

What Green Marketing Strategy to Use Prior To a Greenwashing Scandal?

A Quantitative Study on the Impacts of Different Green Marketing
Strategies on Brand Attitude and Purchase Intention in the Context of a
Greenwashing Scandal

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Abstract

Despite the increase in green advertising in the past decade, the way these green messages are communicated and their efficacy when it comes to mitigating damages in case of a greenwashing scandal, is still an area that has not been well-researched. Thus, this paper aims to contribute to closing this research gap by investigating the impact of two different green marketing communication styles on consumers' brand attitude and purchase intention in the context of a greenwashing scandal while also considering the moderating effects of environmental concern and customer skepticism towards green marketing. To conduct this thesis, a three-step study was carried out where the results showed that consumers' brand attitude before and after a greenwashing scandal is affected negatively to the same extent when presented with the bragging and the humble marketing communication styles. Furthermore, consumers' purchase intention is not affected more or less negatively by the two different communication styles, bragging and humble. The negative effects of the marketing efforts on the difference in brand attitude in the context of greenwashing scandal are stronger for the bragging green marketing in the case of higher consumer skepticism towards green marketing, but this does not apply to the difference in purchase intention. Furthermore, these negative effects on the difference in brand attitude and purchase intention will not be more or less enhanced depending on the consumers' level of environmental concern. This paper will therefore discuss the implications of these findings for marketers and while also considering the limitations and presenting areas for future research.

Keywords: Green marketing, aggressive marketing, bragging green marketing, humble marketing, attitude toward the ad, brand attitude, purchase intention, greenwashing scandal, effects of green marketing, environmental concern.

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1. Introduction

1.1 Background and Problem Area

What happens when a company uses aggressive marketing to advertise its green efforts? A recent case of greenwashing was revealed where H&M continuously made false and misleading claims about how green and sustainable they are (Race, 2022; Ho, 2021). In a news article written by Aimee Percy (2021) and published on the website BigIssue.com, it was disclosed that even their “Conscious Collection” which was supposed to be more sustainable than their normal collection had more synthetic fabric that needed more fuel in the production process, thus making it more harmful for the environment. Yet, they marketed themselves on their store windows as “Eco Warrior” and “Climate Crusader” using bold colors such as red and pink, child activists and strong statements, hoping to give this image of a green company and seem more sustainable than they actually were. When passing by the shopping windows, people were exposed to H&M’s “aggressive” green marketing which could not go unnoticed and had an impact on them where one angry passerby even took action upon it by revealing information about the brand’s greenwashing on cardboards while sitting in the window displays next to H&M’s green marketing, in order to inform people of their intention to fool everyone.

Green marketing is a concept that has been around since the 1970s but has only begun to boom two decades ago with the increase in environmental concern which led to consumers becoming more aware of the consequences of unsustainable business practices (Chitra, 2015). In fact, to this day the concept is still growing in popularity as the value of green markets is on a continuous rise, implying that there could be value to be captured from implementing green marketing tactics, especially since it has been proven that 66% of consumers are willing to pay more for a sustainable brand (Nielsen, 2015). This explains why companies in recent times, started viewing green marketing as a tool for being more sustainable and strengthening the brand image (Banytė & Gadeikienė, 2008). Therefore, sustainability, in all of its forms; social, human, economic and environmental has become an increasingly important factor in today’s business as it provides a long-term advantage over competitors.

Furthermore, in this day and age, companies engaging in CSR practices is no longer a question but rather a dilemma of what sustainability activities to engage in (Prothero & McDonagh, 1992). This is something that usually depends on what is relevant for the firm

and the industry it is operating in, and they deemed it important to set their green marketing strategies in plain view for the consumers through green marketing communications. For example, some companies have decided to implement a “Lean Green” strategy where they essentially engage in fewer pro-sustainability communications than they actually practice meaning that they are not focused on publicizing or marketing their green efforts, whereas some other companies have chosen to implement a “Defensive Green” strategy instead using aggressive promotion of their environmental initiatives in hopes to change their brand image. However, when using an aggressive communication approach, companies are also risking being held to a higher standard and not being able to live up to what they are advertising which might backfire if revealed (Ginsberg et al., 2004). Indeed, with the increase in green marketing, greenwashing is also becoming widespread which is a phenomenon that has been defined as “the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service” (Chen and Chang, 2013; Delmas and Burbano, 2011). TerraChoice – a Canadian-based environmental marketing agency – found that 95% of the products that claimed to be green in the USA and Canada turned out to be false or misleading where at least one of the greenwashing sins had been committed (TerraChoice, 2010). Furthermore, another study reported that out of the 95 firms that had participated, 88.4 % scored higher in talk than in walk, meaning that 84 of the companies are better at communicating their aspirations compared to their actual actions (MISUM, 2019). Therefore, the increase in misleading green communication in combination with the fact that companies want to convey a positive brand image of themselves has led to increased skepticism amongst consumers as they are unable to identify the true green claims (Baum, 2012; Lyon and Montgomery, 2015).

