns, the majority reported that their purchases were not influenced by these concerns (Chase and Smith, 1992). Crane (2000) suggested that managers should establish an environment that creates positive or favorable consumer attitudes for the present and post-purchase consumer behavior context. This study explores the impact of consumer involvement, environmental claims, and societal structure on environmentally favorable purchase decisions.

LITERATURE REVIEW

Conceptual framework: The literature suggests that claims, consumer involvement, and societal structure cause consumers' decisions toward the environment to be favorable.

Consumer involvement

The degree to which consumers are involved in the environment affects how they perceive green claims (D'Souza and Taghian, 2005). D'Souza and Taghian (2005) found differences between the two groups (high vs. low environmental involvement) in terms of their attitudes toward green claims. Low-involved customers appear to have a strong disregard for green advertising, whereas highly involved consumers are intrinsically motivated to be alert to the environmental attributes of products (Schuhwerk and Lefkoff-Hagius, 1995). Dardis and Shen's (2008) study examined the interactive effects of different types of advertising evidence (informational vs. exemplar) and product involvement (high vs. low). The most critical predictor of information-processing strategies was the consumer's level of involvement (Bao, 2009). Schuhwerk and Lefkoff-Hagius (1995) noted that even though green appeals were not necessarily more effective than non-green appeals for environmentally involved consumers, they were much more influential than non-green appeals for environmentally uninvolved consumers. Lee (2008), referring to the degree of emotional involvement in the issue, noted that green purchasing behavior is influenced by environmental concerns by directing an individual's response to the environmental protection of green purchasing. Further behavior is activated by emotional involvement more than by rational assessment (Lee, 2008).

H10: Environmental involvement is not a significant predictor of positive/favorable consumer attitudes in relation to
H10a: high involvement, and
H10b: low involvement.

Environmental claims and message framing

Environmental claims:

Environmental claims are assertions made by firms about the beneficial environmental qualities or characteristics of their goods and services. An environmentally friendly facade can be established by making such claims and tying these claims to positive environmental information (Carlson et al., 1996). Moreover, environmental claims are better received when the information is detailed, relevant, and understandable. Because it is more effective if the environmental benefits of green products are supported with information rather than claims (Ricky et al., 2006), marketers manipulate the specificity of environmental claims in their advertisements (Leonidou et al., 2011).

Environmental claims have been classified (Carlson et al., 1993) into five categories by a panel of five expert judges. These categories include product orientation, process orientation, image orientation, environmental facts, and combination. Product orientation and process orientation fall under the heading of "substantive claims" (Ottman, 1993), whereas image orientation and environmental facts are under the heading of "associative claims" (Chan, 2000). Although green advertising generates a variety of benefits, people in different countries are becoming increasingly skeptical about its credibility, validity, and usefulness (Pfanner, 2008). Some environmental claims may be described as vague, misleading, exaggerated, and even fabricated (Kangun et al., 1991), and skepticism has resulted from companies' environmental credentials related to such deceptive claims (Leonidou et al., 2011).

The use of factual and verifiable claims generates more positive consumer responses (Polonsky et al., 1997). A firm's substantive environmental claims may reflect its overall willingness to perform in a less environmentally harmful fashion. Despite the previous findings, research regarding both "substantive" and "associative" claims reveals different results (Chan, 2000). In a study by Polonsky et al. (1997), the use of factual and verifiable claims resulted in more positive consumer responses. Ricky et al. (2006) found that in the case of advertising services to Chinese consumers, claims were more effective in generating positive consumer attitudes. Surprisingly, Alnicik and Yilmaz (2012) note that the specificity of a green claim did not exert a significant effect on consumers' evaluations of high-relevance product advertising, whereas specific green claims significantly improved the communication effectiveness of low environmentally relevant product advertising. Despite the different findings related to advertising claims, advertising is an important tool that can be used to change consumers' green attitudes (Chan and Lau, 2004).

