



Article

Should “Green” Be Precise? The Effect of Information Presentation on Purchasing Intention of Green Products

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Abstract: Green product companies usually convey product performance in either ambiguous or precise ways. Many studies have been conducted on the ambiguous and precise information presentation of traditional products, but few have examined which kind of information presentation (ambiguous vs. precise) is better for presenting green products. This article conducted three experiments with 484 participants to examine the influence of information presentation (ambiguous vs. precise) of green products on consumers’ purchase intention. Results show that ambiguous information presentation can increase more consumers’ purchase intention of green products than precise information, and green trust plays a mediating effect. Furthermore, product type (durable goods vs. fast-moving consumer goods [FMCG]) moderates the influence of information presentation on consumers’ purchase intention. Specifically, for green durable goods, ambiguous information is more likely to arouse consumers’ purchase intention than precise information presentation. For green FMCG, precise information is more likely to promote consumers’ purchase intention than ambiguous information presentation.

Keywords: information presentation; green durable goods; green FMCG; green trust; purchase intention



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1. Introduction

When green product companies communicate information about the performance of their products, they usually convey it in either ambiguous or precise presentation. For example, a slogan of Wang Pin Xuan (a famous Chinese food brand) states that: “Taste green, enjoy health and multiple nutrition at Wang Pin Xuan” and American cosmetics brand Origins asserts that “Take the earth, regenerate the forest”. In contrast, Midea (a famous Chinese air conditioner brand) highlights in precise information that: “Only one kilowatt per night (eight hours),” and Tesla advertises that Model S reduced carbon monoxide emissions by 1200 tons, hydrocarbon emissions by 120 tons, and nitrogen oxide emissions by 72 tons. Accordingly, which information presentation mode (ambiguous vs. precise) is more effective for introducing green products?

Information presentation can be divided into ambiguous presentation relating to abstract features and precise presentation relating to detailed features of product technical indicators [1]. Marketing literature mainly discussed these two information presentation modes of traditional products from the perspectives of the information process [1–4], image [5], number [6–8], and product name [9], ostensibly providing little insight into the influence on green products. However, information presentation modes of green products can significantly influence consumer behavior [10–12]. This article recognizes this phenomenon in the information presentation of green products and investigates the influence of information presentation modes (ambiguous vs. precise) of green products on individuals’ behavior.

Compared with traditional products, green products cause less environmental pollution and bring more benefits to humans [13] and generally contain more advanced

technology and function [14]. Due to the poor professional knowledge and greenwash of green products, it is hard for consumers to precisely understand this novel technology, such as green manufacturing labels and certification [15,16], which sometimes causes consumers to distrust the first time. On the contrary, the information about green products that highlights the green value but does not describe specific parameters can increase consumers' positive evaluation of green products on the cognitive level [17]. Therefore, this article proposes that compared with precise information presentation, ambiguous information presentation could increase consumers' purchase intention of green products.

In addition, green products have been categorized into durable goods or fast-moving consumer goods (FMCG) depending on the length of time that consumers use them [18,19]. Generally, consumers buy green FMCG more frequently than green durable goods. The repeated purchase of a product will increase consumers' knowledge and familiarity with the product [20], which leads to consumers' trust in the products [21]. When consumers have little information, ambiguous external clues such as brand image and value concepts can help them make decisions [22]. If consumers perceive that the concept and image conveyed by a product match their cognitive level, then their trust in the product will be enhanced [23]. Zhou and Nakamoto [24] demonstrated that consumers with purchase experience are willing to pay more attention to the uniqueness and innovation of products. Thus, precise information such as specific parameters and technology of products can help them distinguish differences among products. Therefore, the type of green product (durable goods vs. FMCG) affects consumers' perception of green product information presentation. Specifically, for green durable goods, ambiguous information presentation can increase consumers' purchase intention. For green FMCG, precise information presentation can increase consumers' purchase intention.

This article makes three research contributions. First, it extends the research on information presentation (ambiguous vs. precise) in green products and finds that ambiguous information presentation can increase consumers' purchase intention of green products better than precise information presentation. Second, it enriches the research on green product types (durable goods vs. FMCG) in the way of product information presentation and proposes the influence of the matching effect of product types and information presentation on purchase intention. Third, it further explores the intermediary mechanism of green trust and the influence mechanism of green product information presentation on purchase intention.

2. Theories and Hypotheses

2.1. Information Presentation Modes

According to Action Identification Theory [25,26], any action can be identified from a high level that pointed out why to do it (e.g., Wash the stains out of the clothes) and a low level that pointed out how to do it (e.g., Put the clothes in the washing machine). In the area of information presentation, Kim, et al. [1] divided information presentation into the ambiguous presentation and precise presentation. Ambiguous information is abstract information that usually expresses an overall evaluation of green value. It does not provide a clear description of product details, which indicates why people use the product. Precise presentation expresses specific information. It usually focuses on how the product achieves its value goals through the presentation of specific technical indicators, which indicates how people use the product.

Researchers have primarily examined how the information presentation modes (ambiguous vs. precise) influence consumers' purchase decisions of traditional products. Wei [7] found the use of ambiguous digital information would make consumers feel that key information is missing and retailers are shirking their responsibilities. Miller and Kahn [9] found that ambiguous information like unusual color or flavor names makes consumers search for much information about products, and this search process results in a positive attribution. For precise information presentation, Xie and Kronrod [6] found that consumers with different levels of skepticism could affect trust in digital precision. For example,

consumers with high skepticism would question whether the specific values provided by retailers were true. In addition, precise information may cause cognitive difficulties, but it requires consumers to exert more effort to understand the information, which can improve the attractiveness and persuasibility of products [1,27]. Van Rompay and Veltkamp [28] discussed comprehensively the effect of ambiguous and precise information presentation of traditional products and found that explicit information could increase brand perception. Mishra, et al. [29] found that when reading ambiguous information, consumers are more optimistic about outcomes post-action than pre-action, and this effect decreases when the information becomes precise.

In the area of green products, different information presentation modes affect the feelings and purchase behaviors of consumers [10,11]. However, how information presentation modes (ambiguous vs. precise) of green products affect consumers' perceptions and behaviors remains unclear. As such, this article focuses on the influence of information presentation modes (ambiguous vs. precise) of green products on consumers' purchase intention.

2.2. Green Products

To understand the influence of these two information presentation modes on green products, it is essential to identify the definition and characteristics of green products. Many scholars have made efforts to develop the definition in different aspects. From the perspective of green materials and attributes, green products are defined as products that are not harmful to the environment, are made of chemical components that cause less pollution to the environment, and could be recycled [30]. Ottman, et al. [31] found that green products reduce the use of environmental pollution and toxic materials. They prevent the wastage of raw materials and achieve the purpose of protecting the environment by saving resources. From the perspective of green certification, green products are defined as products certified by authorities that do not contain toxic and harmful substances to the environment and human body, and the certification process is green and pollution-free [32]. Above all, this article defines green products as products that not only have the functions of traditional products but are less harmful to the environment and human health; hence, they could usually be recycled.

