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The Effect of the Color Green on Environmentally Friendly Consumer Behavior

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The Effect of the Color Green on Environmentally Friendly Consumer Behavior

A Thesis

Presented to the Department of Marketing

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and

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of the Requirements for Graduation Honors

Katelyn Elizabeth Anderson

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Abstract

This study investigates the impact of green visual frames in advertisements of environmentally friendly products on consumer behavior. The study hypothesizes that environmental claims with green visual frames will lead to higher green purchasing intentions and lower perceptions of greenwashing. The paper also proposes a conceptual model that suggests green visual frames can have a positive impact on green purchasing intentions and reduce perceptions of greenwashing. The model was tested with an experimental design on a sample of undergraduate students at a midwestern university, and the results were analyzed with ANOVAs. The findings of this study can help marketers and advertisers develop strategies to promote environmentally conscious behavior among consumers.

Keywords: Green visual frames, advertisements, environmentally friendly products, consumer behavior, green purchasing intentions, perceptions of greenwashing, environmentally conscious behavior

Introduction

Society is increasingly concerned about the environmental consequences of human actions. These worries include resource pollution, climate change, and deforestation, but human consumption habits are one of the highest contributors to environmental degradation. As a result of such concerns, consumers prefer and are demanding green initiatives from businesses (Guerreiro & Pacheco, 2021). A 2017 study found that 68 percent of millennial consumers bought an environmentally or socially friendly product within the previous year. The study also confirmed that American consumers are expecting companies to be engaged in environmental and social matters (Butler, 2021). Therefore, the market for environmentally friendly products is growing (Grimmer & Woolley, 2014). The concept of green consumption refers to responsible consumption habits that reduce negative environmental impacts (Adriata & Mohiuddin, 2020).

With a significant increase in demand for green products, marketing campaigns emphasizing environmental benefits are also becoming more common. This rise in green marketing creates many opportunities for greenwashing efforts. Greenwashing is defined as the discrepancy between an organization's environmental performance and the communication of that performance (Guerreiro & Pacheco, 2021). Firms may present a greenwashing claim in their advertising to appeal to consumers' desires for environmentally friendly products, but the firm's actions do not match the claim that they present. Some organizations have honorably changed their behavior (e.g., reducing the carbon footprint of their production process), while others only claim to do so (Szabo & Webster, 2020). A 2010 study found that out of over 5,000 home products, nearly 95 percent of them presented problematic green claims, also known as greenwashing (Daggett,

2017). Green marketing can be a difficult task that involves analyzing consumer perceptions of advertisements and predicting purchasing behaviors.

Frequently, marketing communications use peripheral cues to encourage consumption. This technique includes visual cues, such as the use of color, that are not always obvious to the consumer, but they can change perceptions of the ad, brand, and even purchasing behavior. The color green is often associated with nature and the environment. For example, the green logo of Whole Foods Market presents its values of eco-friendliness and sustainability. When the use of the color green is misused in advertising practices, consumers may interpret greenwashing efforts (Lim et al., 2020).

The primary purpose of the current research is to examine the impact of green visual cues in environmental advertising on ecologically conscious consumer behavior, while investigating where perceptions of greenwashing may occur in that process. The following literature review will discuss previous research topics in green marketing and effects on consumer behavior. The research is divided into four categories based on their primary independent variables: business characteristics, social and personal values, consumer characteristics, and advertising claims. Following the literature review will be a discussion of hypotheses, the methodology for the study, results, and implications of those results.

Literature Review

Business Characteristics

The general category of business characteristics refers to aspects about a company, and not a particular product, that influence consumer perceptions and behavior. This broad category can be broken down into sub-categories such as the image of the company as being environmentally friendly (ex., green overall image, and perceived environmental

friendliness) (Martínez, 2015; Zahid et al., 2018) and media influence of the company (ex. website design, and media persuasion of environmental problems) (Szabo & Webster, 2020; Haq, Adnan, & Ali, 2021).

