



An Empirical Study on the Influence of Green Advertising Demands on Green Purchase Intention --The Mediating Effect Based on Perceived Interests and the Moderating Effect of Self-Construction

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Abstract. This paper explores the influence of green advertising appeals on consumers' green purchase intention and its underlying mechanisms through experiments. The results show that green advertising appeals have a significant effect on green purchase intention, with self-interested appeals having a stronger effect on consumers' green purchase intention; consumers' perceived benefits play a mediating role; and self-construction plays a moderating role. The study enriches the research on green advertising appeals, self-construction, consumers' perceived benefits and green purchase intention, and also helps enterprises to understand consumers' green purchase intention more deeply and formulate scientific and reasonable marketing strategies.

Keywords: green advertising appeal; green purchase intention; self-construction; consumer interest perception.

1 Introduction

Advertising is a marketing tool widely used by enterprises, and advertising appeals play a very important role in the content of advertisements, and green advertising appeals are also an indispensable part of green advertising. Green advertising appeals are closely related to consumers' purchase intention.[1] In this paper, we will answer the following questions: (1) Do green advertising appeals have an effect on green purchase intention? (1) Do green advertising appeals have an effect on green purchase intention, and do two different green advertising appeals (self-interest vs. altruism) have the same effect on green purchase intention? (2) Do different types of self-construal (independence vs. dependence) moderate the effect of green advertising appeals (self-interest vs. altruism) on green purchase intentions? (3) Do consumers' perceived interests (environmental vs. health) mediate the effect of green advertising appeals (self-interest vs. altruism) on green purchase intentions? The study of the above questions will theoretically enrich the existing research on green advertising appeals, self-construction, consumers' perceived benefits and green purchase intention, and

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Q. Wu et al. (eds.), *Proceedings of the 2024 3rd International Conference on Public Service, Economic Management and Sustainable Development (PESD 2024)*, Advances in Economics, Business and Management Research 309,

https://doi.org/10.2991/978-94-6463-598-0_4

practically help companies to better understand consumers' green purchase intention and formulate scientific and reasonable marketing strategies.

2 Literature Review and Hypothesis Derivation

2.1 The Effect of Green Advertising Claims on Green Purchase Intentions

Green advertising appeals add green elements to advertising appeals with the aim of stimulating consumers' willingness to buy green products [2]. Allen [3] proposed that self-interest appeals are to persuade consumers with self-interest as the point of appeal; and altruistic appeals are to persuade consumers with the interests of others as the point of appeal [4]. Originally applied to advertising, the fine processing model is an important theory for studying the effectiveness of advertising [5], which suggests that the paths of the information pathway are the central pathway and the marginal pathway, which have an impact on individual attitudes and behaviours, respectively [6]. The central path activates consumers' functional congruence motivation; information processed by the edge path activates consumers' image congruence motivation [7]. The following hypotheses are proposed in this study:

H1a: Green advertising claims have a significant effect on green purchase intention.

H1b: Self-interest appeals have a stronger effect on consumers' green purchase intentions than altruistic appeals.

2.2 The Moderating Role of Self-Construal

Self-construction is how a person views the relationship between self and others and society [8], which is divided into independent self and dependent self [9]. The independent self focuses on the self and its own expression; the dependent self focuses on others and the overall relationship [10]. Self-interested advertising appeals are more likely to convey the personal benefits of the product [11], while altruistic advertising appeals are more focused on promoting the social benefits of the product [12], and the following hypotheses are proposed in this study:

H2: Self-construal has a moderating role between green advertising claims and consumers' green purchase intentions.

H2a: Dependent self has a positive moderating effect between green advertising altruistic claims and consumers' green purchase intentions.

H2b: The independent self has a positive moderating effect between green advertising self-interest claims and consumers' green purchase intentions.

2.3 The Mediating Role of Consumers' Perceived Benefits

Some scholars divide the perceived benefits into two dimensions: health benefits and environmental benefits [13], and the S-O-R theory points out that external stimuli will promote consumers' behavioural responses by influencing their psychological state. Green advertising self-interest focuses on the personal benefits of green products, while

green advertising altruism focuses on the social and environmental benefits of green products. The following hypotheses are proposed in this study:

H3a: Green advertising altruistic claims have a stronger impact on consumers' perceived environmental benefits than green advertising self-serving claims.

H3b: Green advertising self-interest claims have a stronger impact on consumers' perceived health benefits than green advertising altruistic claims.

H4: Consumer perceived benefits mediate the effect of green advertising claims on green purchase intentions.