1.2 Research Gap & Research Question

Thus, although there is previous research on how firms should communicate their green marketing efforts (Prothero et al., 1997; Jörg et al., 2014; Ginsberg et al., 2004) and what consumers’ reactions to greenwashing are (Menno et al., 2020; Nyilasy et al., 2014), the efficacy and the effects of these communication strategies have not been tested on customers’ attitude and purchase intention after a greenwashing scandal has occurred, hence knowledge within this area is still scant. This study will therefore use two different green marketing strategies where the first one is a bragging communication strategy that uses messages that are delusive and exaggerated to communicate the green initiatives and is thus an aggressive

communication strategy (Jörg et al., 2014). The second green communication strategy is a humble strategy that uses messages that are more subtle in nature and vague when communicating the green initiatives. The gentler way of phrasing green messages with less assertive language has shown to be effective in green marketing communication (Kronrod et al., 2012). The purpose of this paper is hence, through the use of these two different green communication strategies presented to investigate which one is the most effective to implement before a greenwashing scandal happens to minimize damages after the greenwashing is revealed in terms of the effect on brand attitude and purchase intention, leading to the following research question:

How is the customer's attitude towards a brand and purchase intention affected after a greenwashing scandal has happened, depending on which green marketing communication strategy has been used by the brand prior to the revelation of the scandal?

1.3 Disposition

In the following section, previous literature on the chosen topic will be discussed and the theoretical background and hypotheses of the thesis will be presented. Next, the overall structure and procedures that have been adopted to conduct this study will be presented before introducing the findings of the research. Thereafter, this report proceeds with a general discussion and analysis of the results where even theoretical contribution, managerial implications, and future research will be discussed.

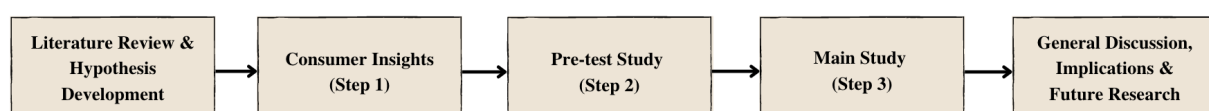


Figure 1: Thesis Structure

2. Literature Review and Hypothesis Development

Overview of the Conceptual Framework

The conceptual framework of this study is outlined below in *Figure 2*. The main hypothesis of this study is that the difference in customer brand attitude and purchase intention, before and after a greenwashing scandal is revealed, will be influenced more or less negatively depending on the green marketing strategy that has been adopted by the firm prior to the

occurrence of the greenwashing. The moderating variables tested are the customer's environmental concern and level of skepticism towards green marketing.