Consumers looking to purchase green products are likely to consider the environmental friendliness of a company before making a purchase. Green overall image refers to a company's commitment to environmental issues (Martínez, 2015). For example, a company may take action to reduce the amount of plastic used in packaging, or water consumption throughout production, or carbon emissions during transportation. Zahid et al. (2018) found that the perceived environmental friendliness of a brand will affect whether consumers are satisfied with their purchase. This relationship was found to be mediated by the consumer's concern for environmental consequences. If a consumer has a higher concern for environmental consequences, they are more likely to be influenced by a brand's environmental image and environmental claims, affecting their perceptions (Zahid et al., 2018). A business's green characteristics impact consumer perceptions, which in turn impacts purchase intentions and behavior.

The way businesses interact with their consumers, through their website design or media presence, has also been found to influence green consumer behavior. Szabo and Webster (2020) found that websites with interactive green components, promoting the brand's environmental claims, observed higher perceived interactivity of the website. Additionally, the study found that a higher perception of interactivity led to lower perceptions of greenwashing. Because consumers interacted and consumed more information on the website, their perceptions of misinformation in the advertisements were lower. Consumers believed the information they interacted with, which caused an increase

in purchase intentions. The perception of interactive green components and the perception of greenwashing mediate the relationship between website design and green purchase intentions (Szabo & Webster, 2020).

Social and Personal Values

The previous literature focuses on the general aspects of businesses themselves, while the following two sections will focus on aspects of the consumer. Personal values refer to personal beliefs and mentalities of the individual consumer (Fattah Uddin & Khan, 2018), while social values refer to social norms and expectations set by the surrounding population (Zahid et al. 2018). Consumers' personal values and social standards affect consumer behavior in a similar manner to business characteristics.

Consumers' values can affect their perceptions of environmental issues. Frequently, individuals' perceptions of environmental problems develop from social values and concerns. Zahid et al. (2018) examines the impact of social appeal on consumers' perceptions and whether they choose to publish their purchase on social media. Social appeal refers to the appeal of a purchase through the influence of society. Consumers are highly influenced by the opinions of others and therefore adopt societal values. For example, now that there is a substantial preference for green products (Zahid et al. 2018), consumers may purchase a green product for the social appeal and not the environmental benefit because of the influence of societal values. Individuals may hold concerns for the environment, but are still influenced by social values, therefore, they change their behavior to align with societal expectations. Social values play an important role in consumer decision making, especially in young consumers (Fattah Uddin & Khan, 2018). Consumer and societal values affect perceptions of consumption's relationship with the environment.

Green marketing literature also examines the impact of personal values on consumer purchasing behavior. Studies have found that personal values, such as altruism (Fattah Uddin & Khan, 2018) and self-transcendence intentions, which focus on the welfare of nature (Pinto et al., 2016), will lead to higher green consumption. Both beliefs go beyond self-interest to act on behalf of the environment, without expecting any type of benefit in return, hence a higher purchasing rate of green products. Pinto et al. (2016) found that dominant personal identities (i.e., individualistic mindset) or dominant social identities (i.e., group-oriented mindset) both positively influence the relationship between self-transcendence intentions and green consumption. In contrast, self-enhancement intentions, those focused on personal success and self-interest, do not have the same positive impact on green consumption as self-transcendence intentions do (Pinto et al., 2016). Personal values, such as altruism, influence consumer attitudes, intentions, and purchase decisions (Fattah Uddin & Kahn, 2018) consistent with the theory of planned behavior.

Many studies make the distinction that purchase intentions are often different from actual purchase behavior. This variation is explained by the theory of planned behavior. The model suggests that consumer intentions are determined by personal attitudes (Brooks, 2021). Studies examining the effects of green marketing look at the consumer thought-process from attitudes to intentions to behavior. Attitudes include characteristics like environmental concern (Chang, 2019; Nekmahmud & Fekete-Farkas, 2020), environmental responsibility (Yue, 2020; Zahid, 2018), or supporting environmental protection (Zahid, 2018). These lead to the intention to purchase green products. However, the difference between intentions and purchase behavior is caused by variables such as consumer ability or opportunity (Adriata & Mohiuddin, 2020) or personal versus social

identity (Pinto et al., 2016). These variables will be discussed in further detail later in the literature review.