H4a: Consumers' perceived health benefits mediate the effect of green advertising self-interest claims on green purchase intentions.

H4b: Consumers' perceived environmental benefits mediate the effect of green advertising altruistic claims on green purchase intentions.

In summary, the research model of this paper is shown in Figure 1:

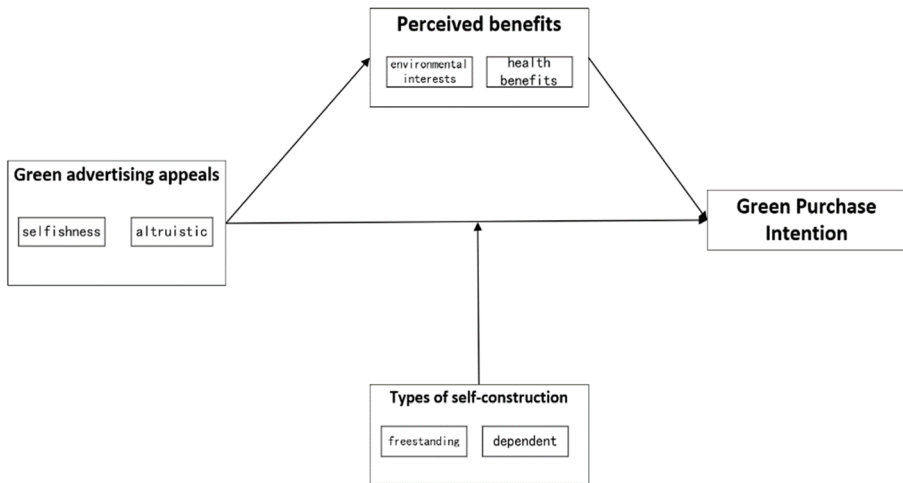


Fig. 1. Diagram of the research model

3 Research Design

3.1 Experimental Design

The experiment adopted a 2 (green advertising appeal: self-interest vs. altruism) x 2 (self-construal type: independence vs. dependence) between-groups experimental design and was conducted online through "Credamo". 360 questionnaires were received in total, and 356 valid questionnaires were collected by eliminating 4 questionnaires that did not pass the screening and validity tests. A total of 360 questionnaires were received. At the beginning of the experiment, participants were randomly assigned to four different scenarios: dependent self/ego appeals, dependent self/altruistic appeals, independent self/ego appeals, and independent self/altruistic appeals.

3.2 Experimental Results and Analysis

(1) Manipulation test: it was tested that the experiment was valid for the manipulation of green advertising claims and self-construal: the results of the statistical analysis are shown in Table 1 and Table 2.

Table 1. Green Advertising Claims Manipulation Test Table

variant	Self-interested advertising claims (N=178)	Altruistic advertising claims (N=178)	F-value	P-value
environmental protection	3.76±1.03	5.67±0.68	279.94	0.00
personal interests	5.79±0.56	3.30±1.04	792.43	0.00

Table 2. Independent samples t-test table for self-construals

variant	Dependent self-construction	Self-construction of independence	T-value	P-value
Dependent self-construal score	6.37	3.47	19.16	0.00
Independent self-construal score	4.76	6.43	-12.41	0.00

(2) Green purchase intention: the reliability of the green purchase intention scale is good ($\alpha=0.93$). ANOVA was conducted with green purchase intention as the dependent variable and green advertisement claims as the factor, and the results are shown in Figure 2. The experimental results support the proposed hypotheses H1a and H1b.

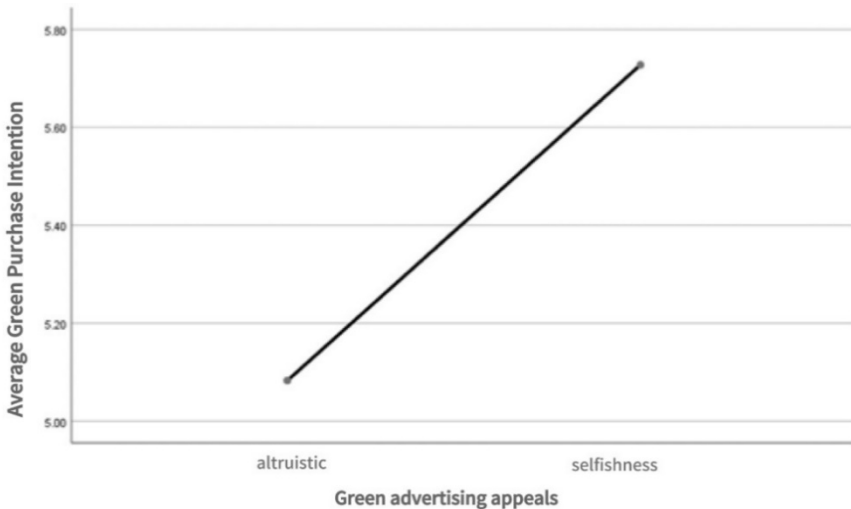


Fig. 2. Effect of altruistic and egoistic appeals on consumers' green purchase intention