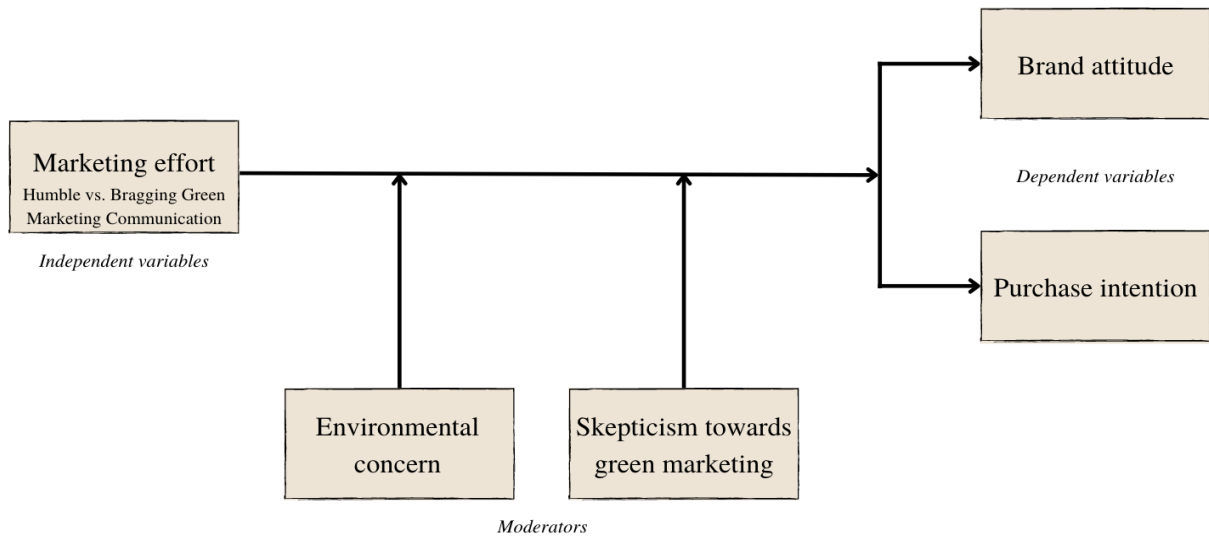


Figure 2: Conceptual Framework

Green Advertising and Marketing Communication Styles

While traditional marketing advertising is defined as the firm's efforts to "inform, persuade, incite, and remind customers, directly or indirectly about the brands they sell." (Keller, 2001), green marketing is marketing that is related to environmental practices and has been defined as "the process of planning, implementing and controlling the development, pricing, promotion, and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met, (2) organizational goals are attained, and (3) the process is compatible with eco-systems" (Fuller, 1999). Therefore, this concept has gradually emerged into a philosophy to develop, practice and communicate green initiatives including business operations which in turn leads to an enhanced corporate reputation as well as market performance (Stainer and Stainer, 1997; Lu et al., 2013). Hence, D'Souza and Taghian (2005) summarize this by stating that green advertising aims to create awareness and positive attitudes towards environmentally friendly brands and companies. Furthermore, communication has been argued to be an important way to draw attention to these green initiatives Gupta & Kuma (2013). Indeed, well-explored and credible communication could have a positive impact on consumer behavior and support the firm in building trust that leads to a favorable perception of the brand's intentions being in line with the long-term needs of the community (Ammenberg, 2006). Thus, previous research on green marketing indicates that one of the most common and basic tools that has been used by firms to communicate the

green messages to consumers and impact their behaviors include advertising, corporate public relations, and visual identifications (Majeed, 2022; Balmer & Greyser, 2006), where there has been a significant increase in green messages in advertising since the 1960s (Easterling et al., 1996). Firms have chosen to adopt different green marketing communication strategies as no single strategy works for every green company (Phau & Ong, 2007). Research has shown that firms are in a stronger position to persuade their consumers to prefer their products when their messages are communicated effectively (Hartmann et al., 2005). Some companies use assertive messages in their environmental advertising using words like “Go” and “Do” (Kronrod et al., 2012) despite the fact that multiple studies in consumer behavior, psycholinguistics, and communications have found that assertively phrased messages typically decrease compliance with the messages as it interferes with the consumers’ freedom (Lord, 1994; Shrum et al., 1994) and gentler, less assertive phrasing is more effective when seeking consumer compliance (Kronrod et al., 2012).

Green Marketing and Greenwashing Effects on Brand Attitude and Purchase Intention

As previously discussed, research has shown that corporations decide to invest in socially responsible initiatives and green marketing communications to change beliefs, attitudes and behaviors amongst stakeholders, most importantly the customers. The objective is to give the perception of being eco-friendly and socially engaged through which they are able to achieve improved brand attitudes and purchase intentions (Hoeffler, Bloom et al., 2010; Nyilasy et al., 2014). However, the green marketing claims communicated by companies are not always supported and shown in the companies’ actual CSR- (corporate social responsibility) and environmental behaviors and often turn out to be a lie (Delmas & Burbano, 2011; Lyon & Montgomery, 2015). This is in other words explained as greenwashing, which is as previously mentioned an increasingly common and widespread phenomenon in today’s business (TerraChoice 2007, 2009, 2010; Baum, 2012; Atkinson & Kim, 2014) and which arises as companies try to gain the benefits of the green positioning without behaving accordingly. Moreover, earlier research on how greenwashing impacts consumers indicates that when greenwashing is revealed, this has negative effects on consumers’ attitudes toward the brand or organization and behavioral intentions such as purchase intention (Nyilasy et al., 2014; Chen & Chang, 2013; De Jong, Harkink, & Barth, 2018). More specifically, Nyilasy et al. (2014) studied the effectiveness of marketing strategies (green, general and no advertising), and the effects of these in connection to a corporation’s environmental performance, on brand attitudes and purchase intentions. Their finding was that “green

advertising can in fact harm companies—it may be that some firms would be better off staying silent”. According to the aforementioned studies, greenwashing scandals can lead to a more negative consumer attitude towards the brand as well as lower purchase intention. Although previous research has discovered interesting findings regarding greenwashing, consumer reactions as a result of greenwashing as well as the benefits and drawbacks of green marketing for corporations, there is a research gap that this study tries to fill around the question of how different green marketing communication strategies (more specifically bragging vs. humble green marketing) used prior to a greenwashing scandal, influence the reactions of customers (i.e. the difference in brand attitude and purchase intention) after a greenwashing scandal. This study also explores the moderation effects of customer’s level of environmental concern and level of skepticism towards green marketing as this was found influential in previous studies when it comes to green marketing and greenwashing (Aji & Sutikno 2015; Newell, Goldsmith, & Banzhaf, 1998; Hartmann & Apaolaza, 2010).