Consumer Knowledge

In addition to personal and social values, consumers' knowledge affects their attitudes and green purchasing behavior. Consumer knowledge includes variables such as environmental knowledge, perception of greenwashing, or willingness to pay (Fattah Uddin & Khan, 2018; Heo & Muralidharan, 2019; Guerreio & Pacheco, 2021; Nekmahmud & Fekete-Farkas, 2020).

Consumers' perceptions of environmental claims and environmental issues impact their purchasing intentions. The perception of greenwashing can have a significant impact on green product purchasing intentions. If an environmental claim is perceived as false, a greenwashing claim, green trust will decrease, therefore decreasing green purchasing intentions. Organizations should use caution in avoiding greenwashing claims because of their significant negative impact on green trust, customer brand engagement, green word-of-mouth, in addition to green purchasing intentions (Guerreio & Pacheco, 2021).

An individual's perception of environmental responsibility (Yue et al., 2020; Zahid et al., 2018) and supporting environmental protection (Zahid et al., 2018) has also been found to impact their purchasing behavior. Previous studies found that a sense of environmental responsibility, an intention to resolve environmental problems (Yue et al., 2020), is positively related to green consumption (Yue et al., 2020; Zahid et al., 2018). Yue et al. (2020) found that a sense of environmental responsibility affects a consumer's environmental concern, which in turn affects their green consumption. Therefore, environmental concern mediates the relationship between environmental responsibility and

green consumption. However, the study also found that price sensitivity can decrease this effect, in other words, consumers' perception of price has a negative moderating effect. If a consumer is more sensitive to price increases, they will be less likely to translate their environmental concern into green consumption intentions (Yue et al., 2020).

Environmental knowledge and concern relating to environmental issues affects green purchasing behavior. Environmental knowledge reflects the general knowledge of the environment and arising problems (Heo & Muralidharan, 2019). Many studies have concluded that environmental knowledge has a positive effect on ecologically conscious consumer behavior (Fattah Uddin & Khan, 2018; Heo & Muralidharan, 2019). An increased knowledge often influences environmental attitudes and concerns, leading to more sustainable consumption habits (Fattah Uddin & Khan, 2018). This is especially true for young Millennials (Heo & Muralidharan, 2019). Environmental knowledge focuses solely on the comprehension of environmental issues, while environmental concern focuses on the worry surrounding those environmental problems. Previous studies have found that environmental concern has a positive impact on green purchasing decisions (Chang, Tsai, & Huang, 2019; Nekmahmud & Fekete-Farkas, 2020). Chang, Tsai, and Huang (2019) found that consumers' environmental concern impacted their attitudes toward environmental advertisements, which impacts their purchase intentions and sustainable purchasing behavior. This is consistent with the theory of planned behavior because of the path from attitude to intention to behavior. Consumers that are highly concerned about the environment will have a positive attitude toward an advertisement with an environmental claim, which in turn influences their purchasing intentions and therefore their sustainable purchasing behavior (Chang, Tsai, & Huang, 2019).

Consumer knowledge of environmental issues and environmental concern also impact consumers' perceived benefits and perceived quality of the green products themselves. Nekmahmud and Fekete-Farkas (2020) examined the impact of perceived benefits and perceived quality, in relation to green marketing, on purchasing behavior. Green perceived benefits relate to positive results of the purchase of a green product. Green perceived quality refers to the superiority of the product in relation to environmental impacts. Although green perceived benefits and quality seem like similar concepts, the study found they impacted green consumer behavior differently. Green perceived benefits did have a positive effect on green purchasing decisions. However, consumer perceptions of green quality did not have a significant impact on ecologically conscious consumer behavior (Nekmahmud & Fekete-Farkas, 2020).

