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# THE IMPACT OF GUILT AND EMPATHY APPEALS ON GREEN ADVERTISEMENT PURCHASE INTENT AMONG GREEN CONSUMERS

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# THE IMPACT OF GUILT AND EMPATHY APPEALS ON GREEN ADVERTISEMENT PURCHASE INTENT AMONG GREEN CONSUMERS

A Thesis Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Jasmine Cassandra Fehr
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# ABSTRACT

The purpose of the study was to examine whether guilt appeals or empathy appeals were more effective at promoting purchase intention among green consumers for green products. This purpose was achieved through studying the effect of using an empathy appeal versus a guilt appeal in a hypothetical green advertisement. To test this objective, participants completed a survey that assessed the relationship between the message condition they were exposed to—either guilt, empathy, or neutral—and their subsequent purchase intent of the advertised product. It was hypothesized that the empathy appeal would lead to higher purchase intention than the guilt appeal, but the results did not support this prediction. Interestingly, the neutral condition led to the highest purchase intention, followed by the guilt appeal, followed by the empathy appeal. Based on the study's results, practical implications are discussed on how to target green consumers most effectively when designing advertisement messaging for green products.

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# CHAPTER ONE

## INTRODUCTION AND GENERAL INFORMATION

### Introduction

Green advertising, along with scholarly research surrounding its role in the advertising industry, has experienced substantial growth in recent years (Dangelico & Vocalelli, 2017). As a facet of cause-related marketing, green advertising supports pro-environmental values through the promoted product or service (Ottman, 1993). Although there is existing research on green advertising in general, little is known in terms what specific message appeals beyond "guilt" connect with consumers most effectively (Chang, 2012; Schuhwerk & Lefkoff-Hagius, 1995; Coulter & Pinto, 1995). Former research on green consumers also exists, but similarly, little is known on how to best reach this specific segment of consumers (Lee, 2017). To bridge this gap in scholarly research, the present study assessed the role of emotional appeals in green advertisements that target green consumers.

Since emotional appeals encompass a myriad of emotions, the present study intentionally focused on just two: guilt and empathy. Empathy as an emotional appeal is frequently used in other forms of advertising but has not been utilized to the same extent in green advertising (Bagozzi & Moore, 1994; Canioz, 2019). In contrast, guilt as an emotional appeal has been utilized in both conventional advertising and green advertising (Chang, 2011; Chang, 2012; Lim & Hong, 2022; Basil et al., 2006). However, previous research has not studied the direct comparison between these two appeals in terms of purchase intention. By studying guilt and empathy appeals as messaging strategies in green advertising, the present study intended to increase knowledge around their effect on consumer purchase intention.

Studying consumers in general also encompasses too broad of a category, which is why the present study targeted green consumers as a specific segment. Although previous research on green consumers has been conducted, little research exists on how to promote purchase intention for green products to these consumers specifically (Lee, 2017; Barber, 2014).

The following literature review highlights previous research that has been conducted in these areas. These studies provide further context and demonstrate how these topics—cause-related marketing, green advertising, emotional appeals, and green consumers—meld together for the present research.

# CHAPTER TWO

# LITERATURE REVIEW

## Previous Research

### Cause-Related Marketing

Cause-related marketing (CRM) plays a contextual role in the current study's purpose. CRM can be summarized as a strategy to help companies attain marketing objectives by supporting social causes (Barone, Miyazaki, & Taylor, 2000). Represented social causes can range from areas such as public health, civil rights, equality, and environmental sustainability. Those that utilize CRM find it beneficial for many reasons, but one especially compelling factor is that it allows the company to differentiate itself from competitors (Murphy 1997). While similar companies might sell related products, those that promote powerful social causes through their campaigns could have an extra advantage over others, differentiating themselves from competitors as a result. Although research surrounding the impact of CRM on consumer choice has increased in recent years, it remains unclear whether antecedents of choice, such as pre-existing brand attitudes, play more of a role in a consumer's decision than CRM directly (Barone, Miyazaki, & Taylor, 2000).

In addition, CRM can sometimes elicit skepticism in consumers, since it is often difficult to discern what a company's true motivation is for supporting a social cause (Smith & Stodghill, 1994). Despite this, many corporations have experienced positive outcomes resulting from CRM efforts, making it probable that this area will continue growing (Brown & Dacin, 1997).

### Green Advertising

Green advertising (GA) is a facet of CRM that the present study will investigate in greater depth. GA can also be referred to as "green marketing" and "environmental advertising" and can be summarized as marketing efforts that promote pro-environmental values through the advertised product (Ahonen & Hansen, 2001). Green consumption, where consumers evaluate the environmental implications that products will have on present and future generations, is typically the outcome of exposure to GA (Lee & Haley, 2022). Those who engage in green consumption are referred to as "green consumers", which is the market segment used in the current study. To target green consumers specifically, advertisers can position themselves based on environmental appeal. Advertisers accomplish this by highlighting the pro-environmental aspects of their products and services (Ahonen & Hansen, 2001).

Similar to general CRM, GA can also elicit skepticism in consumers since information is often viewed as less credible when coming from green advertisements as opposed to environmental organizations. This is because green advertisers often hold a profit-driven agenda while environmental organizations do not use profits as an ulterior

motive (ibid). Consumer skepticism or not, there are still inherent benefits to green advertising. Even if their environmental claims are exaggerated, corporations have at least become more environmentally aware—and ultimately more responsible—through their attempts at green promotion and advertising (D'Souza & Taghian 2005).

### Green Advertising: Issues in Business

In addition to its importance in research settings, green advertising is also significant in business contexts. Consumer purchase intent for green products has increased in recent years according to a survey on attitudes towards green products, which demonstrates its relevance to the advertising industry (GfK Roper Public Affairs & Media and the Yale School of Forestry & Environmental Studies, 2008). The same survey revealed that consumers were not only willing to purchase green products but were also willing to pay more for these products than non-green equivalents (ibid.). Since surveys such as this indicate that green purchasing is trending upward, advertisers can capitalize on this area of growth in their business strategy.

In assessing the value of green advertising to business strategy, it is important to consider issues embedded in this facet of advertising. A specific issue that may have business implications includes the discrepancy between purchase intent for green products and actual purchase behavior. For example, a study by Nielsen revealed that although half of Americans report their intent to buy green products, only about 10% purchase these products in reality (Nielsen, 2011). This indicates that consumers may care more about the social desirability of making green choices than making actual green choices in their purchase behaviors. Similar studies corroborate Nielsen's finding that an increase in green purchase intent does not necessarily equate to an increase in green product sales (Grail Research, 2009). This discrepancy between consumer attitudes and actual purchase choices further highlights the value in researching green advertising.

