

# **The Impact of Green Advertising on Consumer Purchase Intention of Green Products**

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*Chinese advertising industry has dramatically developed as consumers' concerns over the impact of environmental degradation on their lives and interests increase, which results in a significant sale of green products. This study aims to explore how green advertising affect consumers purchase intention of green products. The data were collected from 313 consumers in Shanghai, China. The research findings reveal that credibility of claim ( $\beta=0.847$ ,  $p<0.001$ ) and consumer attitude toward green advertising ( $\beta=0.65$   $p<0.05$ ) significantly influence consumer purchase intention of green products.*

**Keywords:** Attitude towards green advertising, Credibility of Claim, Purchase Intention

## **1. Introduction**

The most effective tool that the marketers and advertisers often use to get consumers' attention is advertising, which helps consumers to elaborate their knowledge about product attributes and specification (Buda and Zhang, 2000). Zinkhan & Carlson (1995) defined green advertising as the appeals that try to fulfill consumers' needs and aspiration regarding to environmental concern and health issues from different perspectives including ecology, sustainability, and pollution-free messages. Many scholars have engaged to study how green message have affected the audiences, and the organizations that expect to win market competition tend to invest more in advertising campaigns by injecting environmental claim (Conolly and Prothero, 2003; Banerjee et al., 1995; Carlson, et al, 1993).

There are various dimensions in green advertising: One is education-focused which aims to enhance consumers' understanding towards the nature and environment; another is commercial-focused which is designed to increase the sales of products or services; some concern about the improvement and enhancement of firm's green image in order to generate long-term customer loyalty (Banerjee et al., 1995; Menon, et al., 1999). Even though green advertising have been widely recognized and accepted, the credibility, validity, and benefits of green advertising are somewhat controversial (Pfanner, 2008) due to the use of false green claim, exaggerate and lurid language and ambiguous information (Easterling et al., 1996; Polonsky et al., 1997). Currently green advertising industry in China is commercial-focused in which firm's green image has been heavily promoting to cultivate customer loyalty as Chinese consumers are losing confidence about food safety and quality of production methods.

Since China has opened up to the west in 1978, domestic market had been flooded with various products through different channels. Chinese consumers used to believe what had been advertised through mass media due to the insufficient and

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ambiguous information about products or services. However, when they take a look at what have happened to their daily lives in recent years, they have found that they are surrounded by a series of food scandals and environmental destruction, which make them highly in health risk and their circumstances in danger. Doubtless, concerns with food security, product quality and environment become mainstream issues at this moment in China, which are the factors that can affect consumer's acceptance of green consumption (D'Souza et al., 2007) as "going-green" becomes a theme of industrial development(Chan, 2004)

Chinese advertising industry has dramatically gained double-digit growth (Song &Wong, 1998), which obviously reflects a demand of transparent information of production methods and a popular anxiety of health and security. Excessive food scandals breed insecurity, so buying and using green products are the ways of eliminating this negative feeling. Therefore, advertising industry has taken on the promotion of green products. That is why affluent and educational Chinese consumers are willing to pay 4.5 percent or more for green products as compared to conventional products (Chan, 1999).

However, there is still a drawback in Chinese advertising industry which is the exaggeration of green theme in quality, safety, product attributes. A trust crisis leads a challenge to the marketers, advertisers, manufacturers since consumers lose their confidences in advertising. The trust crisis in Chinese market has pushed manufacturers, advertisers, marketers to restore consumer confidence. To do so, information of production methods and process is demonstrated in detail in advertisement, and the concept of "consumer merits" has been injected into the advertisement in order to make consumers aware of the impact of their consumptions on environmental improvement and to target "green consumers" who proactively response to the product positioned as "eco-friendly" or "green"(Davis, 1993).

This research explores how green advertising affect consumers purchase intention of green products from Chinese perspective especially Chinese consumers' responses to company itself and the products, which have not been mentioned in relevant empirical studies before. The objectives of this research are as follow:

Objective one: to study the relationship between consumers" responses to green advertising and consumers" attitude toward green advertising.

Objective two: to analyze the relationship between consumers" responses to companies and their products and consumers" attitude toward green advertising.

Objective three: to evaluate the relationship between consumers" attitude toward green advertising and consumers" purchase intention of green products.