Nekmahmud and Fekete-Farkas (2020) also explored consumers' perceptions of price and willingness to pay for green products. Typically, green products are more expensive than other products. Green awareness of price refers to the consumer's knowledge that they are paying more for the environmental benefit of the product. The study found that an increased green awareness of price and higher green willingness to pay led to more green purchasing decisions (Nekmahmud & Fekete-Farkas, 2020). While this study focuses on awareness of price and its direct effect on purchasing behavior, several other studies (e.g., Adriata & Mohiuddin, 2020; Yue et al., 2020) incorporate price-related variables and examine their indirect effect on ecologically conscious consumer behavior.

Advertising Claims

The business and the consumer are connected through advertising. This process is how businesses portray themselves and distribute their message to consumers, and

consumers gain knowledge of the business and its products. While general characteristics about a business and characteristics about its consumers affect purchasing behavior, so does this mediating variable. This final section of the literature review will discuss how different aspects of advertising affect consumer attitudes and decisions.

One aspect of an environmental claim is the potential benefits that might result from purchasing a green product. Grimmer and Woolley (2014) predicted that benefits presented in advertisements can impact green purchase intentions. Advertisement appeals consisted of personal benefit, environmental benefit, or no benefit. This study predicted that purchase intentions would be higher for personal benefit advertising appeals than environmental benefit appeals. Additionally, specific environmental benefits were predicted to be more successful than vague environmental benefit advertising appeals. However, participants in this study were not affected by advertising appeals, and purchase intentions were unchanged (Grimmer & Woolley, 2014).

Generally, eco-labeling and environmental advertising claims result in increased green purchasing behavior (Adriata & Mohiuddin, 2020; Chang, Tsai, & Huang, 2019; Haq, Adnan, & Ali, 2021). Although eco-labeling, green advertising, and green branding all have positive effects on consumer buying behavior, Haq, Adnan, and Ali, (2021) make distinctions between them. Eco-labeling refers to the label on the product itself that promotes green characteristics of the product. Green advertising involves promotional environmental messages. Green branding refers to businesses changing their conventional marketing to incorporate more environmental values (Haq, Adnan, & Ali, 2021). Chang, Tsai, & Huang (2019) found that eco-labeling and environmental advertising affect consumers' attitudes. Positive attitudes toward environmental advertising lead to higher

sustainable consumption behavior, compared to negative attitudes (Chang, Tsai, & Huang, 2019).

As well as the content of the message, advertising also incorporates framing biases, which refer to how one presents that message (i.e., visual, and auditory cues, or positive versus negative messages). Framing biases are often present in advertising because it often impacts consumer decision making subconsciously. For example, a specific type of framing bias refers to the values presented in advertising claims. Consumers will react differently to seeing “20% off” versus “\$120 off.” Although, the discount is the same, consumers believe that the latter is a better deal because of the higher value, and because of this effect, purchasing behavior changes based on the framing of the advertisement (Boyce, 2021).

Previous studies have examined the effects of framing biases on purchasing behaviors, and in the context of green marketing, specific framing biases can impact green purchasing behaviors. The framing effect describes the phenomenon that an individual’s choice may be influenced by how information is presented and not the substance of the information itself (Prera, 2021). Amatulli et al. (2019) examined negative and positive message frames and their effect on pro-environmental behavior. The study found that negative message frames, those that emphasize harmful environmental consequences, are more effective in changing behavior than positive message frames, those that emphasize desirable environmental consequences. This is due to the feeling of shame experienced by the consumer; they will feel more shame from the negative message frame than the positive message frame (Amatulli et al., 2019). The framing bias of an environmental advertisement influences consumer perceptions, intentions, and behavior.