As described by Ajzen (1988), an attitude can be defined as a disposition to respond favorably or unfavorably to an institution, event, etc. Aiming toward a positive brand attitude is crucial for companies as it leads to more positive purchase intention and behavior as only when a consumer likes a brand, will he/she be willing to make a purchase (Morgan & Hunt, 1994; LaBarbera & Mazursky, 1983; Bearden et al., 1984). Chen et al., (2017) and Mitchell & Olson (1981), explain that ‘green brand attitude’, similar to the previous definition, concerns consumers’ attitude toward their overall evaluation of a brand’s performance, but is more specifically connected to their green performance and green initiatives. Additionally, the brand attitude is not only dependent and affected by a company’s green performance but also by how this performance is communicated through green marketing strategies (Nyilasy et al., 2014; Liao et al., 2020). In the previous study by Nyilasy et al., (2014), it was found that green marketing efforts had a negative impact on brand attitude compared to non-green marketing and no marketing at all. More precisely, the results of the study indicated that the negative effect of a firm’s low performance on brand attitudes, for instance, revealed through a greenwashing scandal, becomes stronger in the presence of green advertising compared to general corporate advertising and no advertising at all (Nyilasy et al., 2014). Thus, in our study, we hypothesize that the brand attitude will be more strongly affected in a negative way by a bragging green marketing compared to a more humble one:

***H1a:** When the firm communicates its green efforts in a bragging (vs. humble) manner, this has a stronger (weaker) negative effect on brand attitude.*

According to Chen and Chang (2012), green purchase intention refers to “the likelihood that a consumer would buy a particular brand, product, or service resulting from his or her environmental needs”. Furthermore, purchase intention has been demonstrated to be useful in predicting consumer behavior (Mitchell and Olson, 1981) as it is thought to be an important attribute of brand attitude (Wu and Wang, 2011). Indeed, behavior is one of the three components that define attitude along with effect and cognition where it has been shown that it is a good determinant for future behavior (Pickens 2005). This is emphasized in the study conducted by Kotler and Keller (2008), which has shown that a positive brand attitude will enhance the customer’s purchase intent. In addition, research has shown that patronage intentions are improved by positive perceptions of a company’s green initiatives (Groza et al., 2011). Chen and Chang (2013) point out in another study that greenwash is a factor that influences and determines consumer purchase intention which is also supported by other greenwash literature that also suggests that companies engaging in greenwashing behavior are more likely to experience a lower purchase intention (Nyilasy et al., 2014; Parguel et al., 2011). Moreover, when a firm’s green communication is incongruent with its actual practices, which is the case in greenwashing, the consumers’ attitudes toward the brand are negatively impacted and subsequent their purchase intentions (Nyilasy et al., 2014). This would suggest that green purchase intention would be negatively affected in the case of a greenwash revelation, where the bragging green message would yield lower purchase intention in comparison to the humble green message. However, empirical evidence shows that there is an attitude-behavior gap in green consumerism (Gupta & T. Ogden, 2006; Caruana et al., 2016) and this applies even within the fashion industry where consumers seem to not “walk their talk” (Carrington et al., 2010). It is explained that despite the fact that the consumer might be concerned with environmental issues, there are other internal and external factors that influence “green” purchase intentions (Gupta & T. Ogden, 2006; Wiederhold & Martinez, 2017). These findings lead to the following hypothesis:

***H1b:** When the firm communicates its green efforts in a bragging (vs. humble) manner, this does not have a stronger (weaker) negative effect on purchase intention.*

Moderating Effect of Environmental Concern on Brand Attitude and Purchase Intention