Message framing:

Message framing refers to the presentation of objectively equivalent information (Levin and Gaeth, 1988). Prospect theory is the foundation of marketing and advertising research about message framing (Dardis and Shen, 2008). The content of communication and the way information is presented can influence individual judgments and choices (Levin and Gaeth, 1988). The operationalization of message framing is achieved by presenting product attributes in either a positive or negative light (Levin & Gaeth, 1988). Gallagher & Updegraff conducted a meta-analysis to examine health messages focused on the specific outcomes used to assess persuasive impact (attitudes,

intentions, or actual behavior). In their study, Aaker and Lee (2004) found that positively framed messages appeared to be more effective than negatively framed messages. Specifically, Aaker and Lee (2004, p. 208) found that a promotion-focused, positively framed message was most effective for promotion-oriented consumers, whereas a prevention-focused, negatively framed advertising claim performed best for prevention-oriented individuals. Therefore, it can be concluded that when considering gain vs. loss framing, promotion-oriented messages are most effectively presented in a gain (positive) frame, whereas prevention-oriented messages are most persuasive when presented in a loss (negative) frame.

H20: Environmental claims do not have significant effects on positive/favorable consumer attitudes in relation to

H20a: substantive claims,

H20b: associative claims, and

H20c: message framing.

Collectivism:

Collectivism and individualism are the two most frequently studied issues in relation to environmentally friendly products and ecological behavior research (Hui and Triandis, 1986; Triandis, 1989; Triandis, 1993; McCarty and Shrum, 2001). Individualism vs. collectivism illustrates differences in the basic beliefs of individuals regarding interactions with each other, group goal priorities, and the perceived importance of unity with others (Hui and Triandis, 1986). Triandis et al. (1988) stated, “Culture is a fuzzy construct...we must analyze it by determining dimensions of cultural variation and one of the key dimensions is ‘individualism-collectivism’” (Triandis et al., 1988, p. 323). Individualism and collectivism give cultures differing characteristics. Loose ties, expectations of concern only with oneself and one’s immediate family, and personal gratification (Hui and Triandis, 1986; Triandis, 1988) are the cornerstones of individualism. In contrast, cooperation, helpfulness, and consideration of the goals of the group in relation to the individual are the basic foundations of collectivism (Crane, 2000; Laroche et al., 2001; McCarty and Shrum, 2001). Thus, people from individualistic cultures are inclined to be independent and self-oriented, whereas those from collectivistic cultures are interdependent and group-oriented (Kim, 2005). Research shows that the collectivist consumer tends to have a positive attitude toward the environment. For example, consumers who are more concerned with personal gratification will have a less favorable attitude toward the environment, whereas those who are less concerned with personal gratification will demonstrate a more favorable attitude toward the environment (Kim, 2005). Accordingly, consumers are more likely to purchase environmentally friendly products if they formulate a favorable attitude toward environmentally friendly products. Similarly, consumers with a collectivistic background will demonstrate more altruistic tendencies than those from an individualistic background (Cheah and Phau, 2011).

H30: Societal structures do not have a significant impact on positive/favorable consumer attitudes in relation to

H30a: collectivism, and

H30b: individualism.

THEORETICAL FRAMEWORK

Theoretical Framework: Figure 1 shows the study model that fulfills the objectives summarized in the research. Substantive environmental claims, associative environmental claims, green advertisement messaging, environmentally low involvement, environmentally high involvement, collectivism, and individualism represent the independent variables (IV) in the research. The willingness to make environmentally green purchasing decisions represents the dependent variable (DV). Positive/favorable consumer attitudes/behaviors and a willingness to perform environmentally friendly behavior serve as the mediating factors (MV). The other important aspect in the model is post-purchase intention, which is considered a potential variable to be added to improve the model in the future.

First, an exploratory study was conducted to identify attributes of attitudes and behaviors toward environmentalism. The study included interviews with 25 students from the College of Business Administration at King Saud University in Riyadh City. The inclusion of students as respondents for this study is strongly supported by earlier studies, such as Bao (2009). The interviews revealed that students knew about environmental issues and had clear personal thoughts about these issues. They expressed positive attitudes about working for environmental causes, and they observed claims by companies in advertisements on the internet, television, packaging, billboards, and newspapers. They also discussed issues related to the environment in groups and among their friends, and they all had a voice on the issue. However, they felt that communication from the companies’ side was not very strong

and had a KMO measure of sampling adequacy of 0.894. Bartlett's tests of sphericity revealed that the factors were related at a significance level of 0.000. The factors were labeled as per variance explained. The factors included substantive claims (concern for environment), for which the items "product-level claims" and "process-level claims" exceeded 60% factor loadings; associative claims (environment as part of corporate policy), for which the items "board-room" and "policy frameworks" exceeded 60% factor loadings; and message framing (implementation of environmental concepts in every aspect of the organization), for which the items "employees are trained", "employees are rewarded", "results are monitored", and "control mechanism is in place" exceeded 60% factor loadings.