Colors used in advertisements are a powerful visual frame. Seo and Scammon (2017) examined the impact of visual frames of product packaging on consumer behavior. The study found that a brand's environmental claim will be considered superior when its packaging was green. Additionally, a green product package will produce more positive environmental perceptions if combined with an environmental claim, compared to green product packages without environmental claims (Seo & Scammon, 2017). This study focuses on packaging, while the present study will focus on the use of the color green in the advertisement itself.

Lim et al. (2020) examined how the use of the color green affects consumers attitudes and purchase intentions from environmental advertisements. The study concluded that the color green was more effective than the color grey in encouraging attitudes and intentions of environmental friendliness (Lim et al., 2020). The purpose of the present study is to build on the research of these two studies examining green visual frames.

Adding to marketing literature on this topic, the present study will examine the effects of green visual frames on purchasing intentions. Additionally, the present study will examine the effects of greenwashing claims (specific or vague) and their effect on purchasing intentions and trust in the brand. To the author's knowledge, there is no other study that combines these two areas of focus applied to green marketing practices.

Hypotheses

Previous research suggests that using a green visual frame while advertising an environmentally friendly product will increase consumer purchase intentions because the color green is associated with themes of nature (Lim et al., 2020). Building on this previous research, the following hypothesis was proposed:

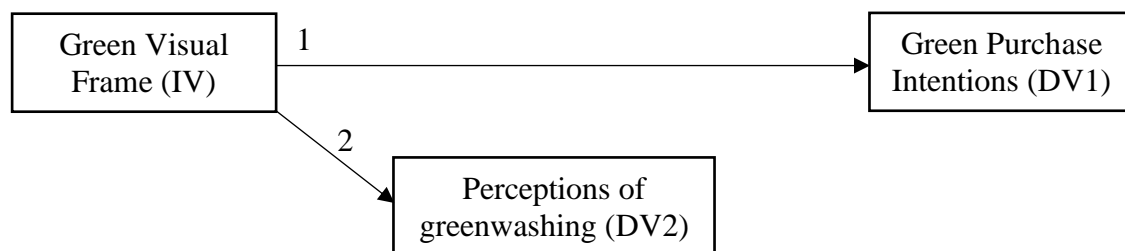
H1: An environmental claim with a green visual frame will lead to higher green purchasing intentions than an environmental claim without a green visual frame.

Perceptions of greenwashing often influence green purchasing behavior (Szabo & Webster, 2020; Schmuck, Matthes, & Naderer, 2018). Therefore, perceptions of greenwashing should have an effect on the relationship between environmental claims with(out) a green visual frame and ecologically conscious behavior. Previous research proves that an environmental claim, with the use of the color green, produces positive environmental perceptions (Seo & Scammon, 2017). Therefore, environmental claims with a green visual frame are less likely to be perceived as greenwashing efforts. Formally, the following hypothesis was proposed:

H2: Perceptions of greenwashing will be lower for environmental claims with green visual frames than for environmental claims without green visual frames.

Theoretical Framework

Figure 1. *Conceptual model of the study*



The theoretical framework suggests that the use of green visual frames can have a positive impact on green purchasing intentions and reduce perceptions of greenwashing.

Methodology

Sample

Data for this study was primarily gathered from surveys of undergraduate students at a midwestern university (Butler University). College students would be an appropriate sample for this study because they hold high concerns for environmental issues and often act on those practices (Lim et al., 2020).

Procedure

The survey was created using Qualtrics. It included a confidentiality statement, demographic questions to measure the values in this study. The questions measured willingness to purchase, environmental purchasing behavior, and perceptions of greenwashing. The questions used in this survey were adapted from the Marketing Scales Handbook (Bruner, 2019). Table 1 includes a summary of the questions and their attached variables.