2.3. Information Presentation of Green Products

Scholars examined the influence of different modes of information presentation on consumer behaviors from the perspective of advertising appeal and visual presentation. For example, Iyer and Banerjee [10] proposed that advertising information can be divided into green appeal and economic appeal. Specifically, green appeal refers to highlighting the information beneficial to the environment and health without economic information. Economic appeal refers to the expression of product green information while emphasizing information related to consumers' practical interests, such as saving money and time. Chang, et al. [11] found that the loss frame with low-level construal, as well as the gain frame with high-level construal results in more purchase intention of green intention. Chen and Chiu [33] proposed that environmentally conscious consumers who read abstract and distant temporal messages will have a more positive brand attitude than those who read concrete and proximal temporal messages. Da Luz, et al. [34] found that demarketing green messages (i.e., encouraging consumers to decrease purchase behavior for protecting the environment) make consumers show more brand attitude and purchase intention toward luxury. Machova, et al. [35] found that if the harm to the environment is shown by videos, pictures, or facts, consumers will be more likely to refuse this product. To the best of our knowledge, little research examines which information presentation mode (ambiguous vs. precise) is better for presenting green products to promote purchase intention.

Due to fewer details and descriptions than precise information, ambiguous information can cause higher skepticism of traditional products [36]. However, this article proposes that consumers may generate more trust in green products when information presentation

is ambiguous. Generally, the mode of information presentation of green products could affect consumers' purchase intention [17]. Liu, et al. [37] proposed that consumers hold a favorable attitude toward environmental protection. However, given that consumers are often limited to environmental knowledge and lack trust, their cognitive attitude toward green products may not necessarily transmit into purchase behavior. For example, because of a lack of professional knowledge, precise information presentation of green products will make it difficult for consumers to realize the environmental effort that green products include [15]. Furthermore, the precise presentation of specific parameter labels of products will lead to consumers' skepticism, and consumers need to further verify their authenticity, thus reducing their purchase intention [38]. In contrast, ambiguous information about green products like environment protection ideas and appeals can improve consumers' positive evaluation because this information is easy for consumers to perceive the green value of green products, and thus increase purchase intention [39]. Therefore, the following hypothesis is proposed:

H1. *Ambiguous information presentation could increase consumers' purchase intention for green products better than precise information presentation.*

2.4. Green Trust

Trust refers to consumers' rational expectations and subjective perceptions of integrity, goodwill, and ability [40,41]. Chen and Chang [16] defined green trust as consumers' expectation and judgment of the trustworthiness and goodwill of retailers to provide green products and services. Moreover, the trust could affect consumers' purchase intention [42,43]. Consumers would have positive psychological expectations and predictions through trust. If consumers have the purchase experience of the products, then the product performance obtained by consumers will test their previous judgment, thus influencing the expectation and judgment of the next purchase [44]. In addition, because some companies often use greenwash information (i.e., exaggerate the environmental functionality of green products) to mislead consumers, which has become a barrier to attracting consumers, how to improve consumers' green trust has become an important problem [16,45].

One of the main factors for consumers to generate green trust is whether they can perceive the consistency of the environment-protection concept between the retailer and their values. If the green values of consumers are highly consistent with those of retailers, then consumers will generate green trust [46], while consumers who doubt the green function and concept of environmental protection could have low green trust [47,48]; this is because with the development of the green industry, some retailers may exaggerate the green value of their products leading to distrust among consumers [46,49]. However, most consumers lack professional knowledge and are unable to judge the quality and information of green products, so distinguishing between true and false is even more difficult [50]. Hence, when presenting detailed information about green products, consumers will not generate green trust because they lack professional knowledge and may not perceive the green effort. When presenting an overall evaluation of green products, consumers' perception of green value conveyed by the green products could be improved because this information is generally easy to understand, thus enhancing the green trust in green products [51]. Based on this argument, this article proposes the following hypothesis:

H2. *Green trust mediates the influence of information presentation of green products on purchase intention. Specifically, the ambiguous presentation could increase consumers' green trust and lead to more purchase intention better than a precise information presentation.*

2.5. Product Types

According to the frequency of use of products, green products can be divided into green durable goods and green FMCG [18]. Green durable goods are usually purchased with low frequency and high unit prices. Green FMCG is usually purchased with high

frequency, lower unit price, shorter use time, and even one-time consumption. Therefore, consumers have a longer cycle to buy green durable goods than green FMCG. Park and Lessig [20] found that consumers lack related knowledge about the products when buying new products, but consumers will gain substantial experience and information after the first purchase, which will also increase their familiarity with the products. Product familiarity refers to consumers' knowledge of a particular type of product or service [52,53]. Therefore, consumers are usually more familiar with FMCG than durable goods. Furthermore, prior experience of purchase is the basis of trust [54,55]. When consumers are familiar with a product, they will trust the product because they can estimate the future performance of the product based on their past purchase experience. This is, trust is usually closely related to familiarity with a situation [21,56].

Accordingly, consumers have limited purchase experience with green durable goods, which means that are usually unfamiliar with these products. If consumers have less professional knowledge or access to information, then information asymmetry will arise between consumers and retailers [57,58]. In this case, consumers need external clues, such as value concepts and brand image, to help them make decisions because the consistency of values between consumers and retailers can improve the green trust in products [47,48]. However, consumers who are more familiar with green products will be more interested in the uniqueness and innovation of products; hence, they pay more attention to the specific parameters and technologies of the products to distinguish them from other products [24]. Therefore, the precise information about green FMCG makes consumers understand the technologies and other details of the green products and consequently believe the function of products for environmental protection.

In summary, for green FMCG, retailers could provide consumers with precise information, such as specific parameters and attributes of products, to help them distinguish green products from other products because they are familiar with these products, while precise information presentation can improve the green trust in products. For green durable goods, retailers should provide ambiguous information such as product brand image or value concept, to convey the value of the green products, because consumers are not familiar with durable goods; whereas ambiguous information presentation can provide external clues to improve consumers' green trust. Based on this argument, this article proposes the following hypothesis:

H3. *The types of green products moderate the influence of information presentation on purchase intention. Specifically, for green durable goods, ambiguous information presentation will increase consumers' purchase intention; whereas for green FMCG, precise information presentation will increase consumers' purchase intention.*

3. Methodology

This article conducted three situational studies to examine whether consumers will generate green trust from the ambiguous information presentation of green products (H2), thereby increasing their purchase intention (H1). The type of product (durable goods vs. FMCG) moderates the effect of information presentation mode (ambiguous vs. precise) on purchase intention. Specifically, for green durable goods, ambiguous information presentation will increase consumers' purchase intention; whereas for green FMCG, precise information presentation will increase consumers' purchase intention (H3).