### Emotional Appeals

Emotional appeals are often used to build a connection between the consumer and the advertised product in CRM and GA campaigns. Appealing to a consumer's emotions is an effective message strategy because of the way it captivates their attention and creates a personal connection. While advertisement messages can use emotional appeals such as fear, humor, and even romance, the current study will focus on two specific appeals that may apply to GA: guilt and empathy.

### Guilt Appeals

Guilt appeals have become prominent in advertising message strategies due to the way they impact a consumer's attitude towards a product as well as their intention to purchase a product (Basil et al., 2006). Whether it is ethical or not, utilizing guilt in a brand's messaging strategy is a powerful tactic in influencing consumers towards purchasing a product. Despite its influential power, guilt appeals can often have the opposite effect; if the consumer perceives the advertisement to be disingenuous or

manipulative, the guilt appeal may backfire. This can lead the consumer to viewing the brand and product as dishonest instead of trustworthy and compelling (Cotte et al., 2005).

Advertising research literature also highlights the effect of guilt appeals on donation behavior. In a study by Chang (2014), advertisements using guilt appeal were shown to be less effective in generating donation intent than ads that induced guilt while also highlighting egoistic benefits. This means that using guilt appeals can have a null effect if not coupled with an emotional appeal that counteracts the feeling of guilt produced. In the case of Chang's study (2014), eliciting an egoistic benefit that prompted the consumer to feel good about their altruistic behavior was shown to be an effective emotional appeal in counteracting guilt.

While prompting donation intent is not completely analogous to prompting purchase intent, the two share similarities in how they influence consumer behavior and decision making. Therefore, Chang's research may indicate that guilt appeals, when used on their own, may not be effective in getting consumers to take action—whether that be in terms of making a donation, purchasing a product, or another related behavior.

The use of guilt appeals in GA specifically has grown in recent years—both in research and in practice. As the importance of taking pro-environmental action has grown, the guilt around not doing one's part to positively contribute has also grown. Since people tend to feel guilty about the lack of environmental sustainability in their daily choices, guilt appeals are especially effective in GA efforts (Henricks, 2008). While guilt appeals are already widely used in GA, empathy appeals have not been utilized as frequently. There is little existing research to date on both their potential to influence consumers as well as how they compare with other appeals in terms of GA messaging effectiveness.

### Empathy Appeals

Empathy appeals use a drastically different strategy than guilt appeals; rather than guilt consumers into purchasing a product, empathy appeals connect with consumers on a more personal level. More specifically, empathy appeals allow consumers to engage vicariously—essentially empathize—with the events and feelings portrayed in the advertisement to create an emotional connection between the consumer and brand (Rawal & Torres, 2017). Evoking strong emotions in consumers can heighten their motivation to purchase the advertised product, making empathy appeals an ideal messaging strategy (Stewart, Morris, & Grover, 2007).

An example of how empathy has been utilized in areas outside of GA is Bagozzi and Moore's research (1994) on public service advertisement message strategies. The researchers found that stimulating empathic reactions in those exposed to the empathy-based public service advertisement led to an increase in helping behavior. Their research demonstrates the effectiveness of using empathy in prompting people to take positive action. This may have a parallel effect in the current study; mobilizing empathy as a

message appeal could influence people to take action in the form of indicating purchase intent.

Although there is evidence for the effectiveness of empathy appeals in general advertising, little research exists surrounding its effectiveness in GA specifically. This gap in research is what the present study attempts to address, since it could reveal the positive impact that empathy appeals have on GA. Empathy appeals could take form in GA by empathizing with the consumer about the inherent difficulties involved in making green purchases. An example of how this could be actualized is by acknowledging the high price of green products compared regular products. After empathizing with the consumer, the advertisement could highlight the downstream positive impact that choosing the green product would have, and how it would ultimately be worth the upfront cost.

### Green Consumer Segmentation

Many types of consumers are exposed to GA, but the current study will focus on the effect that GA has on green consumers specifically. Green consumers are "those who are aware of their obligation to protect the environment by purchasing green products" (Barber, 2014). While there are several subsets of green consumers within this definition, the present study recruited participants that identify as green consumers according to this definition. This prevented the study's recruitment and methodologies from becoming too convoluted.

An example of a green consumer subset includes "challengers," who are those who want to make pro-environmental purchases but do not have as much motivation to do so as other segments of environmentally conscious consumers (Lee & Haley, 2022). Motivations for purchasing pro-environmental products are evenly distributed for members of this segment, which include personal, social, and environmental motivations (ibid). "Challengers" are one of six green consumer segments devised by Lee and Haley. These segments help differentiate between types of green consumers, which is important because each segment exhibits unique motivations for participating in pro-environmental consumer behavior.

Studying green consumers was an intentional decision for this research. Those who already identify as green consumers, as well as those who desire to make future pro-environmental purchases, have grown rapidly in number, making it an increasingly feasible and accessible market to target (Dagnoli, 1991). In addition to this, there is more potential for positive change by targeting green consumers, since having pre-existing environmental consciousness can influence one's response to GA more effectively (Schuhwerk & Lefkoff-Hagius 1995). This is because consumers who are already environmentally conscious are more internally motivated to process environmental messages, making them more likely to take positive action after viewing GA campaigns (Kotchen, 2009). Even if the environmental issue mentioned does not directly impact the consumer, they are still likely to find it important (ibid). Inversely, consumers with less

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environmental consciousness may not be open to changing their behavior in the first place, since their "green product personal schema" is less developed (Chang, 2012).

## Present Study

### *Overview*

The theories and previous studies discussed in the literature review reveal an important gap in research knowledge: the role that guilt and empathy appeals play in green advertisement messaging. To help address this gap, the present study sought to answer the following question: are guilt appeals or empathy appeals more effective at promoting purchase intent for green products among green consumers?

The following variables were used to operationalize the study's research question: the dependent variable was the participant's reported intention to purchase the advertised product while the independent variable was the advertisement messaging condition that the participant was exposed to, which was one of three versions: guilt, empathy, or neutral. These variables were used to explore the relationship between the green advertisement's message strategy—either guilt or empathy—with the participant's subsequent purchase intent.