Table 1. *Summary of variables*

Variable	Item	Description
Willingness to Purchase	WTP	How likely would you be to buy this hoodie?
Environmental Purchasing Behavior	EPB1	It is important to me that the products I use do not harm the environment.
	EPB2	I consider the potential environmental impact of my actions when making many of my decisions.
	EPB3	My purchase habits are affected by my concern for our environment.
	EPB4	I am concerned about wasting the resources of our planet.
	EPB5	I would describe myself as environmentally responsible.
	EPB6	I am willing to be inconvenienced to take actions that are more environmentally friendly.
Perception of Greenwashing	PG1	This company feels morally obligated to help the environment.
	PG2	This company is trying to give something back to society.

- PG3 This company genuinely cares about the well-being of the environment.
- PG4 This company is just taking advantage of the “green trend” to make more money.
- PG5 This company is just trying to make their product seem more attractive so they can charge a higher price.
- PG6 How environmentally friendly do you think this company is?
- PG7 How committed to the environment do you think this company is?
-

With approval from the Institutional Review Board (IRB), the survey was distributed to the participants. The survey was sent through a variety of methods, but primarily through email to students in Butler University’s Honors Program and students studying marketing in the Lacy School of Business. Additionally, the survey was distributed to acquaintances through social media platforms. Participants were provided a link to the survey and asked to fill it out on their own time in their own environment. Participants agreed to a consent statement and read a brief description of the purpose of the study before beginning the survey questions. Finally, the participants were provided the contact information of the researchers for any concerns about the survey questions.

Manipulations

There is one independent variable manipulated in this study: green visual frames (green or grey). This variable was manipulated in two social media advertisements for a fictitious clothing company. The advertisements can be found in Appendix 1. By using a fictitious company, previous knowledge and opinions will not affect the results of the survey. Both conditions will advertise the same product in the same format, meaning size, shape, font, message, and other variables will remain consistent. The product is a black pullover hoodie with a small earth logo on the upper left chest.

Participants were randomly assigned to one of the two advertisements through Qualtrics. One presented the advertisement with an environmental claim and a green background. The other presented the advertisement with an environmental claim and a grey background. Both advertisements will present the same environmental claim: “Made of 94% recycled materials, saving water and reducing CO2 emissions.” This claim was adapted from Patagonia’s Hidden Cost of Clothes (2023).

Measures

Green purchasing intentions were measured on a 5-point Likert scale where 1 indicates “strongly disagree” and 5 indicates “strongly agree.” Respondents indicated their sentiments to statements such as, “It is important to me that the products I use do not harm the environment” and “My purchase habits are affected by my concern for our environment” (adapted from Bruner, 2019).

Perceptions of greenwashing were measured on a 5-point Likert scale with 1 meaning “strongly disagree” and 5 meaning “strongly agree.” Respondents indicated their perceptions using statements such as, “This company is just taking advantage of the ‘green trend’ to make more money” and “This company is just trying to make their product seem more attractive so they can charge a higher price” (adapted from Bruner, 2019).

Results

In total, the data collection procedure yielded 74 participants. Participants were primarily from Butler University, with 5 outliers. Two different conditions were presented to the respondents, with each respondent only seeing one of the conditions. Not all participants completed the survey, and those with partial answers were excluded from the data set. 26 people were exposed to the advertisement with the green visual frame, and 48

people were exposed to the advertisement with the grey visual frame. Table 2 presents a summary of the participant's demographics.

Table 2. *Demographics of respondents*

Variables	Green visual frame group		Grey visual frame group	
	Number	% of group	Number	% of group
<i>Gender</i>				
Male	5	23.8%	7	23.3%
Female	16	76.2%	21	70.0%
Non-Binary	0	0.0%	2	6.7%
<i>Age</i>				
18-24	20	95.2%	27	87.1%
25-34	0	0.0%	1	3.2%
35 or older	1	4.8%	3	9.7%
<i>Year in school</i>				
Freshman	5	23.8%	5	17.2%
Sophomore	1	4.8%	7	24.1%
Junior	6	28.6%	10	34.5%
Senior	9	42.9%	7	24.1%
<i>School of major(s)/minor(s)</i>				
College of Communication	2	7.7%	4	12.5%
College of Education	1	3.8%	0	0.0%
College of Liberal Arts and Sciences	13	50.0%	15	46.9%
College of Pharmacy and Health Sciences	4	15.4%	3	9.4%
Jordan College of the Arts	2	7.7%	5	15.6%
Lacy School of Business	4	15.4%	5	15.6%