This article recruited 484 participants in these three studies, and all the participants were told to join a survey about a new poster, which means that every participant did not know the real purpose of these studies. In addition, to decrease the experimental interference, every participant was recruited randomly.

3.1. Study 1

Study 1 aimed to examine the effect of information presentation mode (ambiguous vs. precise) on purchase intention (H1 and H2). Specifically, ambiguous information about

green products could lead to higher purchase intention than precise information, and green trust plays the intermediary role.

3.1.1. Design and Participants

Study 1 adopted a single factor (information presentation: ambiguous vs. precise) between-subjects design. This study was conducted at a square in a community in Southern China and a total of 130 participants (66 female, $M_{age} = 31.3$, 54 of them have a bachelor's degree or above) were randomly recruited when they passed the square. Study 1 was conducted from 16:30–18:00 for three days (from 4 May 2022 to 7 May 2022). Each participant was given 5 CNY (about 0.74 USD) as a reward.

3.1.2. Procedures

Study 1 chose a refrigerator with an environmental attribute as a stimulus and asked participants to read one of the 2 scenarios (ambiguous presentation group vs. precise presentation group). Following the method of Morel and Kwakye [18], Study 1 introduced the concept of green products to the participants (i.e., a green product is an eco-friendly product that uses new manufacturing steps and recycling technology. It is less harmful to the environment than traditional products; hence, they can reduce environmental pollution). Participants were then asked to read the following scenarios and advertisement pictures: “Responding to the recent call of protecting the environment, you are going to buy a refrigerator with an environmental attribute on Taobao, an online shopping platform. After browsing for some time, you focus on a refrigerator brand that is promoting their new refrigerator with an environmental attribute”. Then, the participants read the information about the refrigerator. The information read by the ambiguous presentation group is: “Protect the earth, save the blue sky”. The precise presentation group read the following description: “1 kWh every four days”. (See Figure 1).



Figure 1. Stimuli materials of Study 1.

After reading, the participants were first asked whether the material of the refrigerator characterizes a green product (0 = no, 1 = yes). Then, the participants were asked about their perception of the precision degree of the information (I think the precision of the description of this refrigerator was very ambiguous = 1, very precise = 7) as a manipulation check. The authors asked them about their familiarity with the relevant technology mentioned in the description (1 = very little, 7 = very much). In addition, participants were asked to finish the purchase intention scale (e.g., the likelihood of buying this product was very low = 1, very high = 7, Dodds, et al. [59]) and the green trust scale (e.g., the degree of the environmental reputation of the product is generally sound, very low = 1, very high = 7, Chen and Chang [16]). Finally, the participants reported demographic variables and were asked if they knew the purpose of the study.

3.1.3. Results and Discussion

Manipulation Check: The results showed that 127 participants chose “this refrigerator is a green product” and 3 chose “this refrigerator is not a green product”; thus these 127 participants were included in the analysis process. Significant differences were present in the ambiguous and precise presentation of information. The precision degree of the precise group was significantly higher than that of the ambiguous group ($M_{\text{precise}} = 5.14$, $SD = 1.11$; $M_{\text{ambiguous}} = 4.60$, $SD = 1.28$, $F(1, 125) = 6.18$, $p = 0.014$), and no significant difference is found in the familiarity with relevant technologies between the two groups ($F(1, 125) = 0.026$, $p = 0.872$). The manipulation of information presentation meets the needs of the purpose of this study. In addition, none of the participants guessed the purpose of the study.

Purchase Intention: one-way ANOVA was conducted for purchase intention, and the results indicate that participants in the ambiguous group have higher purchase intention than those in the precise group ($M_{\text{ambiguous}} = 5.15$, $SD = 1.05$; $M_{\text{precise}} = 4.45$, $SD = 1.02$; $F(1, 125) = 14.20$, $p < 0.001$). The results indicate that ambiguous information presentation could increase consumers’ purchase intention for green products better than precise information presentation. Thus, H1 is supported.

Mediating Analysis: a mediation analysis was further conducted through PROCESS (Model 4, 5000 Bootstrapping, Hayes [60]). With purchase intention as the dependent variable, information presentation modes as the independent variable, green trust as the mediating variable, and sample size selected as 5000, under a 95% confidence interval, the mediating effect analysis results show that the mediating effect of green trust on purchase intention was significant ($\beta = -0.31$, $SE = 0.28$, $LLCI = -0.5910$, $ULCI = -0.0417$). Therefore, H2 is supported.

The results of Study 1 supported H1 and H2. Ambiguous information presentation increases higher purchase intention of green products more than precise information presentation. In addition, green trust is the mediating variable of information presentation on purchase intention. Study 1 did not consider the boundary condition of H1. Thus, Study 2 will explore the moderating effect of the type of green product (i.e., FMCG and durable goods), which is H3.

3.2. Study 2

Study 2 was conducted to verify the effect of information presentation modes of green products on purchase intention and the moderating effect of product types (FMCG vs. durable goods).

3.2.1. Design and Participants

Study 2 adopted 2 (information presentation: ambiguous vs. precise) \times 2 (green product type: FMCG vs. durable goods) between-subjects design. This study was conducted at the gate of a community in Southern China and a total of 154 participants were randomly recruited when they came in and out of the gate (72 female, $M_{\text{age}} = 30.6$, 66 of them have a bachelor’s degree or above). Study 2 was conducted for four days from 11:30 to 13:00 (from 21 May 2022 to 24 May 2022). Each participant was given 5 CNY as a reward.

3.2.2. Procedures

First, participants were randomly read one of the 4 scenarios (ambiguous-durable, ambiguous-FMCG, precise-durable, precise-FMCG), and the definitions of green products, green durable goods, and FMCG were introduced to them. Then the participants read the four scenarios, which were the same as those in Study 1. Next, the four groups read different information about the refrigerator and recycled tissue. The scenarios of the refrigerator group (precise-durable group and ambiguous-durable group) are the same as those in Study 1. The ambiguous information presentation for recycled tissue (ambiguous-FMCG) read the slogan: “Protect the earth, save the forest”. The description for the recycled tissue-precise group (precise-FMCG) reads: “Tissue made by straw material” (See Figure 2).

After reading the information, the participants were asked to answer questions similar to Study 1. They were also asked whether they thought that the green refrigerator or green tissue was a durable good or an FMCG (1 = FMCG, 7 = durable goods) as a manipulation check. Finally, the participants reported their demographic variables.