Objective four: to examine the relationship between credibility of green claim and consumers" purchase intention of green products.

This research contributes towards better understanding of how green advertising affect Chinese consumer buying intention. The first step to generate marketing strategy and to target green consumer is to understand what consumers are

concerned about (Endecott, 2004). Therefore, from a practical perspective, green product enterprises, advertisers and marketers need to see how consumers respond to green advertising. By doing so, marketers can evaluate their strategies and yield more effective strategies to convince consumers. In addition, for academicians, this work will enrich knowledge with regard to the influence of green advertising on Chinese consumer buying intention and know more characteristics of those Chinese consumers.

This paper consists of five sections. Section one provides general information about green advertising. Section two presents relevant previous studies. Section three and section four explain conceptual framework and data analysis. Section five summarizes the research.

## 2. Literature Review

**Attitude towards green advertising:** Consumers' feelings and judgments are formed when they are exposed to an advertisement which will influence consumers' attitudes towards the ad itself and their beliefs regarding the brand or the product (Batra and Ray, 1986). It is necessary to investigate the differences between consumers' affective response which is consumers' feelings from ad exposure) and cognitive response which is consumers' judgments towards the ad (Button and Lichtenstein, 1988). Based on the previous researches, consumers' affective responses are influenced by other ads, consumers' emotions and the current circumstance (Gardener, 1985; Aaker *et al.*, 1986). Therefore, how the consumers feel about the ad that they are exposed will affect their assessments of the brand (Edell and Burke, 1987). The study of consumers' attitudes towards green advertising has been very comprehensive. Consumers who are environmental concerned normally have generated positive attitudes towards green advertising and environmental issues (Carlson *et al.*, 1993).

**Consumer Response:** A series of researches were conducted to study consumers' responses to advertising claims and products. To understand how consumer respond to message in green advertisement is critical to green marketing, because people at present somewhat have questions about the credibility of products presented through green advertising (Kangun *et al.* 1991; Mayer *et al.* 1993; Kim and Damhorst, 1999) even if products from companies that have been perceived as "green" and have good reputation of environmental preservation are still more acceptable than conventional products by consumers (Stisser, 1994; Ottman Consulting, 1991). In this study, the researcher intends to investigate how consumers respond to green advertising itself and how consumers respond to the organizations that have been perceived "green" and their products respectively.

**Credibility of Claim:** Lutz (1985) identified ads credibility as the degree to measure the perception of audience regarding the trustworthiness of the advertised brand in the advertisement. The credibility of ad claim is able to strongly affect audiences' responses toward ad itself and the advertised brand. Eco-label is perceived as an important factor for consumers to make a buying decision (Thorgersen, 2002). Therefore, consumers' evaluations and attitudes toward the advertisement claim are affected by eco-label and information regarding to products' environmental attributes (Ian and Denise, 2007). For those brands with green images, they more likely affect

audiences" emotion and enhance customer loyalty (Ginsberg and Bloom, 2004). In addition, these green brands can generate a positive public image and optimistic sales (Marshall and Mayer, 1992). The advertisements that deliver environmental message are perceived credible (Mathur and Mathur, 2000); however, the credibility of green claim has been weakened by the excessive use of the terms of "environmental-friendly", "natural", "sustainable" or "recycled" (Karna et al., 2001; Annonziato, 2001).