The following definitions were used to explicate and operationalize the study's research question: "Effective" referred to how persuasive an advertisement's messaging is in promoting pro-environmental product purchase intention; "Guilt appeals" referred to how an advertisement evokes feelings of guilt, impacting consumers' attitude and purchase intention of the advertised product as a result (Coulter & Pinto, 1995); "Empathy appeals" referred to how an advertisement evokes feelings of connection and understanding between the consumer and brand, impacting consumers' attitude and purchase intent of the advertised product as a result (Rawal & Torres, 2017); "Green advertising" referred to marketing efforts that promote pro-environmental values through the advertised product (Kärnä et al., 2001); and "Green consumers" referred to those who are aware of their duty to protect the environment by consuming green products when possible (Barber, 2014).

### *Importance*

The literature review outlined research that provides evidence for the effectiveness of guilt appeals in GA. However, there is little research that assesses the effect of empathy appeals in GA. Understanding the impact of empathy appeals on GA could help shape the strategies that marketers use to connect with consumers, which could result in increased purchase intention. If empathy appeals were revealed to be an effective strategy, a few benefits could emerge, such as higher commitment to purchasing pro-environmental products among green consumers. Another potential benefit could be the increased use of empathy appeals as opposed to guilt appeals. This would allow advertisers to be less reliant on prompting consumers to feel bad about themselves (i.e. guilt appeal) in order to sell a green product, and in contrast, more reliant on having

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consumers feel understood and connected with (i.e. empathy appeal) in order to sell a green product. These potential benefits help demonstrate the importance of conducting the present research.

*Hypothesis*

The hypothesis for the present study's research question was the following: an empathy appeal message strategy will be more effective than a guilt appeal message strategy in promoting purchase intent for an advertised green product among green consumers. The logic behind this hypothesis stems from previous research surrounding guilt appeals. Although guilt appeals are still widely used, they often backfire and cause the opposite of the intended effect. This means that they can decrease purchase intent rather than increase it (Cotte et al., 2005). They are also often inconsistent in their effect; guilt appeals can be effective in promoting purchase intention in some contexts, but it is difficult to predict with complete certainty if using a guilt-based approach will backfire or not (Coulter & Pinto, 1995).

In contrast, utilizing empathy appeals could be a more effective and consistent message strategy in promoting purchase intent due to their positive effect on consumers. This positive effect refers to consumers feeling heard and understood by the brand as opposed to feeling pressured or guilted into purchasing the green product. While evoking feelings of guilt have been effective in some advertising contexts, there is evidence that supports a shift towards brands building more genuine connections with consumers to promote purchase intent (Bagozzi & Moore, 1994). Empathy appeals, which seek to create a connection with consumers, could help facilitate this shift. The inconsistent effect of guilt appeals coupled with the untapped potential of utilizing empathy appeals is ultimately why empathy appeals were hypothesized to have a greater effect on purchase intent.

# CHAPTER THREE
# MATERIALS AND METHODS

## Methods

### Study Objective

The purpose of the study was to examine whether guilt appeals or empathy appeals were more effective at promoting purchase intention for green products. This purpose was achieved through studying the effect of using empathy appeal messaging versus guilt appeal messaging in green advertisements among green consumers.

### Stimuli Development

Guilt appeal was manipulated through guilt-framed advertisement copy that accompanied a photo of the advertised product. Similarly, empathy appeal was manipulated through empathy-framed copy that accompanied the same photo of the advertised product. In addition to the two experimental messaging conditions, a third advertisement condition was also included to serve as a control. The copy for this advertisement included the same information as the two experimental conditions but was neutral in how it manipulated the participants' emotions. This control condition was accompanied by the same photo of the advertised product. All three advertisements emulated the appearance of an Instagram advertisement and can be found in Appendix C.

### Stimuli Pretest

To assess which advertisement copy captured the essence of guilt and empathy most effectively, a stimuli pretest was conducted. Three versions of each appeal—guilt, empathy, and control—were provided to a sample of twenty graduate-level college students. The participants were instructed to rate each of the guilt appeal versions on how guilty the advertisement made them feel as well as how believable they found it to be. As for the empathy appeal versions, participants rated each appeal on how understood the advertisement made them feel as well as how believable they found it to be. Average scores were calculated for the guilt, empathy, and believability indicators. The highest average score out of the three versions for guilt and empathy were used as the stimuli for the study. The complete stimuli pretest can be found in Appendix B.

### Study Population

The study population included 335 adults who were 18 or older that identified as green consumers. The following definition was provided for what constitutes being a green consumer: "Those who are aware of their obligation to protect the environment by purchasing green products" (Lee, 2017). To screen for green consumption, individuals were asked how frequently they purchased green products. Exclusion criteria included those who were not located in the U.S. and those who were not active users on Instagram. An "active Instagram user" constituted those who used Instagram, for any length of time, at least once per week.

Participants received $1.00 USD for participating in the study. This was the only amount that participants were eligible to receive and no other tangible item was provided as payment for study participation. Participants only received payment for fully completing the study. The payment was deposited into their Mturk account where participants were able to initiate a payout to their bank account.

### Screening Protocol

The procedure used to screen participants was a brief questionnaire. This ensured that participants were located in the U.S., were active users on Instagram, and identified as green consumers. If participants did not meet these criteria, they were disqualified. The specific criterion that was used included the following questions:

1. Are you based in the U.S.? (yes/no)
2.  Do you use Instagram, for any length of time, at least once per week? (yes/no)
3. Green consumers are "those who are aware of their obligation to protect the environment by purchasing green products". Do you consider yourself to be a green consumer? (yes/no)

The screening questionnaire occurred prior to obtaining informed consent. The complete screening protocol used can be found in Appendix D. Mturk automatically assessed potential participants and disqualified anyone who did not meet the survey criteria. Screening information was not retained from participants who failed to qualify or declined to participate in the study.

### Study Procedures

A survey distributed through Amazon's Mturk platform—an online crowdsourcing website—constituted the data collection method. Participants were recruited through Mturk since it was the most cost effective and efficient method of gathering participants. The survey was designed to take participants approximately five minutes to complete. The setting and location took place entirely on Mturk and was accessed through the participants' personal devices. Following consent (Appendix A), participants were led through the following sequence of question sections:

1. Baseline Environmental Beliefs + Attitudes Towards Green Products (4 indicators)
2. Social Media Use (3 indicators)
3. Exposure to Green Advertisement; participants were randomly assigned one of three possible conditions, which included a guilt condition, empathy condition, and control condition (4 indicators)
4. Manipulation perception (2 indicators)
5. Demographics (3 indicators)

The first section served as a baseline pre-test to account for participants' preexisting environmental beliefs as well as their attitude towards green products. The second section

collected information regarding social media use; this information was used as a covariate in the analyses. To measure social media use, participants were asked to log onto Instagram and report their number of followers, the number of accounts that they follow, and the amount of time they spend on the platform. In addition to serving as a covariate in analyses, asking these questions primed participants with social media use before exposure to one of the advertisement conditions. This helped promote "ecological validity", which allows the study's results to be applicable to real-world settings (Reich and Pittman 2020).