(3) Self-construal: The interaction between green advertising claims and self-construal was found to be significant through a 2 (green advertising claims: altruistic vs. self-interested) × 2 (self-construal type: dependent vs. independent) ANOVA, the results of the experiment are shown in Figure 3, and the results support the proposed hypotheses H2a and H2b.

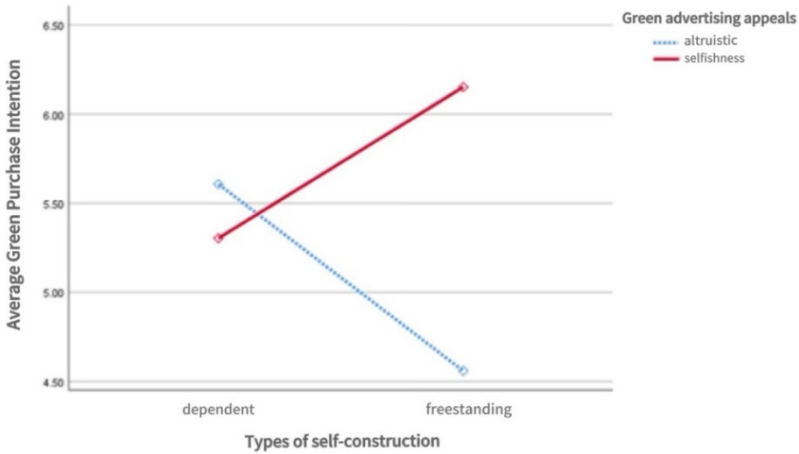


Fig. 3. The moderating role of self-construals between green advertising claims and consumers' green purchase intentions

(4) Consumer perceived benefits: firstly, the effects of different green advertising appeals on consumer perceived benefits were analysed through the use of independent samples t-tests, the results are shown in Table 3, and the results support hypotheses H3a and H3b. In addition to examining the mediating role of consumer perceived benefits, the results show that the mediating effect of consumer perceived benefits is significant (LLCI= 0.07, ULCI= 0.52, not including 0), and the results supported Hypothesis H4. The study also examined the mediating effect of different two perceived interests on different green advertising appeals to influence green purchase intention separately. The results showed that the mediating effect of perceived environmental benefits was significant in the case of altruistic appeals (LLCI=0.07, ULCI= 0.39, excluding 0), and the mediating effect of perceived health benefits was significant in the case of self-interested appeals (LLCI=0.47, ULCI= 0.94, excluding 0), which supported hypotheses H4a and H4b.

Table 3. Independent samples t-test table for consumers' perceived benefits

variant	Altruistic advertising appeals	Self-interested advertising appeals	T-value	P-value
Perceived environmental benefits	6.11	4.06	17.72	0.00
Health Perceived Benefits	4.47	5.90	-12.49	0.00

4 Conclusions

In this study, green juice, which is common in daily life, was chosen as the experimental material, and the effect of green advertising appeals on green purchase intention was examined by referring to scholars' methods of manipulating green advertising appeals, and it was found that green advertising appeals had a significant effect on consumers' green purchase intention, and that egoistic types of advertising appeals had a stronger effect on consumers' green purchase intention. This study also examined the interaction effect of self-construal (dependent vs. independent) and green advertising appeals (altruistic vs. self-interested) on consumers' green purchase intention by manipulating self-construals of the participants in the experiment, and found that the acceptance degree of green advertising appeals varies among different self-construals, and that the altruistic type of green advertising appeal is more effective when the consumers are dependent self-construals, while the altruistic type is better when the consumers are independent self-construals, and that the altruistic type of advertising appeal has a stronger effect on consumers' green purchase intention when the consumers are self-interested. When consumers are independent self-construals, altruistic green ad appeals will be more persuasive. Also, this research experiment tested the mediating role of consumers' perceived benefits. It was found that different types of green ad appeals (altruistic vs. self-interested) had different effects on consumers' perceived benefits (environmental vs. health benefits), with altruistic green ad appeals being more effective in stimulating consumers' environmental benefits and self-interested green ad appeals being more effective in stimulating consumers' health benefits.

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