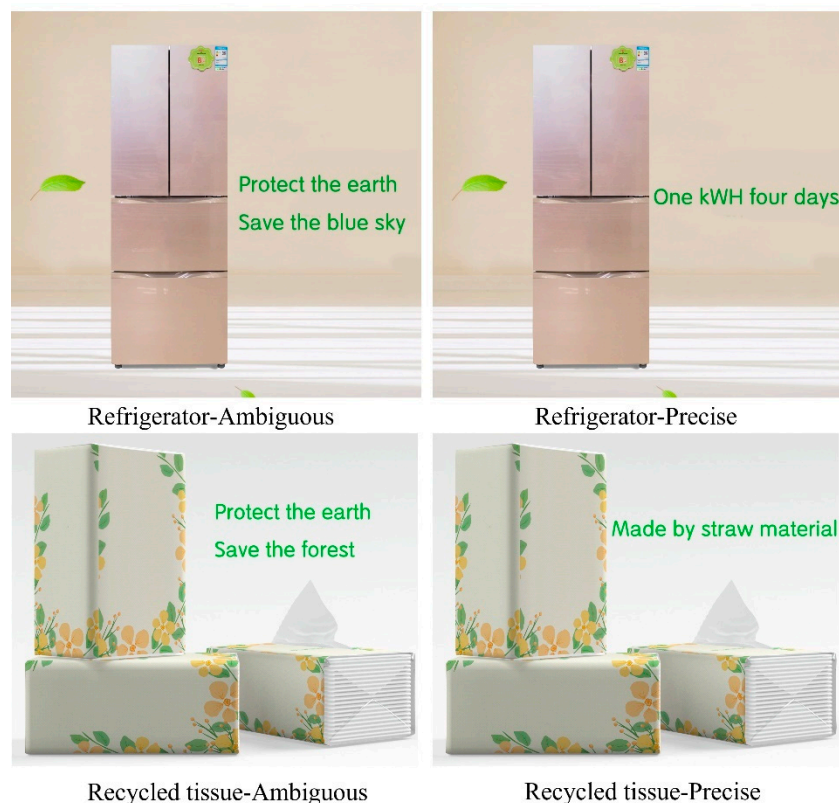


Figure 2. Stimuli materials of Study 2.

3.2.3. Results and Discussion

Manipulation Check: A total of 153 participants chose “this refrigerator/tissue is a green product” and 1 participant chose “this refrigerator/tissue is not a green product”. Therefore, using a refrigerator and recycled tissue as green products in this scenario is appropriate, and 153 participants were included in the analysis process. The results of one-way ANOVA show that the durability of the refrigerator ($M = 5.53$, $SD = 1.14$) is significantly higher than that of recycled tissue ($M = 4.73$, $SD = 1.71$; $F(1, 151) = 11.28$, $p = 0.001$). Therefore, the refrigerator and recycled tissue are suitable for this study as durable goods and FMCG, respectively. The degree of precision of the precise group was significantly higher than that of the ambiguous group ($M_{\text{precise}} = 3.79$, $SD = 1.45$; $M_{\text{ambiguous}} = 4.83$, $SD = 1.46$, $p < 0.001$), and no significant difference was found in the familiarity with relevant technologies among the four groups ($F(1, 151) = 0.42$, $p = 0.520$). The manipulation of the information presentation meets the needs of the purpose of this study.

Purchase Intention: The results of one-way ANOVA for purchase intention show that precise information presentation leads to higher purchase intention than ambiguous information presentation ($M_{\text{ambiguous}} = 4.58$, $SD = 0.99$; $M_{\text{precise}} = 4.23$, $SD = 1.08$; $F(1, 151) = 4.39$, $p = 0.038$). Thus, H1 is supported.

To further test the moderating effect of product types, a 2×2 ANOVA was conducted with the information presentation of product types and the interaction between them as independent variables, and the purchase intention of green products as the dependent variable. The results show a significant interaction effect of product type and information presentation on purchase intention ($F(1, 151) = 28.65$, $p < 0.001$). The results of simple

effect analysis showed that for the refrigerator (durable goods), the purchase intention of the ambiguous presentation group ($M = 4.95$; $SD = 1.04$) is higher than that of the precise presentation group ($M = 3.73$, $SD = 0.95$, $F(1, 70) = 27.01$, $p < 0.001$). For the green paper (FMCG), the purchase intention of the precise presentation group ($M = 4.70$; $SD = 0.98$) is higher than that of the ambiguous presentation group ($M = 4.27$, $SD = 0.84$, $F(1, 79) = 4.53$, $p = 0.036$, as shown in Figure 3). Thus, H3 is supported.

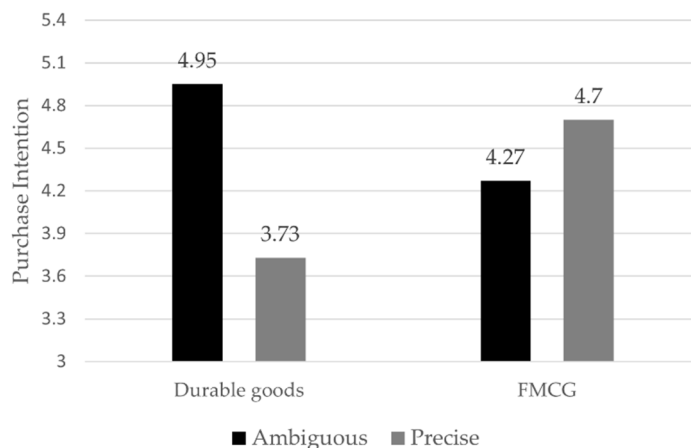


Figure 3. Moderating effect of product types on purchase intention (Experiment 2).

Study 2 verifies that ambiguous information presentation mode can increase purchase intention of green products. But according to the results, this effect only exists in green durable goods. When green products are FMCG, precise information presentation mode can increase purchase intention. However, Study 2 used different stimuli materials (i.e., refrigerators as durable goods and tissue as FMCG), and the different functions and price levels of these two materials may influence the consumers' perception of green products. Therefore, Study 3 chose the materials of the same function and price.

3.3. Study 3

Study 3 was conducted to examine the moderating effect of green product types (FMCG vs. durable goods) on information presentation and the moderated mediation effect of green trust. Different from Study 2, this study chose glass cups as green durable goods and paper cups as green FMCG, which have the same function and price for consumers.

3.3.1. Design and Participants

Study 3 adopted 2 (information presentation: ambiguous vs. precise) \times 2 (green product type: FMCG vs. durable goods) between-subjects design. The authors randomly recruited 209 participants (112 female, $M_{age} = 23.9$, all participants are undergraduates) from a university in Southern China and all participants are from four different elective courses. Study 3 was conducted for 4 weekends before the elective courses began (from 14 May 2022 to 22 May 2022). Each participant was given 5 CNY as a reward.