Following the baseline pre-test and social media use screening, participants were randomly assigned to an advertisement that conveyed one of three message appeal conditions—guilt, empathy, or a control version. The advertisement was formatted to match the style of an Instagram post. After viewing the advertisement, participants indicated their purchase intent for the product, which served as the dependent variable.

To measure "purchase intent", two items adapted from Spears and Singh's (2004) were used:
1. "I would like to buy this product in the future."
2. "I would be willing to pay a little more for this product."

After indicating purchase intent, participants answered questions that measured sustainability ideation and green concern, which were used as mediators in the analyses.

To measure "sustainability ideation", one item adapted from Pittman et al. (2021) was used:
1. "This ad made me think about the importance of sustainability."

To measure "green concern", one item adapted from Pittman et al. was used:
1. "I care a lot about the environment."

Following this section, participants answered questions that accounted for their manipulation perception of the advertisements. These responses were used as a covariate in the analyses.

To measure "perceived manipulation", two items adapted from Campbell (1995) were used:
1. "The way this ad tried to persuade people seems unacceptable to me."
2. "This ad tried to manipulate people in a way I don't like."

Finally, demographic information including age, gender, and income level were gathered to serve as covariates in analyses. The exact indicators, questions, and survey formatting can be found in Appendix D. Following the completion of these 5 sections of questions, participants were thanked for their time and the survey ended.

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*Measures and Analyses*

A one-way ANOVA was used to assess the relationship between the message condition participants were exposed to with their subsequent purchase intent of the advertised product. Using a one-way ANOVA was intentionally chosen in order to account for each of the three advertisement conditions. Follow up analyses used a univariate test to account for covariates—such as social media use and demographics—to evaluate their potential impact on the relationship between variables. After conducting analyses on the study's main effect, additional tests were run to discover further correlations between variables. In addition, a moderated mediation model analysis was conducted to evaluate indirect effects between variables. Further explanation and assessments on these analyses can be found in the "Results" section.

*Privacy and Risk Assessment*

Participants' privacy was protected by making the survey completely anonymous. The participants' personal information was not obtained aside from general demographics, including age group, gender, and income level. All participant responses gathered in the survey were only accessible to the study investigators. The study data remained in Mturk and SPSS during analysis and all participant data will be terminated following the completion of the study.

Possible risks were minimal for participating in the study. A potential emotional risk may have included the participant feeling guilty about contributing to environmental damage through purchasing unsustainable clothing items. This could have resulted if the participant was assigned the advertisement condition that used guilt-framed messaging.

# CHAPTER FOUR

# RESULTS AND DISCUSSION

## Results

### Data Organization

After the 335-participant quota was reached on MTurk, the participant survey data was exported to SPSS for analysis. Before running analyses, invalid participants were removed from the dataset. This included participants who failed to pass either of the two attention check questions. 293 participants were retained for analysis.

To conduct analyses, five new variables were created: "Envibi", which was a median split between less-passionate and more-passionate green consumers; "Purchase intent" (PI), which collapsed the two purchase intent indicators into a single variable; "Enviro", which collapsed the four environmental beliefs and attitudes on pro-environmental products indicators into as single variable; "Manip", which collapsed the manipulation indicators into a single variable; and "Attcha", which reported the attitude change between initial environmental beliefs and attitudes and post-manipulation beliefs and attitudes. "Envibi", "Purchase intent", and "Enviro" were used for primary analyses; "Manip" was used for covariate purposes; and "Attcha" was used to assess whether viewing the advertisement impacted the participants' environmental attitudes and beliefs.

### Participants

The total number of participants who completed the survey was 335. After removing invalid participants, the total number of participants was lowered to N=293 (64% male). The mode response of the participants' age was 25-34 years old; 47.6% of all participants fell within his age range. The mode response of the participants' income was $31,000-$60,000; 54.8% of all participants fell within this income range. The mode response for the amount of time participants spent on Instagram was "Frequently".

### Analysis

Using SPSS, a one-way ANOVA was computed to assess the relationship between the message condition participants were exposed to with their subsequent purchase intention of the advertised product. The message conditions assessed were control (M = 5.68, SD = 1.08), guilt (M = 5.68, SD = .986), and empathy (M = 5.56, SD = 1.18). There was not a statistically significant correlation between these conditions and purchase intention, as demonstrated by computing the one-way ANOVA (F (2,292) = .410, p = .664). Although these relationships were not significant, the test revealed that the control condition led to the highest purchase intent, followed by guilt, and finally empathy, which resulted in the lowest purchase intent. These findings did not support the study's hypothesis.

Although the main effect was not supported, further analysis on SPSS revealed relationships between other key variables. A positive correlation was found between purchase intent and sustainability ideation (r (293) = .531, p < .001). Another relationship emerged through running a moderated mediation model analysis using message condition, sustainability ideation, and purchase intent. The test revealed an indirect relationship between message condition and purchase intent, which was mediated by sustainability ideation. This relationship still existed after controlling for Instagram use and level of environmental concern (F (3,289) = 46.68).

## Discussion

### Social Media Use Implications

The medians of both follower count indicators were relatively low, meaning that participants may not have been the most Instagram savvy. This could impact the validity of the results since the participants could be less—or possibly more—susceptible to Instagram advertising as a result. However, most participants indicated using Instagram frequently, meaning they might be savvier with the platform than what their follower counts implied.

### Main Effect Implications

The SPSS analyses revealed that the control condition led to the highest purchase intent, followed by guilt, and finally empathy, which resulted in the lowest purchase intent. This finding opposed the study's primary hypothesis, which predicted that the empathy appeal would lead to higher purchase intent than the guilt appeal. However, it was not the guilt appeal that led to highest purchase intent; it was the control advertisement that resulted in the highest purchase intent among participants.