A one-way between subjects ANOVA was conducted to compare the effect of an environmental claim on green purchasing intentions in the presence of a green visual frame and the absence of a green visual frame (grey visual frame). There was not a significant effect of an environmental claim on green purchasing intentions at the $p < .05$ level for the two conditions [$F(1, 48) = 0.216, p = 0.644$]. These results suggest that environmental claims with green visual frames really do not have an effect on green purchasing intentions. Specifically, our results suggest that environmentally friendly purchasing behavior is not affected by the colors used in advertisements.

H1 states that environmental claims with green visual frames will lead to higher environmentally friendly purchasing intentions compared to a grey visual frame. Our results suggest that there is not a significant difference between green and grey visual frames on the respondents' purchasing intentions.

Additionally, a second one-way between subjects ANOVA was conducted to compare the effect of an environmental claim on perceptions of greenwashing in the presence of a green visual frame and the absence of a green visual frame (grey visual frame). There was not a significant effect of an environmental claim on perceptions of greenwashing at the $p < .05$ level for the three conditions [$F(1, 48) = 0.583, p = 0.449$]. These results suggest that the presence or absence of the color green in advertising does not affect consumers' perceptions of greenwashing.

H2 predicted a relationship between perceptions of greenwashing and green visual frames. H2 states that perceptions of greenwashing will be lower for environmental claims with green visual frames than for environmental claims without green visual frames. This hypothesis was not supported in this study. There was not a significant difference between the two conditions (green and grey visual frames) and their effect on perceptions of greenwashing.

Discussion

Implications

The findings of this study have several implications for marketers who advertise environmentally friendly products. The use of green visual frames in advertising does not directly correlate to higher green purchasing intentions, nor does it lower perceptions of greenwashing. Therefore, marketers do not necessarily need to use a green visual frame to

communicate environmental claims. Additionally, consumer perceptions of greenwashing are not likely to change based on the colors used in the advertisements. Marketers can use this information to guide them in creating advertisements for environmentally friendly products. Consumers may respond more strongly to specific environmental claims or other visual cues that indicate ecological friendliness. These are areas that could be expanded upon in further research.

Limitations

Because the survey will be administered to a small convenience sample of people, it may be difficult to make generalized statements about a greater population of people. Therefore, this study would have a high internal validity but a low external validity. This would limit the ability to draw conclusions outside of the present study. Moreover, self-reported data may suffer from social desirability bias, leading to inaccurate responses. The study's validity is also limited by its use of a fictitious company and advertisement. Participants may respond differently to real-life products and ads.

Future Research

Future research can expand on this study by using a more diverse sample and testing the effectiveness of green visual frames in advertising across different cultures. Additionally, further research can investigate the role of other colors in advertising and their impact on consumer behavior. Future studies can also investigate the relationship between green visual frames and other variables, such as the level of eco-friendliness of the product and credibility of the company.

Conclusion

This study aimed to investigate the impact of green visual frames on consumers' environmentally friendly purchasing intentions and perceptions of greenwashing. The theoretical framework predicted that the use of green visual frames would have a positive impact on green purchasing intentions and reduce perceptions of greenwashing. However, the results of the study contradicted both hypotheses proposed. The findings suggest that environmental claims with a green visual frame do not lead to higher green purchasing intentions. Additionally, the results showed that the presence of absence of a green visual frame does not have an effect on consumers' perceptions of greenwashing. Overall, this study contributes to the growing body of literature on green marketing and provides practical implications for marketers promoting environmentally friendly products.

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Appendix

Appendix 1. *Manipulated advertisements*