Green or environmental concern is defined as “an individual’s awareness of environmental problems and his/her willingness to tackle the problem” (Akehurst et al., 2012). Most research involving this concept perceives it as either a direct or an indirect predictor of consumers’ green purchasing intentions (Yadav & Pathak, 2016; Newton et al., 2015) where environmental concern has shown to have a strong impact on a customer’s intention to purchase green products (Kim and Choi, 2005). Similarly, Hartmann and Apaolaza (2010) studied the impact of environmental concern on consumers’ attitude towards a green ad and the brand itself as well as purchase intentions and found a positive relationship between them. This means that consumers exerting a higher environmental concern are more likely to have a strong sense of environmental responsibility and turn that into environmentally-friendly behaviors (Biswas and Roy, 2015). They have also been found to be more likely to identify greenwashing and recognize its negative impacts, as they are more aware of the claims that are being made in order to be able to make informed green purchase decisions which might influence their purchase intention (Newton et al., 2015). In addition, Zhang et al. (2018) argue that, in a way, “green concern represents consumers’ perceptions of their own environmental responsibility”, which is what motivates them to be more aware of how their decisions impact the environment and leads them to behave in a more responsible way through reducing their purchases from companies that have engaged in greenwashing. Hence, the authors established that when a consumer exhibits a higher green concern, purchase intention in relation to greenwashing perceptions will decrease. Similar to Newton et al., (2015), they explain that consumers that are more concerned with the environment are more capable of determining the real green claims from the greenwashing ones. Based on the presented literature, we hypothesize the following:

***H2a:** Customers' level of environmental concern moderates the effect of marketing communication efforts on brand attitude in such a way that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern.*

***H2b:** Customers' level of environmental concern moderates the effect of marketing communication efforts on purchase intention in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern.*

Moderating Effect of Green-ad Skepticism on Brand Attitude and Purchase Intention

As previously mentioned, according to Easterling et al. (1996) there has been a significant increase in the number of green messages in advertising. Yet, these green messages do not always translate into a positive brand attitude as consumers have become more skeptical of the environmental claims of some of these corporations (Gfk, 2010; Orazi & Chan, 2020). Skepticism has been defined by Obermiller and Spangenberg (1998) as “the general tendency toward disbelief of advertising claims” and they established that it is a stable attribute of consumers which has an impact on their response to advertisement, treating it as a personality trait, and they also concluded that all advertisement including claims are subject to disbelief to some extent. The authors continue on to explain that a highly skeptical person might be more or less subject to disbelief in an ad claim whereas a less skeptical person will be more likely to believe the ad claim and this will be dependent on situational factors such as ad execution variables and perception of manipulative intent. In the same study, they found that skeptical customers had a less favorable attitude towards the advertisement and were less persuaded by green advertisements compared to non-skeptical customers. However, Mohr et al. (1998) consider skepticism as a cognitive response that is dependent on the context and the content of communication rather than a deep-rooted mistrust towards these claims and thus this skepticism might only manifest itself in certain situations. Moreover, Lutz (1985) has identified advertising credibility belief as an input of attitude toward the ad; i.e., an enduring susceptibility to believing the ad. This credibility could be negatively affected in the case of when consumers perceive that a firm is exaggerating their green performance, which in turn creates a negative evaluation of the company, meaning that the attitude towards the company will also be affected negatively (Zhang et al., 2018). Lyon and Montgomery (2015) further emphasize this by stating that this “greenwashing discount” negatively impacts

purchasing intentions. Zhang et al. (2018) also disclose that if consumers feel cheated by the firm's greenwashing, they may become wary of the firm's green actions and may not want to engage in a long-term relationship with the firm leading to decreased purchasing intentions. Therefore, based on the presented literature, these are the proposed hypotheses:

***H3a:** Customers' level of skepticism towards corporate green marketing communication moderates the effect of marketing communication efforts on brand attitude in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of skepticism.*

***H3b:** Customers' level of skepticism towards corporate green marketing communication moderates the effect of marketing communication efforts on purchase intention in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of skepticism.*

3. Overall Study

In the following section, the overall study will be explained through the three-step approach applied, where the methodologies and findings will be displayed and discussed in detail.

3.1. Empirical Approach

The hypotheses for the study were built upon existing literature on brand attitude, purchase intention and sustainability. Thus, the method applied for the study was a deductive research method, meaning that research by others has been reviewed as well as the existing theories and literature on the examined topic, from which study's hypotheses have emerged and then been tested. This method is a common practice in research, usually associated with different scientific research built upon quantitative study methods in social sciences (Yin, 1994).

In order to answer the research question and test the hypotheses, a three-step approach was implemented in the study. (See Figure 1) The first stage revolved around gathering consumer insights about green marketing as well as greenwashing scandal through qualitative interviews which were then used as a base to develop study's stimuli and questionnaire used

in the main study. Following the first stage, the second stage included a quantitative pre-test study that consisted of a short questionnaire where the aim was to test participants' perceptions of the created stimuli that would, later on, be used in the main study. For the third and final stage of the study, a longer quantitative questionnaire was used where the stimuli tested and adjusted from the pre-test were included as well as the variables measuring the dependent-, moderating- and control variables included in the study.