This could mean that neutral messaging about a pro-environmental product— meaning messaging that does not intentionally tap into a participant's emotional state— could be the most effective strategy in generating purchase intent. Furthermore, this could indicate that laying out the facts as they are without incorporating emotional appeals could be the most effective strategy in promoting pro-environmental purchase intent among green consumers. This seems logical since green consumers are typically those who are more highly educated, and therefore may be influenced more by facts than emotional appeals.
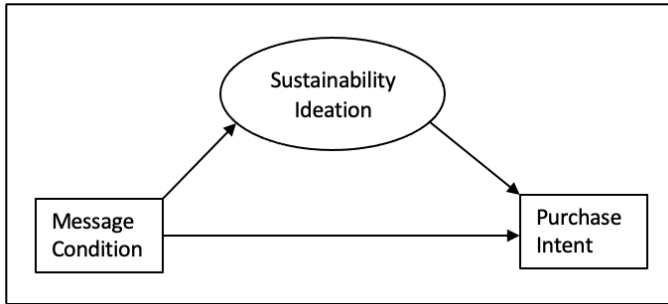
Figure 1.1. Moderated Mediation Model

## Appeals Implications

The control condition may have performed the best because it did not sway the participants' emotions in any particular direction; the messaging simply presented the facts as they were without prompting participants to tie a specific emotion to their customer journey. Eliciting emotions such as guilt and empathy may have caused participants to focus more on their emotional state than on the advertisement itself. The empathy appeal may have prompted participants to reflect on their financial situation rather than prompt them to consider purchasing the product or not. In addition, it may have encouraged participants to adopt a "free pass" mindset. This would mean interpreting the messaging as the following: "we get it, being sustainable is really tough so it's okay if you don't try!".

The guilt framing may have prompted participants to reflect on their environmental footprint rather than on their desire to purchase the product or not. However, a reason why this appeal may have still performed better than the empathy appeal is how it essentially woke the participants up to the reality of their actions. Although it was relatively harsh, it may have encouraged participants to interpret the message as, "you're right, my actions *do* make an impact and I need to make changes in my environmental purchases."

In contrast to these two conditions, using a neutral lens may have allowed participants to focus on the advertisement's information rather than on their *feelings* about the information, or on their self-reflections regarding their life situation or environmental footprint.

## Implications of Additional Analyses: Sustainability Ideation

Although the study's main effect was not supported, further analyses revealed the following indirect effect: the message condition that participants received led them to think about environmental sustainability which ultimately led them to think about their purchase intent for the advertised product. Therefore, the message condition indirectly led participants to consider their purchase intent.

This means that although the message condition itself did not impact purchase intent, the way it prompted sustainability ideation made a significant impact, since sustainability ideation was positively correlated with purchase intent. Because of this, the message conditions indirectly impacted the participants' purchase intent. This relationship implies that the specific message appeal participants were exposed to made less of an impact than the participants' specific thought processes in terms of how they evaluate pro-environmental advertisements.

When analyzing sustainability ideation, it was observed that empathy was the least influential of the three message conditions. This means that using an empathy appeal was the least helpful in prompting participants to think about sustainability. Even after controlling for variables such as Instagram use, empathy was still the least impactful

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in generating sustainability ideation. In addition, empathy was perceived to be the most manipulative of the messaging conditions, followed by guilt, followed by the control condition.

# CHAPTER FIVE

# CONCLUSIONS AND RECOMMENDATIONS

## Future Directions

### *Consumer Segmentation*

While general green consumers were used for the present study, future research could focus specifically on the previously mentioned subset of green consumers known as "challengers". Since there are numerous types of green consumers with varying degrees of environmental values and interests, it could be impactful to distill the consumers being studied to a specific segment. The reason why "challengers" should be selected as the target audience among the six segments is because they have the most potential for increasing pro-environmental behavior. Since this segment holds evenly distributed environmental motivations, they are less likely to be biased in one specific area of environmental sustainability. This is important because it would allow the results to be applicable in a broader sense.

In addition to this, "challengers" are less motivated to make pro-environmental decisions and purchases than other segments. This creates the perfect condition for future research: these consumers have pre-existing environmental consciousness—meaning they are more open to green messages than non-green consumers—but are not as completely devoted to making green decisions as other segments. Because of these two factors, "challengers" hold the most potential to respond positively to pro-environmental messages and make a behavior change as a result.

### *Stimuli Saliency*

Another future direction could focus on improving the saliency of the stimuli. To do so, more vivid and emphatic language in the guilt and empathy advertisement copy could be used, especially in comparison to the control advertisement copy. This would ensure that the conditions themselves (guilt vs. empathy) would be affecting purchase intention directly as opposed to a potential confounding variable. For example, instead of using copy that says, "This is how you're destroying our earth", the copy could be more dramatic and say, "YOU are responsible for the destruction our beautiful earth!!".

### *Purchase Intent: Sustainability Ideation*

Although the present study's main effect was not supported, future research could assess other effects that emerged through additional analyses. In particular, the relationship between sustainability ideation stemming from an advertised product and its subsequent effect on purchase intent could be studied further. Since the moderated mediation model revealed a correlation between sustainability and purchase intent, future research could delve into how this relationship could be applied to green advertising in practical settings.

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### *Purchase Intent: Emotional Appeals*

The results indicated that neither guilt nor empathy message appeals were significant predictors of purchase intention for pro-environmental products. While guilt and empathy were not strong indicators of purchase intention, it cannot be ruled out that emotional appeals altogether are ineffective. Green consumers are unique in how they process and respond to information—so although guilt and empathy were not shown to be particularly effective, it cannot be assumed that *all* emotional appeals would be ineffective. It is possible that other emotional message appeals, such as fear or humor, could better predict purchase intent for pro-environmental products. Future research could follow a similar design to the current study with the primary difference being the message appeal used in the experimental advertisement conditions.

# LIST OF REFERENCES

Bagozzi, R. & Moore, D.(1994). Public service advertisements: Emotions and empathy
  guide prosocial behavior. *Journal of Marketing*, *58*(1), 56-70.

Barber, N. (2014). Profiling the potential green hotel guest: Who are they and what do
  they want? *Journal of Hospitality & Tourism Research*, 38(3),
  https://doi.org/10.1177/1096348012451462.

Barone, M., Miyazaki, A., & Taylor, K. (2000). The Influence of Cause-Related
  Marketing on Consumer Choice: Does One Good Turn Deserve Another?.
  *Journal of the Academy of Marketing Science*, 28. 248-262,
  https://doi.org/10.1177/0092070300282006

Basil, D., Ridgway, N. & Basil, M. (2006). Guilt appeal: the mediating effect of
  responsibility. *Psychology and Marketing*, 23(12), 1035–1054.

Brown, T. & Dacin, P. (1997). The Company and the Product: Corporate Associations
  and Consumer Product Responses. *Journal of Marketing* 61, 68-84.

Campbell, M. (1995). When Attention-Getting Advertising Tactics Elicit Consumer
  Inferences of Manipulative Intent: The Importance of Balancing Benefits and
  Investments. Journal of Consumer Psychology, 4(3), 225–254.