3.3.2. Procedures

First, the participants were randomly read one of the 4 scenarios (ambiguous-durable, ambiguous-FMCG, precise-durable, precise-FMCG), and the concepts of green durable goods and FMCG were introduced to them. They were then asked to read the information and pictures of two kinds of cups, one made of glass and the other made of paper. The precise information about the paper cup (precise-FMCG) reads: "The paper cup is made of bagasse and can be degraded in 60 days". The ambiguous information (ambiguous-FMCG) reads: "This paper cup is made of environmentally-friendly materials and can be degraded in a short time". The precise information for the glass cup (precise-durable) is: "This glass cup is made of pyrex and does not contain toxic mercury". The ambiguous

information (ambiguous-durable) reads: “This glass cup is made of new materials and does not contain poisonous substances” (See Figure 4). After reading, the participants were asked to complete the green trust scale and related questions and scales used in Study 2.



Figure 4. Stimuli materials of Study 3.

3.3.3. Results and Discussion

Manipulation Check: The results showed that 204 participants chose “this glass is a green product” and 5 participants chose “this glass is not a green product”. Thus, consumers think that the cup in the scenario is a green product, and 204 participants were included in the analysis process. The results of one-way ANOVA show that the durability of a glass cup ($M = 5.81$, $SD = 1.04$) is significantly higher than that of a paper cup ($M = 5.01$, $SD = 1.64$; $F(1, 202) = 17.33$, $p < 0.001$). These two kinds of cups are suitable as stimulants for durable goods and FMCG, respectively. The degree of precision of the precise group was significantly higher than that of the ambiguous group ($M_{\text{ambiguous}} = 4.36$, $SD = 1.53$; $M_{\text{precise}} = 5.13$, $SD = 1.05$, $F(1, 202) = 17.62$, $p < 0.001$), and no significant difference was found in the familiarity with relevant technologies among the four groups ($F(1, 202) = 0.115$, $p = 0.793$). Therefore, the manipulation of the information presentation meets the need of the study.

Purchase Intention: one-way ANOVA was conducted for purchase intention, and the results show that ambiguous information presentation leads to higher purchase intention than precise information presentation ($M_{\text{ambiguous}} = 5.15$, $SD = 0.87$, $M_{\text{precise}} = 4.88$, $SD = 0.92$; $F(1, 202) = 4.72$, $p = 0.031$). Thus, H1 is supported.

To further test the moderating effect of product types, the authors took the information presentation of the product types and the interaction between them as independent variables and the purchase intention of green products as the dependent variable. The results showed a significant effect of product type and information presentation on purchase intention ($F(1, 202) = 23.75$, $p < 0.001$). The results of simple effect analysis show that for

glass cups (durable goods), the purchase intention of the ambiguous presentation group ($M = 5.43$; $SD = 1.01$) is higher than the precise presentation group ($M = 4.57$, $SD = 0.97$, $F(1, 99) = 18.95$, $p < 0.001$). For paper cups (FMCG), the purchase intention of the precise presentation group ($M = 5.19$, $SD = 0.75$) is higher than that of the ambiguous presentation group ($M = 4.88$; $SD = 0.62$, $F(1, 101) = 5.01$, $p = 0.027$, as shown in Figure 5). Thus, H3 is supported.

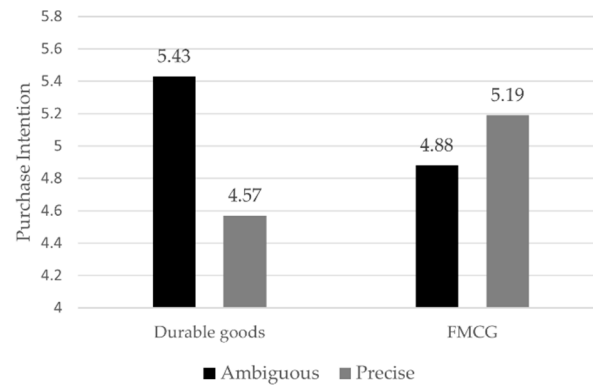


Figure 5. Moderating effect of product types on purchase intention (Experiment 3).

Moderated Mediation Analysis: a moderated mediation analysis was further conducted through PROCESS (Model 7, 5000 Bootstrapping [60]). With purchase intention as the dependent variable and information presentation as the independent variable, green product type as the moderating variable and green trust as the mediating variable, the indirect effect of information presentation mode and product type on purchase intention through the green trust was significant ($\beta = -0.11$, $SE = 0.07$, $LLCI = -0.2842$, $ULCI = -0.0028$) and the direct effect was not significant ($\beta = -0.33$, $SE = 0.10$, $LLCI = -0.4793$, $ULCI = 0.0083$, as shown in Figure 6).

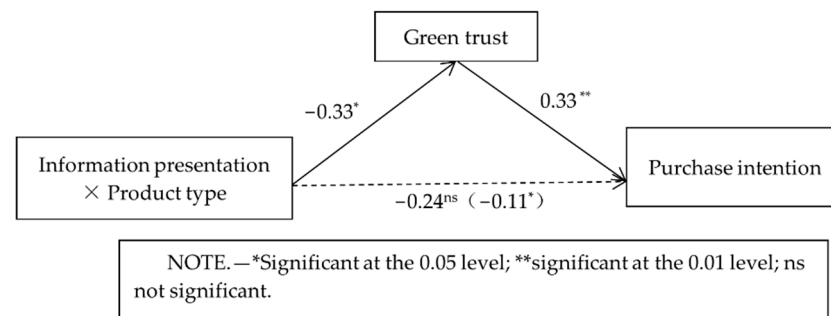


Figure 6. Moderated mediation analysis of green trust.

To increase the robustness and external validity four scenarios of Study 3 used the same materials (cups), and it is proved that consumers have more purchase intention of green products when the information was presented in ambiguous ways. Besides, Study 3 examined the moderating effect of green product type and the moderated mediation effect of green trust.

4. Discussion

In this article, three studies were conducted to investigate the effect of information presentation of green products on consumers' purchase intention, and the internal psychological mechanism and boundary conditions were analyzed. The results show that information presentation mode (ambiguous vs. precise) affects consumers' purchase intention. Specifically, ambiguous information about green products leads to higher purchase intention than precise information, and the internal influence mechanism is green trust (H1

and H2). In addition, product type moderates the effect of information presentation mode on purchase intention. When green products are durable goods, ambiguous information could increase purchase intention better than precise information; whereas when green products are FMCG, precise information could increase purchase intention better than ambiguous information (H3). The research conclusions not only enrich the previous research on the information presentation of green products but also provide a practical guide for information presentation in green product marketing.