Six statements concerning societal structure underwent factor analysis. One statement was eliminated due to low factor loadings: "Individuals influence group thoughts on environment" (0.482). The Cronbach's alpha was 0.528. The remaining five statements were reduced to two factors with an overall variance explained of 65.8% and a KMO measure of sampling adequacy of 0.936. Bartlett's test of sphericity revealed that the factors were related at a significance level of 0.000. The factors were labeled as per variance and loadings. The items for collectivism included "groups can influence more significant change in the environment", "groups are more active", and "groups can fund more". These exceeded 60% factor loadings. Items for individualism included "the individual drives the group" and "individual motivation". These contributed to group loadings exceeding 60%.

Respondents' positive/favorable attitudes scored always (5) and usually (4) on the measurement scale, and the majority (55.39%) of the respondents were willing to purchase products with environmental backgrounds. The respondents were almost equally divided between purchasing and not purchasing for multiple reasons. From the cross-tabulation results between the independent variables and favorable consumer attitudes, it can be concluded that there is a significant association between favorable consumer attitudes and the independent variables.

Testing Hypotheses

Inferential statistical techniques, such as multiple regressions, univariate ANOVA, and t-tests, were used to test the formulated hypotheses. The results are described in the following paragraphs and tables. For hypothesis one, multiple linear regression analysis was used to estimate the effect of the respondents' involvement in the environmental issue. The regression models for the choice of willingness to purchase contributed significantly and predicted 48.5% of the variation for environmentally high involvement in model 1, 49.0% of the variation for environmentally high involvement and environmentally low involvement in model 2; and 30.1% of the variation for environmentally high involvement, environmentally low involvement, and favorable consumer attitudes in model 3. It also yielded a significant statistic ($F=308.669$, $p=0.000$; $F=239.947$, $p=0.000$; $F=127.042$, $p=0.000$; $F=220.613$, $p=0.000$).

The coefficient revealed that the beta values for environmentally high involvement ($\beta=0.661$, $t=23.330$, $p=0.000$), environmentally high involvement and environmentally low involvement ($\beta=0.652$, $t=22.899$, $p=0.000$ & $\beta=0.073$, $t=12.465$, $p=0.000$), and environmentally high involvement, environmentally low involvement, and favorable consumer attitude ($\beta=0.436$, $t=-10.767$, $p=0.000$; $\beta=0.406$, $t=10.020$, $p=0.000$ & $\beta=0.143$, $t=4.175$, $p=0.000$) are significant predictors. The summary further indicates that independent variables, such as environmentally high involvement, environmentally low involvement, and favorable consumer attitude, are related to the dependent variable (i.e., willingness to perform environmental purchase decisions). Hence, we present the following regression models:

$Y = 1.479 + 0.661 X_1 - (1)$; $Y = 1.713 + 0.652 X_1 - 0.07X_2 - (2)$; $Y = 1.547 + 0.871 X_1 + 0.662 X_2 + 0.594X_3 - (3)$, where Y = willingness to perform environmental purchase decisions, X_1 = environmentally high involvement, X_2 = environmentally low involvement, and X_3 = favorable consumer attitude.

The results of the following null hypotheses, H_{2o_a} , H_{2o_b} , and H_{3o_c} , were disproved. Therefore, the alternative hypotheses, environmentally high involvement (H_{2o_a}), environmentally low involvement (H_{2o_b}), and favorable consumer attitude (H_{2o_c}), were proven to be significant predictors of willingness to perform environmental purchase decisions. Dardis and Shen (2008) found that respondents who were highly involved with environmental issues demonstrated positive attitudes and purchase decisions. In contrast, this study finds that both environmentally high- and low-involved respondents demonstrate positive attitudes and purchase decisions.

Hypothesis two: The effects of determinants of environmental claims via substantive, associative, and message framing on willingness to perform environmental purchase decisions were examined using stepwise forward multiple linear regression analysis (MLRA). The resulting regression models for dependent variables are

presented in the following paragraphs. The regression models for willingness to purchase contributed significantly. There is a predicted 47.0% variation for substantive environmental claims in model 1, a 74.0% variation for substantive environmental claims and associative environmental claims in model 2; an 82.0% variation for substantive environmental claims, associative environmental claims, and effective message framing claims in model 3; and a 10.1% variation in substantive environmental claims, associative environmental claims, effective message framing claims, and favorable consumer attitude in model 4. The results also yielded a significant statistic (F=516.083, p=0.000; F= 157.326, p= 0.000; F=136.664, p=0.000; F= 141.058, p= 0.000).