Canioz, E. (2019). The Impact of Social Identity and Empathy on Helping Behavior: The
  Moderator Role of Empathy. *International Journal of Scientific and
  Technological Research*, 5(12). https://doi.org/10.7176/JSTR/5-12-35

Chang, C. (2008). To Donate or Not to Donate? Product Characteristics and Framing

  Effects of Cause-Related Marketing on Consumer Purchase Behavior. *Psychology*

  *and Marketing*, 25(12), 1089-1110. https://doi.org/10.1002/mar.20255

Chang, C. (2011). Guilt appeals in cause-related marketing. *International Journal of*

  *Advertising*, 30(4), 587-616. https://doi.org/10.2501/IJA-30-4-587-616

Chang, C. (2012). Are guilt appeals a panacea in green advertising? *International Journal*

  *of Advertising,* 31(4), 741-771. https://doi.org/10.2501/IJA-31-4-741-771

Chang, C. (2014). Guilt Regulation: The Relative Effects of Altruistic Versus Egoistic

  Appeals for Charity Advertising. *Journal of Advertising*, 43(3), 211-227.

  https://doi.org/10.1080/00913367.2013.853632

Chang, C. (2017). A Metacognitive Model of the Effects of Susceptibility to Persuasion

  Self-Beliefs on Advertising Effects. *Journal of Advertising*, 46(4), 487-502.

  https://doi.org/10.1080/00913367.2017.1392911

Chang, C. & Cheng, Z. (2014). Tugging on Heartstrings: Shopping Orientation, Mindset,

  and Consumer Responses to Cause-Related Marketing. *Journal of Business*

  *Ethics*, *127*(2), 337–350. https://doi.org/10.1007/s10551-014-2048-4

Cotte, J., Coulter, R. & Moore, M. (2005). Enhancing or disrupting guilt: the role of ad

Coulter, R. & Pinto, M. (1995) Guilt appeals in advertising: what are their effects?

  *Journal*

  credibility and perceived manipulative intent. *Journal of Business Research*,

  58(3), 361–368.

D'Souza, C. & Taghian, M. (2005). Green advertising effects on attitude and choice of advertising themes. *Asia Pacific Journal of Marketing and Logistics*, 17(3), 51–66.

Dagnoli, J. (1991). Conscious green. *Advertising Age,* 16(14).

Dangelico, R. & Vocalelli, D. (2017). "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature, *Journal of Cleaner Production*, 165, 1263-1279, DOI: 10.1016/j.jclepro.2017.07.184.

GfK Roper Public Affairs & Media and the Yale School of Forestry & Environmental Studies. (2008). "The GfK Roper Yale Survey on Environmental Issues: Consumer Attitudes Toward Environmentally Friendly Products and Eco-Labeling," available at http://environment.yale.edu. Accessed February 28, 2023.

Grail Research. (2009). "The Green Revolution," available at http://grailresearch.com/about_us/featuredresearch .aspx?aid=90/. Accessed February 28, 2023.

Hartmann, P., Apaolaza Iban~ez, V., & Javier Forcada Sainz, F. (2005). Green Branding Effects on Attitude: Functional versus Emotional Positioning Strategies. Marketing Intelligence & Planning, 23(1), 9–29.

Henricks, M. (2008). Green with guilt. *American Way Magazine*. Available online at: www.americanwaymag.com/hybrid-car-yale-school-of-forestry-environmental-studies-christopher-silas-neal-energy (accessed 20 September 2022).

Kärnä, J., Juslin, H., Ahonen, V., and Hansen, E. (2001). Green Advertising: Greenwash
   or a True Reflection of Marketing Strategies? *Greener Management
   International*, 33, 59-70. Austin, TX: Greenleaf Publishing.

Kotchen, M. (2009). Offsetting green guilt. *Stanford Social Innovation Review*, 26–31.

Kubat, U. (2017). Attitudes towards a Socially Responsible Brand: Effects of Product
   Type, Anticipated Guilt, and The Role of Gender Identity. *Journal of Consumer
   and Consumption Research*, 9(2), 317-346.

Lee, J. (2017). Green Consumers' Skepticism toward Pro-Environmental Advertising:
   Consumer Motivations for Purchasing Pro-Environmental Products. *PhD diss.,
   University of Tennessee*. https://trace.tennessee.edu/utk_graddiss/4698.

Lim, R. & Hong, J. (2022). Don't Make Me Feel Guilty! Examining the Effect of a Past
   Moral Deed on Perceived Irritation with Guilt Appeals in Environmental.
   *Advertising, Journal of Current Issues & Research in Advertising*, 43(3). DOI:
   10.1080/10641734.2022.2122638.

Murphy, I. (1997). Pillsbury Proves Charity, Marketing Begins at Home? *Marketing
   News*, 16.

Nielsen. (2011). "Sustainable Efforts and Environmental Concerns," available at
   www.nielsen.com/us/en/insights/ reports-downloads/2011/sustainable-efforts-
   environmental- concerns.html (accessed February 27, 2023).

Ottman, J. (1993). Green Marketing: Challenges and Opportunities for the New
   Marketing Age (Lincolnwood, IL: NTC Business Books).

Pittman, M., & Reich, B. (2016). Social Media and Loneliness: Why an Instagram

    Picture May Be Worth More than a Thousand Twitter Words. *Computers in*

    *Human Behavior* 62(155), 167. DOI: 10.1016/j.chb. 2016.03.084.

Pittman, M., Read, G., & Chen, J. (2021). Changing Attitudes on Social Media: Effects

    of Fear and Information in Green Advertising on Non-Green Consumers. *Journal*

    *of Current Issues & Research in Advertising*, 42(2), 175-196, DOI:

    10.1080/10641734.2020.1835755.

Rawal, M. & Torres, J. (2017. Empathy for Emotional Advertisements on Social

    Networking Sites: The Role of Social Identity. *The Marketing Management*

    *Journal*, 27(2), 88-102.

Rodgers, S. & Thorson, E. (2019) Advertising Theory. Involvement, Chapter *, edited by

    Haley, E. 120-131. https://doi.org/10.4324/9781351208314.

Schuhwerk, M. & Lefkoff-Hagius, R. (1995). Green or non-green? Does type of appeal

    matter when advertising a green product? *Journal of Advertising*, 24, 45–54.

Smith, G. & Stodghill, R. (1994). Are Good Causes Good Marketing? *Business Week*, 64,

    66.

Stewart, D., Morris, J. & Grover, A. (2007). Emotions in advertising. In G. J. Tellis & T.

    Ambler (Eds.), *The Sage Handbook of Advertising,* 120-134. London, UK: Sage

    Publication.