4.1. Theoretical Contributions

First, this article enriches the research of the information presentation mode (ambiguous vs. precise) to green products. The findings indicate that the use of ambiguous information presentation of green products can increase purchase intention, thus enriching the research on the information persuasion of green products in the marketing field. Scholars examined information persuasion from individual differences among consumers, brand types, and source countries [61–63]. However, it remains unresearched about the mode of information presentation (ambiguous vs. precise) of green products and which information presentation mode is better for introducing green products. This article enriches the research on the information presentation of green products, which provided an important supplement and expansion of previous research.

Second, this article extends green trust to the field of information presentation. Scholars mostly consider the influence of green trust on purchase intention from the perspective of consumers' value. Li, et al. [64] found that consumers' environmental values can increase consumers' purchase intention of green products through the intermediary role of green trust. Khan and Mohsin [65] demonstrated that functional value, social value, and environmental value positively affect consumers' choice of green products, whereas conditional value and epistemic value negatively affect consumers' choices. This article further explores the internal mechanism of green trust in the process of product information persuasion, thus enriching the research on green trust in the field of marketing communication.

Finally, this study examines the moderating effect of information presentation and product type on purchase intention through green trust. Generally, for traditional products, consumers will consider more when choosing durable goods while considering less when choosing FMCG [18]. According to elaboration likelihood mode (ELM), when choosing products, consumers use the central route to make a series of serious attempts to evaluate new information logically, whereas they use the peripheral route to associate products with another thing, thus encompassing the emotional element [66]. Therefore, consumers may need precise information about durable goods for central route persuasion and ambiguous information about FMCG for the peripheral route. However, this article proposes that this effect will be reversed for green products because many consumers may lack professional knowledge of green products [15], which further enriched research in the field of green information persuasion.

4.2. Practical Implications

The practical implications of this article indicate that ambiguous information about green products could increase consumers' purchase intention. However, if the green product is FMCG, then precise information presentation increases consumers' purchase intention. Therefore, retailers could improve their business or marketing strategies by using the best mode of information presentation (ambiguous vs. precise) by the product type (durable goods vs. FMCG). On the one hand, retailers engaged in green production and sales (e.g., an environment-friendly refrigerator [durable goods]), could use ambiguous information presentation, weaken the relevant details and parameters to gain consumers' trust and then increase consumers' purchase intention. On the other hand, retailers should design product information according to the type of green product. For green FMCG, such as green laundry detergent and recycled tissue, the specific product parameters and details should be described in as much detail as possible, and even the design and

production process could be described. For green durable goods, such as green refrigerators and air conditioners, retailers should weaken the description of their details and focus on the ambiguous description of their characteristics and ideas. In this way, consumers could develop more trust in their products which leads to higher purchase intention for green products.

4.3. Limitations and Future Directions

In this article, three studies were designed to verify the hypothesis. However, some limitations need to be further explored in the future. First, this research selected green refrigerators and green recycled tissue as the stimuli materials in the studies. However, these kinds of materials (environmental refrigerators and recycled tissue) could not represent all types of green products, such as green food (FMCG) or green air conditioning (durable goods) [18]. In addition, although this article classifies green products into durable goods and FMCG, the technical level and environmental efforts of green products are also important for green products [67]. Future research could classify green products in terms of other green attributes to examine the influence of information presentation of green products on purchase intention.

Second, this article investigates the mediating role of green trust on the effect of information presentation on the purchase intention of green products. According to previous studies, perceived green value [66,68], advertising appeals [12,69], and green product packaging [70], consumers' knowledge [71] leads to influence on consumers' purchase intention. Therefore, future research could examine the effect of different mediating variables on the purchase intention of green products.

Finally, this article excludes technology familiarity on the effect of information presentation mode on purchase intention. However, some explanations may affect the purchase intention of green products, such as the degree of favor perception of quality. Future research could examine the influence of these kinds of factors on the purchase intention of green products, which could lead to more robust findings.

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Institutional Review Board Statement: Ethical review and approval were waived for the research since the questionnaire survey did not involve ethical issues and was conducted in accordance with general ethical guidelines and legal requirements.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. We informed the participants that they could choose to participate or not and that they could quit at any time if they found the questions not suitable to answer. An oral explanation was given to inform the participants of the purpose of the study. It was also promised that the survey was anonymous and that the result would only be used for academic purposes.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to the need to maintain the confidentiality of study participants.

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References

1. Kim, H.; Rao, A.R.; Lee, A.Y. It's Time to Vote: The Effect of Matching Message Orientation and Temporal Frame on Political Persuasion. *J. Consum. Res.* **2009**, *35*, 877–889. [[CrossRef](#)]