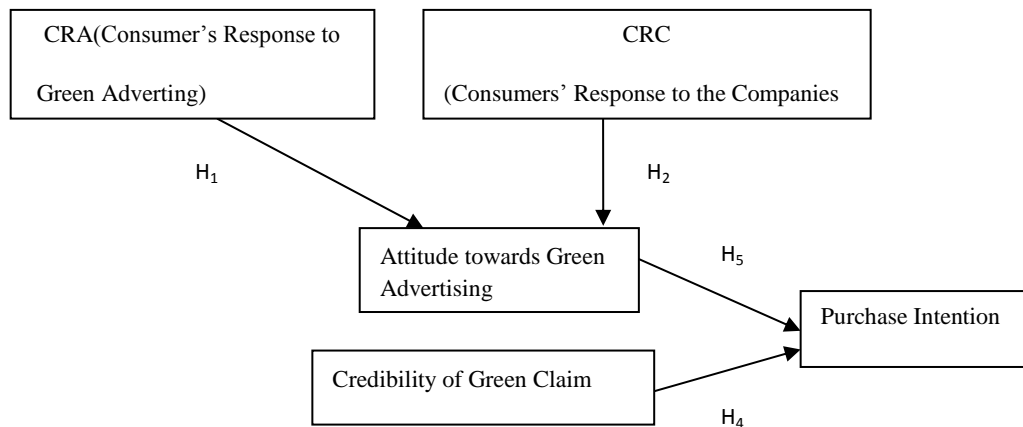
### 3. The Methodology and Model

#### Conceptual Framework

Based on previous studies of Matulich, Haytko and Austin (2000), Ian and Denise (2007), Chan (2004), Leonidou, Leonidou, Palihawadana and Hultman (2011), the researcher developed a conceptual framework for this study to study how consumer response, consumer attitudes toward green advertising, credibility of green claim directly and indirectly influence consumer purchase intention of green products since there is no any empirical studies done in Chinese market.

In addition, 400 self-administered questionnaires were distributed to the respondents who have ever exposed to green advertising in Shanghai through convenience sampling technique and 313 questionnaires were collected. The respondent rate was 78.25 percent.

**Figure 1: Modified conceptual framework**



**H1o:** There is no relationship between consumers" responses to green advertising and consumers" attitude toward green advertising

**H2o:** There is no relationship between consumers" responses to companies and their products and consumers" attitude toward green advertising

**H3o:** There is no relationship between consumers" attitude toward green advertising and consumers" purchase intention of green products

**H4o:** There is no relationship between credibility of green claim and consumers" purchase intention of green products

## 4. Research Findings

### Descriptive Analysis

**Table1: Summary of Demographics represented by Highest Percentages**

Consumer Profile	Variables	Percentage (%)
Gender	Female	62.8
Age level	31-40 years old	39.8
Marriage status	Single	47.8
Income	RMB3,001-4,000	43.5
Education level	Bachelor degree	65.3
Employment category	private sector employed	32.5

All the highest percentages of demographic factors were summarized in Table 1. The majority of all respondents were female which account for 62.8 percent of the respondents and most of the respondents were in the age group of 31 to 40 years old that account for 39.8 percent. 47.8 percent of respondents were single. In addition, 43.5 percent of the respondents have their monthly income between 3,001 RMB and 4,000 RMB. For education level, the highest percentage was 'bachelor degree' with 65.3 percent. Moreover, 32.5 percent of the respondents are employed in private sector.

### Multiple Regression Analysis

**Table 2: Result of regression analysis for predicting attitude toward green advertising**

Variable	Unstandardized Coefficient (B)	Standardized Coefficient ( $\beta$ )	t-value	P-value
(Constant)	1.884		8.816	.000
CRA*	.306	.302	5.089	.000
CRC*	.271	.281	4.727	.000

Note: \*\*\*  $p < 0.001$ ;  $F = 56.561$ ;  $R^2 = .267$ ; Adjusted  $R^2 = .263$

As indicated in Table 2, the column of estimates provides the values to form a regression model for this study:  $Y = 1.884 + 0.306x_{cra} + 0.271x_{crc}$ . In addition, Beta ( $\beta$ ) shows relative influence of predictor variables, in which consumer response to green advertising (CRA) significantly influence consumers' purchase intention of green food followed by consumer response to companies and their products (CRC).