Vinzenz, F., Priskin, J., Wirth, W., Ponnapureddy, S. & Ohnmacht, T. (2019). Marketing

    sustainable tourism: the role of value orientation, well-being and credibility.

*Journal of Sustainable Tourism*, 27(11), 1663-1685,

https://doi.org/10.1080/09669582.2019.1650750.

Voorveld, H., Neijens, P., & Smit, E. (2011). Opening the Black Box: Understanding

Cross- Media Effects. *Journal of Marketing Communications,* 17(2), 69–85.

Wang, J., Yang, X., He, Z., Wang, J., Bao, J., Gao, J. (2022). The Impact of Positive

Emotional Appeals on the Green Purchase Behavior. *Front Psychology*, 2(13).

DOI: 10.3389/fpsyg.2022.716027.

# APPENDICES

## Appendix A: Consent

We are asking you to be in this research study because you identify as a green consumer and are an active user on Instagram. You must be located in the U.S. and age 18 or older to participate in the study. The information in this consent form is to help you decide if you want to be in this research study. Please take your time reading this form and contact the researcher(s) to ask questions if there is anything you do not understand.

The purpose of the research study is to understand the impact of messaging strategies used in pro-environmental advertising.

If you agree to be in this study, you will complete an online survey. The survey includes questions about environmental attitudes and purchases and should take you about five minutes to complete. You can skip questions that you do not want to answer.

Being in this study is up to you. You can stop up until you submit the survey. After you submit the survey, we cannot remove your responses because we will not know which responses came from you.

We don't know of any risks to you from being in the study that are greater than the risks you encounter in everyday life.

We do not expect you to benefit from being in this study. Your participation may help us to learn more about pro-environmental advertising. We hope the knowledge gained from this study will benefit others in the future.

The survey is anonymous, and no one will be able to link your responses back to you. Your responses to the survey will not be linked to your computer, email address or other electronic identifiers. Please do not include your name or other information that could be used to identify you in your survey responses. Information provided in this survey can only be kept as secure as any other online communication.

Information collected for this study will be published and possibly presented at scientific meetings.

You will be compensated $1.00 for being in this study. This amount will be provided to you through Mturk.

If you have questions or concerns about this study, or have experienced a research related problem or injury, contact the researchers, Dr. Haley through haley@utk.edu or Jasmine Fehr through jfehr1@vols.utk.edu.

For questions or concerns about your rights or to speak with someone other than the research team about the study, please contact:

Institutional Review Board
The University of Tennessee, Knoxville
1534 White Avenue
Blount Hall, Room 408
Knoxville, TN 37996-1529
Phone: 865-974-7697
Email: utkirb@utk.edu

Statement of Consent I have read this form, been given the chance to ask questions and have my questions answered. If I have more questions, I have been told who to contact. By selecting "I Agree" below, I am providing my signature by electronic means and agree to be in this study. I can print or save a copy of this consent information for future reference. If I do not want to be in this study, I can select "I Do Not Agree" to exit out of the survey.

X I agree to participate
X I do not agree to participate

# Appendix B: Stimuli Pretest

**Directions / Notes:**

- Read each advertisement (8 total) and answer the questions beneath them as truthfully as possible
- Scale: 1 = not at all; 7 = completely (circle your response)
- Ad believability questions: imagine that you saw each ad on Instagram

**Guilt appeal #1:**

If you purchase "fast fashion" clothing made from non-sustainable materials, this is what you're contributing to…
♻️ Toxic dyes that pollute clean water
♻️ Greenhouse gas emissions that destroy our planet
♻️ Harmful waste management
💚 Choose Green Earth Apparel T-Shirts. It's the right thing to do!

    1. Did this ad make you feel guilty? 1  2  3  4  5  6  7
**[Average: 4.7]**
    2. How believable is this ad?  1  2  3  4  5  6  7
**[Average: 4.8]**

**Guilt appeal #2:**

This is how you're destroying our earth by purchasing non-sustainable "fast fashion" clothing…
♻️ You're causing toxic dyes to enter clean waterways
♻️ You're contributing greenhouse gas emissions that wreck our planet
♻️ You're supporting harmful waste management
💚 Choose Green Earth Apparel T-Shirts. Save our planet!

    1. Did this ad make you feel guilty? 1  2  3  4  5  6  7
**[Average: 5.4]**
    2. How believable is this ad?  1  2  3  4  5  6  7
**[Average: 4.5]**

**Guilt appeal #3:**

Thinking of buying "fast fashion" clothing made with non-organic materials? Think again…
Purchasing non-sustainable clothing means you're…
♻️ Causing toxic dyes to pollute clean water
♻️ Supporting climate change by promoting greenhouse gas emissions
♻️ Contributing environmental waste that destroys our planet

💚 Choose Green Earth Apparel T-Shirts. Be a good global citizen!

    1.  Did this ad make you feel guilty? 1  2  3  4  5  6  7
**[Average: 4.3]**
    2.  How believable is this ad?  1  2  3  4  5  6  7
**[Average: 5.3]**

**Guilt appeal #4:**

Thinking of buying "fast fashion" clothing made from non-sustainable materials? Think again…
Purchasing non-sustainable clothing means you're…
♻️ Causing toxic dyes to contaminate clean water
♻️ Supporting climate change by promoting greenhouse gas emissions
♻️ Contributing harmful waste that destroys our planet
💚 Choose Green Earth Apparel T-Shirts. Choose to care about our earth!

    1.  Did this ad make you feel guilty? 1  2  3  4  5  6  7
**[Average: 4.8]**
    2.  How believable is this ad?  1  2  3  4  5  6  7
**[Average: 5.0]**

**Empathy appeal #1:**

Choosing the pro-environmental option is tough, we get it…
But here's why it's worth it:
♻️ You're reducing water pollution
♻️ You're limiting greenhouse gas emissions
♻️ You're decreasing environmental waste
💚 Give Green Earth Apparel T-Shirts a shot. It's worth your effort!

    1.  Did this ad make you feel understood?  1  2  3  4  5  6  7
**[Average: 5.6]**
    2.  How believable is this ad?  1  2  3  4  5  6  7
**[Average: 5.8]**

**Empathy appeal #2:**

Choosing sustainable clothing is tough, we get it…
But here's why it's worth your time, money, and effort:
♻️ You're reducing water pollution
♻️ You're helping limit greenhouse gas emissions
♻️ You're decreasing environmental waste

💚 Give Green Earth Apparel T-Shirts a shot. It's worth your sacrifice!