The coefficient revealed the beta values for substantive environmental claims ($\beta = -0.247, t = -5.365, p = 0.000$); substantive environmental claims and associative environmental claims ($\beta = -0.312, t = -6.475, p = 0.000$ and $\beta = 0.201, t = 4.250, p = 0.000$); substantive environmental claims, associative environmental claims, and effective message framing claims ($\beta = -0.316, t = -6.592, p = 0.000$; $\beta = 0.195, t = 3.944, p = 0.000$ and $\beta = 0.106, t = -2.312, p = 0.000$); and substantive environmental claims, associative environmental claims, effective message framing claims, and favorable consumer attitude ($\beta = -0.714, t = -17.418, p = 0.000$; $\beta = 0.146, t = 15.410, p = 0.000$; $\beta = 0.104, t = 13.075, p = 0.000$ and $\beta = 0.088, t = 9.117, p = 0.000$). These results indicate that substantive environmental claims, associative environmental claims, effective message framing claims, and favorable consumer attitude are significant predictors of willingness to perform environmental purchase decisions. Hence, the following regression models are adopted:

$Y = 1.792 + 0.613X_1 - (1)$; $Y = 1.191 + 0.497X_1 + 0.302X_2 - (2)$; $Y = 1.473 + 0.672X_1 + 0.518X_2 + 0.479X_3 - (3)$; $Y = 1.304 + 0.421X_1 + 0.670X_2 + 0.519X_3 + 0.337X_4 - (4)$. where Y= decision choice; X1= substantive claims; X2= associative claims; X3= message framing; and X4 = favorable consumer attitude.

The results of the null hypotheses H3_{o_a}, H3_{o_b}, H3_{o_c}, and H3_{o_d} were disproved. Therefore, the alternative hypotheses, substantive claims (H2_{o_a}), associative claims (H2_{o_b}), message framing (H2_{o_c}), and favorable consumer attitude (H2_{o_d}), were determined to be the significant predictors of willingness to engage in environmental purchase decisions. Carlson et al. (1996) asserted that the effect of substantive claims and associative claims differ at the international comparative level, and they suggested that these claims differ with respect to consumer attitudes and purchase decisions. Currently, awareness among consumers with respect to environmental issues is very high due to the increased overall pressure that has been placed on such issues. Hence, although the type of claim plays only a minimal role, the effectiveness of the framing and execution of the message are crucial.

Hypothesis three: To test H3, regression analysis was used to estimate the effect of societal structure on decision choice. The resulting regression models for decision choice and its significance, including distinct predictors at varying α levels, are presented in the following paragraphs. The regression models for decision choice shown in table 8 contributed significantly and predicted 49.0% of the variation by collectivism, 37.2% by collectivism and individualism, and 44.3% by collectivism, individualism, and favorable consumer attitude. The three evolved regression models indicated that the independent variables of collectivism, individualism, and favorable consumer attitude were related to the dependent variable (decision choice) with a significant statistic (F = 623.296, p=0.000; F= 285.284, p=0.000 and F= 164.703, p=0.000) for the respective models. The coefficients revealed that collectivism ($\beta = 0.024, t = 0.645, p = 0.000$), collectivism and individualism ($\beta = 0.058, t = 1.039, p = 0.000$), ($\beta = -0.013, t = -0.357, p = 0.000$), and collectivism, individualism, and favorable consumer attitude ($\beta = 0.056, t = 1.418, p = 0.000$), ($\beta = 0.076, t = 4.174, p = 0.000$), ($\beta = 0.050, t = 1.078, p = 0.000$) were significant predictors of decision choice. Hence, the following regression models were adopted for decision choice:

$Y = 1.758 + 0.604X_1 - (1)$; $Y = 1.444 + 0.643X_1 + 0.581X_2 - (2)$; $Y = 1.109 + 0.561X_1 + 0.730X_2 + 0.618X_3 - (3)$, where Y= decision choice; X1= collectivism; X2= individualism; and X3 = favorable consumer attitude.