4. Consumer Insights - Step 1

4.1. Methodology

The first step in the study revolved around gathering consumer insights about green marketing and greenwashing scandal through qualitative interviews. (For the interview guide, see *Appendix 1*) These were conducted in order to gain an overview of current customer perceptions and perspectives with regards to green marketing, false green marketing and misconduct in the fashion industry as well as green-ad skepticism. This helped determine which dependent and independent variables were the most important for the consumers in that matter and which were then included in the main study. Additionally, these insights were used to create a well-suited main study design, stimuli and questionnaire.

The qualitative interviews were conducted with 10 people from the author's personal networks, family, friends and other acquaintances, aged from 19 to 39 years where the majority were students without any expert knowledge about sustainability or green marketing. These qualitative interviews were conducted with the participants between March 20th and March 25th, 2022.

4.2. Results

The first question the respondents were asked was what they associate the word greenwashing scandal and/or green corporate misconduct with, where some of the responses mostly talked about false marketing and companies not being truthful and lying about their green efforts, in order to seem better than they actually are while the rest of the interviewees had the immediate association of well-known companies such as H&M and Volkswagen and the scandals they were involved in throughout the past such as child labor and making claims about products being green and eco-friendly when they actually were not. One of the respondents answered "I immediately think of an unsustainable company trying to portray

itself as sustainable just because of the huge consumer movement towards sustainability and I usually think of the non-renewable energy industry or fashion”. Another participant stated: “I associate it with a lot of negative PR, which culminates in an apology from the company admitting their wrongdoing.”, which summarizes most of the other interviewees' responses.

Furthermore, when talking about their associations upon hearing the word greenwashing scandal within the fashion industry, most of the participants without hesitation started talking about H&M and how it is trying to present itself as a company prioritizing sustainability, recyclability and environment when that is actually not the case. The other participants talked in more general terms about large companies negatively affecting the environment through for instance hidden pollution, toxic waste and wrong waste disposal through their production processes, while one of them even mentioned how loose the regulations and guidelines for protecting the environment are.

Participants were also asked to give examples of some greenwashing scandals within the fashion industry that they could think of. For this question, the interviewees gave real-life examples of companies lying about products being sustainable and recyclable, including H&M making claims about giving away clothes to charity when they were actually burnt, as well as, claiming that they were selling a more sustainable clothing line under the name “Conscious”, when that was not the case and they were even more harmful to the environment than the regular collection. Another example brought up by the participants, was bad working conditions and child labor applied by H&M and Zara in the past. Most of the participants said that this kind of behavior did affect them in a way where it made them feel sad and a bit guilty for shopping there which kept them away from the brand for a while and reduced their purchases from the brand to a minimum. However, they also mentioned that they still continued to purchase there after some time, especially when these companies committed to making things better and correcting their misconduct.

Moreover, when asked if and how their attitude towards a specific brand would be affected by a misconduct depending on the relationship they have with it, the overall answer was that it would depend on the size and type of the misconduct and what it is related to. Two participants mentioned how a misconduct, despite the fact that it would affect their perception of the brand, their attitude towards it might not change drastically. They explained that they might be less prone to purchase from it but they would still perhaps buy from them, where

one of them mentioned convenience as a factor. However, the rest of the participants emphasize that the misconduct would hurt their relationship with the brand in question and even possibly lead to them not engaging with the brand in the future and not purchasing from them anymore.

Additionally, seven of the participants had a hard time coming up with specific words that could potentially trigger suspicion about a situation being a misconduct but they did mention that they are suspicious when companies try “too much” and make too big claims such as 100%, “we are the best in the world” or “unmatched” while also using the word sustainability all the time instead of words such as “small part of the change”, “contributing”, “going in the right direction” and “small step”. Three participants however mentioned how they would usually look for unbelievable statistics or claims that could not be backed up by any proof or based on the company’s own numbers and cannot be benchmarked against anything else.

Regarding the question of whether participants see themselves as skeptical when it comes to companies’ marketing efforts in general, the overall response was that they are quite skeptical in general but can trust some claims that come from companies that they are familiar with and have more trust in. They also emphasized that they have more trust in companies’ claims if they themselves manage to estimate a high level of honesty in them but that they get more skeptical after each scandal that happens and the high frequency of them happening, connected to some of the previous marketed claims by companies. Other participants even mentioned that the level of their skepticism towards a green ad can depend on what company it is, their reputation as well as how they view the brand and if it is a low-priced brand or not.

On a scale from 1-10, most of the participants claimed to care about sustainability where their average level lay around 7 to 8 on the scale. However, some of the participants disclosed that despite the fact that their attitude towards sustainability is high, they often only act sustainably when it is convenient or if they can afford it due to price sensitivity. Furthermore, they claim that this would overall affect their attitude towards the company and brand that chose to engage in a greenwashing scandal but they would still buy from the company if they did not have any other options or if it was convenient. They also comment on the fact that a person that is more concerned with sustainability would probably have a stronger reaction and be more affected.