2. Koester, A. 'About Twelve Thousand or So': Vagueness in North American and UK Offices. In *Vague Language Explored*; Springer: Berlin/Heidelberg, Germany, 2007; pp. 40–61.
3. Featherman, M.; Jia, S.Z.; Califf, C.B.; Hajli, N. The impact of new technologies on consumers beliefs: Reducing the perceived risks of electric vehicle adoption. *Technol. Forecast. Soc. Chang.* **2021**, *169*, 18. [[CrossRef](#)]
4. Zhu, W.; Li, J. A Pragmatic Study on the Functions of Vague Language in Commercial Advertising. *Engl. Lang. Teach.* **2013**, *6*, 103–112. [[CrossRef](#)]
5. Gil-Perez, I.; Rebollar, R.; Lidon, I. Without words: The effects of packaging imagery on consumer perception and response. *Curr. Opin. Food Sci.* **2020**, *33*, 69–77. [[CrossRef](#)]
6. Xie, G.-X.; Kronrod, A. Is the Devil in the Details? *J. Advert.* **2012**, *41*, 103–117. [[CrossRef](#)]
7. Wei, J.M. Codeswitching in campaigning discourse: The case of Taiwanese president Chen Shui-bian. *Lang. Linguist.* **2003**, *4*, 139–165.
8. Pena-Marin, J.; Wu, R.M. Disconfirming Expectations: Incorrect Imprecise (vs. Precise) Estimates Increase Source Trustworthiness and Consumer Loyalty. *J. Consum. Psychol.* **2019**, *29*, 623–641. [[CrossRef](#)]
9. Miller, E.G.; Kahn, B.E. Shades of meaning: The effect of color and flavor names on consumer choice. *J. Consum. Res.* **2005**, *32*, 86–92. [[CrossRef](#)]
10. Iyer, E.; Banerjee, S. Anatomy of green advertising. *Adv. Consum. Res.* **1993**, *20*, 494–501.
11. Chang, H.; Zhang, L.L.; Xie, G.X. Message framing in green advertising: The effect of construal level and consumer environmental concern. *Int. J. Advert.* **2015**, *34*, 158–176. [[CrossRef](#)]
12. Du, Y.; Wang, H. Green Innovation Sustainability: How Green Market Orientation and Absorptive Capacity Matter? *Sustainability* **2022**, *14*, 8192. [[CrossRef](#)]
13. Dahlquist, S.H. How green product demands influence industrial buyer/seller relationships, knowledge, and marketing dynamic capabilities. *J. Bus. Res.* **2021**, *136*, 402–413. [[CrossRef](#)]
14. Yang, J.Y.; Roh, T. Open for Green Innovation: From the Perspective of Green Process and Green Consumer Innovation. *Sustainability* **2019**, *11*, 3234. [[CrossRef](#)]
15. Nittala, R. Green Consumer Behavior of the Educated Segment in India. *J. Int. Consum. Mark.* **2014**, *26*, 138–152. [[CrossRef](#)]
16. Chen, Y.-S.; Chang, C.-H. Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *J. Bus. Ethics* **2012**, *114*, 489–500. [[CrossRef](#)]
17. Nguyen, T.T.H.; Yang, Z.; Nguyen, N.; Johnson, L.W.; Cao, T.K. Greenwash and Green Purchase Intention: The Mediating Role of Green Skepticism. *Sustainability* **2019**, *11*, 2653. [[CrossRef](#)]
18. Morel, M.; Kwakye, F. Green Marketing: Consumers Attitude towards Eco-Friendly Products and Purchase Intention in the Fast Moving Consumer Goods (FMCG) Sector. Master's Thesis, Umeå University, Umeå, Sweden, 2012.
19. Baumann, C.; Hamin, H.; Chong, A. The role of brand exposure and experience on brand recall Product durables vis-a-vis FMCG. *J. Retail. Consum. Serv.* **2015**, *23*, 21–31. [[CrossRef](#)]
20. Park, C.W.; Lessig, V.P. Judgmental Rules and Stages of the Familiarity Curve: Promotional Implications. *J. Advert.* **1977**, *6*, 10–16. [[CrossRef](#)]
21. Luhmann, N. *Trust and Power*; John Wiley & Sons: Hoboken, NJ, USA, 1982.
22. Hutton, J.G. A study of brand equity in an organizational-buying context. *J. Prod. Brand Manag.* **1997**, *6*, 428–439. [[CrossRef](#)]
23. Rishi, B. Determinants of Brand Trust for FMCG Products with Special Reference to Shampoos Category. *Asia-Pac. J. Manag. Res. Innov.* **2013**, *9*, 221–227. [[CrossRef](#)]
24. Zhou, K.Z.; Nakamoto, K. How do enhanced and unique features affect new product preference? The moderating role of product familiarity. *J. Acad. Mark. Sci.* **2007**, *35*, 53–62. [[CrossRef](#)]
25. Vallacher, R.R.; Wegner, D.M. *A Theory of Action Identification*; Psychology Press: London, UK, 2014.
26. Wegner, D.M. The emergence of action. *J. Personal. Soc. Psychol.* **1984**, *46*, 269–279. [[CrossRef](#)]
27. Diemand-Yauman, C.; Oppenheimer, D.M.; Vaughan, E.B. Fortune favors the bold (and the Italicized): Effects of disfluency on educational outcomes. *Cognition* **2011**, *118*, 111–115. [[CrossRef](#)] [[PubMed](#)]
28. van Rompay, T.J.L.; Veltkamp, M. Product Packaging Metaphors: Effects of Ambiguity and Explanatory Information on Consumer Appreciation and Brand Perception. *Psychol. Mark.* **2014**, *31*, 404–415. [[CrossRef](#)]
29. Mishra, H.; Shiv, B.; Nayakankuppam, D. The Blissful Ignorance Effect: Pre- versus Post-action Effects on Outcome Expectancies Arising from Precise and Vague Information. *J. Consum. Res.* **2008**, *35*, 573–585. [[CrossRef](#)]
30. Qiu, L.; Jie, X.W.; Wang, Y.N.; Zhao, M.J. Green product innovation, green dynamic capability, and competitive advantage: Evidence from Chinese manufacturing enterprises. *Corp. Soc. Responsib. Environ. Manag.* **2020**, *27*, 146–165. [[CrossRef](#)]
31. Ottman, J.A.; Stafford, E.R.; Hartman, C.L. Avoiding Green Marketing Myopia: Ways to Improve Consumer Appeal for Environmentally Preferable Products. *Environ. Sci. Policy Sustain. Dev.* **2006**, *48*, 22–36. [[CrossRef](#)]
32. Gurău, C.; Carrigan, M.; Ranchhod, A. International green marketing: A comparative study of British and Romanian firms. *Int. Mark. Rev.* **2005**, *22*, 547–561. [[CrossRef](#)]
33. Chen, M.-Y.; Chiu, C.-I. Go green: How to influence the perceived effectiveness of a green product? *Int. J. Advert.* **2016**, *35*, 622–641. [[CrossRef](#)]
34. da Luz, V.V.; Mantovani, D.; Nepomuceno, M.V. Matching green messages with brand positioning to improve brand evaluation. *J. Bus. Res.* **2020**, *119*, 25–40. [[CrossRef](#)]