    1. Did this ad make you feel understood? 1 2 3 4 5 6 7
**[Average: 5.9]**
    2. How believable is this ad? 1 2 3 4 5 6 7
**[Average: 5.6]**

**Empathy appeal #3:**

Choosing sustainable clothing is tough, we get it…
But here's why it's worth your extra effort:
♻️ You're helping reduce water pollution
♻️ You're decreasing greenhouse gas emissions
♻️ You're preventing excess environmental waste
💚 Give Green Earth Apparel T-Shirts a shot. It's worth your sacrifice!

    1. Did this ad make you feel understood? 1 2 3 4 5 6 7
**[Average: 5.4]**
    2. How believable is this ad? 1 2 3 4 5 6 7
**[Average: 5.1]**

**Empathy appeal #4:**

Choosing the green option is tough, we get it…
But here's why it's worth your time, money, and effort:
♻️ You're protecting clean waterways from being polluted
♻️ You're helping prevent greenhouse gas emissions
♻️ You're decreasing environmental waste
💚 Give Green Earth Apparel T-Shirts a shot. It's worth your energy!

    1. Did this ad make you feel understood? 1 2 3 4 5 6 7
**[Average: 6.0]**
    2. How believable is this ad? 1 2 3 4 5 6 7
**[Average: 6.0]**

**Overview:**

**Overall highest for guilt = #2 (5.4; 4.5)**

This is how you're destroying our earth by purchasing non-sustainable "fast fashion" clothing…
♻️ You're causing toxic dyes to enter clean waterways
♻️ You're contributing greenhouse gas emissions that wreck our planet
♻️ You're supporting harmful waste management

💚 Choose Green Earth Apparel T-Shirts. Save our planet!

**Overall highest for empathy = Empathy appeal #4 (6.0; 6.0):**

Choosing the green option is tough, we get it…
But here's why it's worth your time, money, and effort:
♻️ You're protecting clean waterways from being polluted
♻️ You're helping prevent greenhouse gas emissions
♻️ You're decreasing environmental waste
💚 Give Green Earth Apparel T-Shirts a shot. It's worth your energy!

# Appendix C: Stimuli

Control



**greenearthapparel** Buying environmentally sustainable clothing has many benefits for our earth…
♻️ Less water pollution
♻️ Less greenhouse gas emissions
♻️ Less environmental waste
💚 Try out Green Earth Apparel T-Shirts. Be a sustainable consumer!

Guilt



**greenearthapparel** This is how you're destroying our earth by purchasing non-sustainable "fast fashion" clothing…
♻️ You're causing toxic dyes to enter clean waterways
♻️ You're contributing greenhouse gas emissions that wreck our planet
♻️ You're supporting harmful waste management
💚 Choose Green Earth Apparel T-Shirts. Save our planet!

Empathy



**greenearthapparel** Choosing the green option is tough, we get it…
But here's why it's worth your time, money, and effort:
♻️ You're protecting clean waterways from being polluted
♻️ You're helping prevent greenhouse gas emissions
♻️ You're decreasing environmental waste
💚 Give Green Earth Apparel T-Shirts a shot. It's worth your energy!

**Appendix D: Survey**

1.  **Consent (Appendix A)**
2.  **Screener:**
*Answering "No" to any of the following questions resulted in automatic termination
- Are you based in the U.S.? (Yes/No)
- Do you use Instagram, for any length of time, at least once per week? (Yes/No)
- Green consumers are "those who are aware of their obligation to protect the environment by purchasing green products". Do you consider yourself to be a green consumer? (Yes/No)
3.  **Environmental Beliefs and Attitudes Towards Pro-Environmental Products:**
*1-7 scale from "Strongly disagree" — "Strongly agree"
- Taking care of the earth is important.
- Engaging in pro-environmental behaviors is important.
- Buying pro-environmental products is important.
- I try to purchase pro-environmental products whenever possible.
4.  **Social Media Use:**
- Log on to Instagram and report the number of accounts you follow, the number of accounts that follow you, and how often you use Instagram:
    - Number of accounts that you follow: (open-ended number response)
    - Number of accounts that follow you: (open-ended number response)
    - How often do you use Instagram? (1-7 scale from "Hardly ever" — "Very frequently")
5.  **Advertisement Manipulation Conditions:**
*Participants were randomly assigned to one of the following three conditions with the instructions: "Review the ad shown and indicate your agreement with the statements that follow"
- Control condition
- Guilt condition
- Empathy condition
*The image and copy used for each condition can be found in Appendix C
*Participants were required to view the advertisement for eight seconds before moving to the following section
6.  **Purchase Intent:**
*1-7 scale from "Strongly disagree" — "Strongly agree"
- I would like to buy this product in the future.
- I would be willing to pay a little more for this product.
7.  **Attention Check:**
- Please tell us that you're a human so that we can pay you! (response options: "beep bop", "I'm human!", "boop boop beep bop", "beeeeeep boop boo bop"
8.  **Sustainability Ideation:**
*1-7 scale from Strongly disagree — Strongly agree"
- This ad made me think about the importance of sustainability.

**9. Green Concern:**

*1-7 scale from Strongly disagree — Strongly agree

- I care a lot about the environment.

**10. Manipulation Perception:**

*1-7 scale from Strongly disagree — Strongly agree

- The way this ad tried to persuade people seems unacceptable to me.
- This ad tried to manipulate people in a way I don't like.

**11. Demographics:**

- What is your age?
    - 18-24
    - 25-34
    - 35-44
    - 45-54
    - 55-64
    - 65+

- What is your gender?
    - Male
    - Female
    - Nonbinary
    - Prefer not to say
- What is your total annual income?
    - $0-$30,000
    - $31,000-$60,000
    - $61,000-$90,000
    - $91,000-$120,000
    - $121,000+
- Finally, is there anything you want to say that this survey did not ask? (optional; open-ended text response)

*End of survey message: We thank you for your time spent taking this survey. Your response has been recorded.

# VITA

Jasmine Cassandra Fehr was born in Saskatchewan, Canada in 1999. She earned a B.A. in Psychology from the University of Portland in 2021. She completed an undergraduate Honors Thesis titled: *Impacts of COVID-19 Reflections on Commitment to Engaging in Pro-Environmental Behavior*. She is expected to graduate in May, 2023 from the University of Tennessee with a M.S. in Communication with a concentration in Advertising. She anticipates publishing her Master's Thesis titled: *The Impact Of Guilt And Empathy Appeals On Green Advertisement Purchase Intent Among Green Consumers*. In addition to her scholarly research, Jasmine competes in NCAA Division 1 Track and Field for the University of Tennessee.