Finally, the answers to the question of how willing the participants would be to forgive a company after a misconduct varied, most of the participants reported that they would consider forgiving the company if they would acknowledge their mistake and try to fix the problem right away by making large investments into the solution as well as make sure that the same problem never happens again. However, they claim that more proof of these efforts would be needed in that case from the company in question. However, other participants disclosed that they would not be willing to forgive the company and would even be very skeptical of their efforts to make things better, while they also emphasize that their willingness would depend on the level and effects of the misconduct as well as the likelihood of the same thing happening again in the future. Furthermore, when asked whether this level of willingness would be affected by their relationship with the brand in question, almost all of the interviewees answered yes. According to them, they would be more upset with the brand that they have a strong relationship with if it chose to engage in misconduct behavior. Although, one of the participants claimed that it would not and that its willingness to forgive would be more affected by the efforts undertaken after a misconduct regardless of the relationship with the brand.

4.3. Discussion

The overall conclusion from the conducted interviews is that when hearing the word misconduct or greenwashing most participants think directly of H&M within the fashion industry and its previous scandals, mentioning both child labor-related misconduct as well as environment-related misconduct. Based on this, it was decided that H&M would be used as the company within the fashion industry to create study's stimuli and complete the research, instead of using a fictional company. As previously mentioned, these insights were the baseline for the design of the stimuli as well as the questionnaire. For instance, some of the words that were used by the interviewees during the interview sessions when explaining their experiences and perceptions and that caught our attention were "small part", "small step", "contributing", "going in the right direction" as well as "we are the best in the world", "unmatched efforts" and "collected clothes". These were then slightly adapted and integrated into the creation of the study's stimuli, i.e. the three marketing efforts used (See *Appendix 2*), which will be further explained below. As interviewees mentioned several times their attitude towards the brand in times of greenwashing and gave several examples, the brand attitude was chosen as one of the dependent variables of the study. Moreover, interviewees talked

about having a negative brand attitude as a result of a greenwashing scandal but still continuing to purchase from the brand because of convenience and low price, which is why purchase intention was seen as something that could be impacted in a different way compared to brand attitude and was thus included in the study as the other dependent variable. This also meant that there could be an inconsistency between customers' pro-environmental attitudes and green purchase behavior, which is in accordance with parts of our literature review on purchase intention. Furthermore, interviewees expressed that they are usually skeptical when it comes to marketing efforts by companies and that absurd claims that cannot be backed up are often what makes them believe that they are being misled. This was an interesting insight and was seen as a potential impactful factor when testing the marketing efforts' effects in the context of a greenwashing scandal, which is why it was included as one of the moderators of the main study, i.e. customer's skepticism towards green marketing. One interesting finding was also that the interviewees had different levels of environmental concern, where some claimed to care more for the environment and some less. This was thus also included as one of the study's moderators, with a potential impact on the study's results.

5. Pre-test Study - Step 2

5.1. Methodology

The second step of the study consisted of testing the designed study's stimuli that were created with the help of the aforementioned consumer insights in a pre-test questionnaire, in order to ensure that they were perceived as intended and could be included in the main study. The designed stimuli consisted of three marketing efforts as well as a news article revealing a greenwashing scandal that was used as the context of the study.

5.1.1. Stimuli design

The first three stimuli used as the study's treatments consisted of three marketing efforts, two of which painted a bragging green marketing communication and a humble green marketing communication, respectively. The third marketing effort that was used as a control treatment was presented as a regular (non-green) marketing effort aiming to communicate information about the H&M's newsletter and spring collection, with no connections to green marketing. The treatments were created with the H&M brand colors in mind and were fictional but inspired by other, real-life green marketing efforts presented by the H&M brand. These three green marketing efforts tested in the pre-test can be seen below.

Stimuli - Green Marketing efforts:

Stimuli 1: Treatment - Group 1



Don't let fashion go to waste!

Our Garment Collecting Program is the biggest in the world. Our efforts to collect garments are unmatched and we contribute a large part to a more sustainable fashion industry.

We collected over 62.300 tons of unwanted clothes and textiles in 2021 alone.



Stimuli 2: Treatment - Group 2



Be part of the change!

With our Garment Collecting Program, we aim to contribute a small part to a more sustainable fashion industry.

This is only a small step in the right direction. We collect garments to prolong the product lifecycle.



Stimuli 3: Control group - Group 3



The spring collection is finally here!

Sign up for our newsletter to stay updated.

By signing up for our newsletter you will get to learn more about our products.