The results disproved the null hypotheses that the decision does not have a significant effect on collectivism, individualism, and favorable consumer attitude. Thus, there was validity for the alternate hypotheses, H4_a, H4_b, and H4_c. The results are well supported by the previous study by Hans et al. (2012), who found that collectivistic societies are more positive toward environmental issues because these societies are more cooperative and give more credence to group goals than to individual goals (McCarty and Shrum, 2001; Kim, 2011).

DISCUSSION AND MANAGERIAL IMPLICATIONS

A favorable attitude among consumers is an important factor in the marketing of products (D'Souza and Taghian, 2005) because we are all subject to the mass marketing of environmental products that we do not hold in

high regard. Therefore, managers must attract consumers when they are young and draw them in, convincing them of the relevance of environmental issues so that they become long-term customers (Dardis and Shen, 2008). Environmental involvement and the choice of buying decisions indicate that those respondents who said they were highly involved in environmental issues had a positive “ β ” of 0.661 and a favorable consumer attitude, estimated at a positive “ β ” of 0.143, indicating that a change in these individuals will have similar effects on buying decisions. In contrast, respondents who claim low involvement in environmental issues had a negative “ β ” of -0.073 and -0.406, indicating that a change in these individuals will not affect their buying decisions. Laroche et al. (2001) correctly identified that respondents who are motivated toward environmental issues will be more likely to make a purchase decision in favor of environmental products or services. Accordingly, companies that focus on marketing green products must work to create multiple platforms to inform, educate, and convert consumers about buying green products. In the present context, there is a mixed response of high and low involvement with respect to the environmental issue. Because a significant number of respondents are still not interested in environmental issues, they demonstrate disinterest toward purchasing environmental products or services. A similar trend was observed by Bao (2009). This issue presents a tremendous opportunity for green marketing companies and managers because a large number of people are still not convinced about or do not believe in the concepts and benefits of environmental consumption (Lee, 2008).

Messages claiming substantive achievements regarding environmental issues scored a negative “ β ” of -0.247, indicating the respondents are not ready to accept inflated claims. This finding explains that messages with substantive claims were not received well by the respondents, and any changes in this variable will not affect purchasing decisions. However, Chan and Lau (2004) determined that substantive claims have superiority over associative claims in the context of high eco-friendly nations. However, other researchers, such as Pfanner (2008), Polonsky et al. (1997), and Carlson (1996), have found that consumers are less inclined to believe substantive claims. The respondents accepted associative claims as credible and believable. The “ β ” score of 0.201 reveals that a change in this variable will affect purchasing decisions. Thus, associative claims are included in organizations’ claims to associate an activity with an environmental issue. Practitioners should focus on promoting cause-related marketing by promoting the product along with a societal cause. This combination will be received well by consumers. Message framing presented a negative “ β ” of -0.106, which indicates that although the message frame includes environmental concerns or benefits of consuming environmentally friendly products or services, the respondents’ state of mind toward the environment was not significantly active; hence, they were not psychologically ready to respond positively toward such message frames. Gallagher and Updegraff concluded that gain-framed messages received more positive responses from consumers than loss-framed messages. This is a strong indicator that ad sponsors should focus on gain-type messages. It can be further hypothesized that gain-based associative claims are more effective and reach more consumers than other combinations of claims.

Societies follow collectivistic or individualistic practices (Triandis et al., 1988). The respondents adhered to a collectivist approach with a “ β ” value of 0.024, which indicates that environmental issues were collectively accepted. Companies should understand the collectivistic/individualistic cultural issue because some Western countries are purely individualistic, whereas large numbers of developing nations are collectivistic (Hui and Triandis, 1986). Thus, based upon the launch market, a decision must be made regarding group marketing or individual marketing. The homogeneous nature of the student respondents in this study suggests a common view regarding environmental issues. This is because the course content administered to the students included environmental issues. Acceptance of a collectivist mindset automatically terminates individualism, which provided a negative “ β ” of -0.013. Hence, a change to a collectivist mindset will affect buying decisions. This research combined involvement, claims, message framing, and societal structure into an integrated platform and included these four components as the core of consumers’ favorable attitudes or acceptance of green marketing. This study concludes that studying post-purchase evaluations is important for the sustainability of green marketing and consumption.

LIMITATIONS AND FUTURE RESEARCH STUDIES

The major limitation of this study is considering students as respondents. Though students are the future buyers, but in the present times their buying capacity is limited. Issues for future research include post-purchase dissonance and cognitive aspects of the emotional dimension, which are crucial due to their influence on future purchase patterns.

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