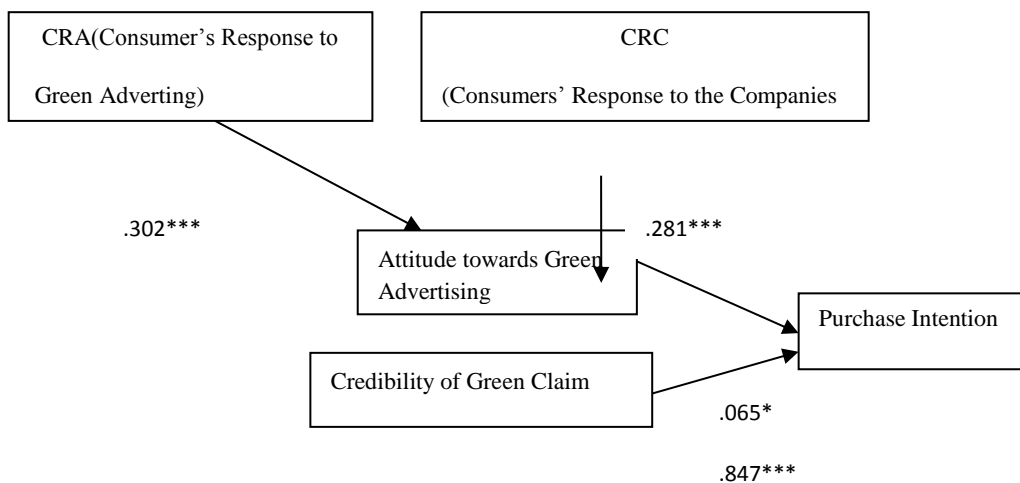
**Table 3: Result of regression analysis for predicting attitude toward purchase intention of green products**

Variable	Unstandardized Coefficient (B)	Standardized Coefficient (β)	t-value	P-value
(Constant)	.452		3.603	.000
CC***	.810	.847	28.240	.000
ATT*	.058	.065	2.168	.031

Note: \*\*\*  $p < 0.001$ ; \*  $p < 0.05$ ;  $F = 505.033$ ;  $R^2 = .765$ ; Adjusted  $R^2 = .764$

As indicated in Table 3, the column of estimates provides the values to form a regression model for this study:  $Y = 0.452 + 0.810x_{cc} + 0.058x_{att}$ . Beta ( $\beta$ ) shows relative influence of predictor variables. Two Xs (CC and ATT) have positive influence on Y, and CC has the greatest influence on Y (purchase intention). That is to say, credibility of claim significantly influence consumers' purchase intention of green food.

**Figure 2: Result of Hypotheses testing**



Note: \*\*\*  $p < 0.001$ ; \*  $p < 0.05$ ;

As shown in Figure 2, hypothesis 1, hypothesis 2, hypothesis 4 are significant at .001 level ( $p < .001$ ), and hypothesis 3 is significant at .05 level ( $p < .05$ ). Therefore, all the null hypotheses are rejected.

## 5. Summary and Conclusions

Based on the research findings, the researcher can firstly conclude that a systematic and well-planned scheme is needed to launch a green advertising campaign. Green marketing strategy should be applied so that the firms will be able to establish a strong corporate image of "being green" and achieve optimistic sales of green products

Second, research findings reveal that the credibility of claim in green advertising plays the most important role in influencing consumer purchase intention of green

products in Shanghai. As there is a lot of concern over credibility of claim, detailed information and actual benefits from consuming green products should be provided. The firms should not use exaggerated linguistics for the advertising; in contrast, the claims should be specific, trustful and sincere. By doing so, the companies will be able to lay consumers' doubts, enhance companies' reputation and gain credibility with the public to a certain extent.

Third, consumer attitude toward green advertising also positively influence consumer purchase intention of green products. According to Ajzen (1991), the more positive attitude consumers have toward a behaviour, the stronger intention the consumers will have to perform the behaviour under his or her control. In this study, Chinese consumers' intentions to purchase green product are strong as their attitudes toward green advertising are positive. While the consumers optimistically respond to green advertising, the companies and their products, the firms should stress their environmental actions, which will allow consumers to differentiate between "green" firms and "non-green" firms as green products are in demand. In addition, the application of green methods in production and green product attributes should be emphasized to convince and attract consumers. What's more, a green advertising campaign should be associated with a clear, transparent, understandable and concise environmental claim, through which the firms will be able to grab the consumers' attention.

### Limitations of the Research

This research selected only one city in China, but the actual number of population is unknown. Thus, the sample size the researcher adapted may not be perfect to represent the characteristics of the entire target population. Second, even though social-demographic factors play a minor role to elicit the difference in the environmental attitudes and behaviours (Tanner *et al.*, 2004), the differences between purchase intention and demographic factors are disregard in the study. Moreover, this study is a general study, so the information presented by this research may not be specific and sufficient enough for a particular product. The next constraints are limited time and lack of budget.

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