35. Machova, R.; Ambrus, R.; Zsigmond, T.; Bako, F. The Impact of Green Marketing on Consumer Behavior in the Market of Palm Oil Products. *Sustainability* **2022**, *14*, 1364. [[CrossRef](#)]
36. Holbrook, M.B. Beyond Attitude Structure: Toward the Informational Determinants of Attitude. *J. Mark. Res.* **1978**, *15*, 545–556. [[CrossRef](#)]
37. Liu, X.; Wang, C.; Shishime, T.; Fujitsuka, T. Sustainable consumption: Green purchasing behaviours of urban residents in China. *Sustain. Dev.* **2012**, *20*, 293–308. [[CrossRef](#)]
38. Luo, B.; Sun, Y.; Shen, J.; Xia, L. How does green advertising skepticism on social media affect consumer intention to purchase green products? *J. Consum. Behav.* **2020**, *19*, 371–381. [[CrossRef](#)]
39. Huang, X.; Ge, J. Electric vehicle development in Beijing: An analysis of consumer purchase intention. *J. Clean. Prod.* **2019**, *216*, 361–372. [[CrossRef](#)]
40. Komiak, S.X.; Benbasat, I. Understanding Customer Trust in Agent-Mediated Electronic Commerce, Web-Mediated Electronic Commerce, and Traditional Commerce. *Inf. Technol. Manag.* **2004**, *5*, 181–207. [[CrossRef](#)]
41. Swan, J.E.; Bowers, M.R.; Richardson, L.D. Customer Trust in the Salesperson. *J. Bus. Res.* **1999**, *44*, 93–107. [[CrossRef](#)]
42. Hong, I.B.; Cha, H.S. The mediating role of consumer trust in an online merchant in predicting purchase intention. *Int. J. Inf. Manag.* **2013**, *33*, 927–939. [[CrossRef](#)]
43. Lee, J.; Park, D.H.; Han, I. The different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls. *Internet Res.* **2011**, *21*, 187–206. [[CrossRef](#)]
44. Harris, L.C.; Goode, M.M.H. Online servicescapes, trust, and purchase intentions. *J. Serv. Mark.* **2010**, *24*, 230–243. [[CrossRef](#)]
45. Chen, Y.-S.; Lin, C.-Y.; Weng, C.-S. The Influence of Environmental Friendliness on Green Trust: The Mediation Effects of Green Satisfaction and Green Perceived Quality. *Sustainability* **2015**, *7*, 10135–10152. [[CrossRef](#)]
46. Kim, J.; Fairclough, S.; Dibrell, C. Attention, Action, and Greenwash in Family-Influenced Firms? Evidence From Polluting Industries. *Organ. Environ.* **2017**, *30*, 304–323. [[CrossRef](#)]
47. Ganesan, S. Determinants of Long-Term Orientation in Buyer-Seller Relationships. *J. Mark.* **2018**, *58*, 1–19. [[CrossRef](#)]
48. Mayer, R.C.; Davis, J.H.; Schoorman, F.D. An Integrative Model of Organizational Trust. *Acad. Manag. Rev.* **1995**, *20*, 709–734. [[CrossRef](#)]
49. Xiao, Z.; Wang, Y.; Guo, D. Will Greenwashing Result in Brand Avoidance? A Moderated Mediation Model. *Sustainability* **2022**, *14*, 7204. [[CrossRef](#)]
50. Gershoff, A.D.; Frels, J.K. What Makes It Green? The Role of Centrality of Green Attributes in Evaluations of the Greenness of Products. *J. Mark.* **2015**, *79*, 97–110. [[CrossRef](#)]
51. Chen, Y.S. Towards Green Loyalty: Driving from Green Perceived Value, Green Satisfaction, and Green Trust. *Sustain. Dev.* **2013**, *21*, 294–308. [[CrossRef](#)]
52. Perera, L.C.R.; Chaminda, J.W.D. Corporate Social Responsibility and Product Evaluation: The Moderating Role of Brand Familiarity. *Corp. Soc. Responsib. Environ. Manag.* **2013**, *20*, 245–256. [[CrossRef](#)]
53. Jung, I.N.; Sharma, A.; Mattila, A.S. The impact of supermarket credibility on purchase intention of novel food. *J. Retail. Consum. Serv.* **2022**, *64*, 102754. [[CrossRef](#)]
54. Hosmer, L.T. Trust: The Connecting Link between Organizational Theory and Philosophical Ethics. *Acad. Manag. Rev.* **1995**, *20*, 379–403. [[CrossRef](#)]
55. Kumar, N.; Scheer, L.K.; Steenkamp, J.-B.E.M. The Effects of Supplier Fairness on Vulnerable Resellers. *J. Mark. Res.* **2018**, *32*, 54–65. [[CrossRef](#)]
56. Gefen, D. E-commerce: The role of familiarity and trust. *Omega* **2000**, *28*, 725–737. [[CrossRef](#)]
57. Heinzle, S.L.; Wustenhagen, R. Dynamic Adjustment of Eco-labeling Schemes and Consumer Choice—The Revision of the EU Energy Label as a Missed Opportunity? *Bus. Strategy Environ.* **2012**, *21*, 60–70. [[CrossRef](#)]
58. Chiou, L.; Tucker, C.E. How Do Restrictions on Advertising Affect Consumer Search? *Manag. Sci.* **2022**, *68*, 866–882. [[CrossRef](#)]
59. Dodds, W.B.; Monroe, K.B.; Grewal, D. Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *J. Mark. Res.* **2018**, *28*, 307–319. [[CrossRef](#)]
60. Hayes, A.F. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*; Guilford Publications: New York, NY, USA, 2017.
61. Lee, A.Y.; Aaker, J.L. Bringing the frame into focus: The influence of regulatory fit on processing fluency and persuasion. *J. Personal. Soc. Psychol.* **2004**, *86*, 205–218. [[CrossRef](#)]
62. Sar, S.; Anghelcev, G. Congruity between mood and message regulatory focus enhances the effectiveness of anti drinking and driving advertisements: A global versus local processing explanation. *Int. J. Advert.* **2015**, *34*, 421–446. [[CrossRef](#)]
63. Yoo, J.; Kim, M. The effects of online product presentation on consumer responses: A mental imagery perspective. *J. Bus. Res.* **2014**, *67*, 2464–2472. [[CrossRef](#)]
64. Li, G.X.; Yang, L.F.; Zhang, B.J.; Li, X.X.; Chen, F.Y. How do environmental values impact green product purchase intention? The moderating role of green trust. *Environ. Sci. Pollut. Res.* **2021**, *28*, 46020–46034. [[CrossRef](#)]
65. Khan, S.N.; Mohsin, M. The power of emotional value: Exploring the effects of values on green product consumer choice behavior. *J. Clean. Prod.* **2017**, *150*, 65–74. [[CrossRef](#)]
66. Cacioppo, J.T.; Petty, R.E.; Kao, C.F.; Rodriguez, R. Central and peripheral routes to persuasion: An individual difference perspective. *J. Personal. Soc. Psychol.* **1986**, *51*, 1032–1043. [[CrossRef](#)]

67. Hosseini-Motlagh, S.-M.; Ebrahimi, S.; Jokar, A. Sustainable supply chain coordination under competition and green effort scheme. *J. Oper. Res. Soc.* **2019**, *72*, 304–319. [[CrossRef](#)]
68. Pals, H.; McColl, R.; Schultz, D.E.; Kerr, G.; Kitchen, P.J. The elaboration likelihood model: Review, critique and research agenda. *Eur. J. Mark.* **2014**, *48*, 2033–2050. [[CrossRef](#)]
69. Yoon, S.; Kim, Y.; Baek, T.H. Effort investment in persuasiveness: A comparative study of environmental advertising in the United States and Korea. *Int. J. Advert.* **2016**, *35*, 93–105. [[CrossRef](#)]
70. Hidalgo-Baz, M.; Martos-Partal, M.; Gonzalez-Benito, O. Is advertising helpful for organic businesses? Differential effects of packaging claims. *Int. J. Advert.* **2017**, *36*, 542–561. [[CrossRef](#)]
71. Kim, Y.; Yun, S.; Lee, J.; Ko, E. How consumer knowledge shapes green consumption: An empirical study on voluntary carbon offsetting. *Int. J. Advert.* **2016**, *35*, 23–41. [[CrossRef](#)]