Furthermore, the article that the participants were presented with, portrayed a fictional scandal but was inspired by a real-life greenwashing scandal involving the H&M brand. The article depicted a greenwashing scandal where it was revealed that the claims made by the H&M brand regarding their green initiative “Garment Collecting program” actually weren’t true as they did not do what was promised, i.e. to reuse, resell or recycle the unwanted clothes, and instead the majority of the gathered clothes ended up being burned. The news article that was used as the context of the study can be found in *Appendix 3*.

5.1.2. Pre-test - Survey design

For the pre-test study, a within-subjects design was implemented where each individual participant was exposed to all three stimuli (i.e. treatments) previously presented, in a quantitative questionnaire. All three marketing campaigns were compared where one was supposed to be seen as “Bragging green marketing”, the second as “Humble/Soft green marketing” and the third as non-green without any correlation to sustainability. These advertisements were also displayed in a random manner in order to avoid order bias. Each participant was also exposed to the news article that intended to portray and reveal a greenwashing scandal involving H&M and was tested to ensure that participants recognized the manipulation as a realistic greenwashing scandal. The pre-test was in that way used as an internal validity check to make sure that the participants perceived the stimuli as intended, in order to avoid receiving misleading or insignificant results in the main study. (For the pre-test questionnaire, see *Appendix 5*)

The measures implemented in the pre-test were based on the Likert 7-point scale, used in many quantitative studies (Likert, 1932). The answer options that participants of the pre-test questionnaire were presented with were labeled from numbers 1 - 7, where only the endpoints were labeled.

Participants were first presented with a short introduction in the survey, after which they were exposed to the above explained marketing effort stimuli, one at a time. After seeing each of the stimuli, participants were asked the following questions that sought to test their perceptions of the stimuli: “After seeing the advertisement, how do you perceive the ad message/the firm’s communication? I perceive it as: (Endpoints: 1 = Not humble at all; 7 = Very humble)”; “I perceive it as: (Endpoints: 1 = Not bragging at all; 7 = Very bragging)”; “I

perceive it as: (Endpoints: 1 = Very humble; 7 = Very bragging)”. Thereafter, each participant was presented with the previously mentioned news article and was then asked the following questions about their perceptions of it: “After reading the newspaper article, to what extent do you perceive the actions described in the article as a greenwashing scandal? (Endpoints: 1 = Not a greenwashing scandal at all; 7 = Clearly a greenwashing scandal)”; “To what extent do you agree with the following statements: I would say that the newspaper article I just saw can be classified as a corporate misconduct involving the H&M brand (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I perceive the situation presented in the newspaper article I just saw to be a corporate fraud committed by H&M (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “How realistic do you perceive the newspaper article to be? (Endpoints: 1 = Very unrealistic; 7 = Very realistic)”. At the end of the questionnaire, the participants were asked about their demographics, such as their gender, age and country of residence. Additionally, throughout the pre-test questionnaire, three manipulation questions were used in order to ensure that participants were paying attention which was the same manipulation check that was later on used in the main study survey and will be explained in detail later on in the Main study section.

5.1.3. Sampling and Data collection

The pre-test survey was created in Qualtrics and distributed to the participants only on SurveyCircle between April 12th and April 16th, 2022. It was completed by 52 respondents in total. After removing the participants that failed to follow the instructions and answer the manipulation check questions correctly, 35 valid responses remained and were used for the analysis. Out of the remaining respondents, 77.1% were females (N = 27), 20.0% were males (N = 7) and 2.9% were others (N = 1). The age of the respondents ranged between 20 and 36 years where the mean age was 24 (SD = 3.48). The majority of the respondents were students (80%, N = 28), while the rest were employed (20%, N = 7). When it comes to the country of residence of the pre-test participants, most of the participants marked that their residence was outside of Sweden (80%, N = 28), amongst other countries the United Kingdom, Tunisia, Portugal, Italy, Canada, Hong Kong, USA and Poland. The rest of the participants marked that their residence was in Sweden (20%, N = 7).

5.2. Results

The results from the pre-test indicate that participants viewed the bragging marketing effort they were presented with as relatively bragging across the three perception questions (see appendix) asked ($M_1 = 3.03$, $SD_1 = 1.20$; $M = 4.51$, $SD_2 = 1.54$; $M_3 = 4.60$; $SD_3 = 1.38$). Regarding the second marketing effort, i.e. the humble advertisement, participants' perceptions of it that were revealed in the results implied that they perceived it as relatively humble ($M_1 = 5.14$, $SD_1 = 1.35$; $M_2 = 2.66$, $SD_2 = 1.39$; $M_3 = 2.74$, $SD_3 = 1.29$). Finally, the third, non-green advertisement that participants were exposed to, which was the control group, was according to the results viewed as non-green by the participants, meaning that they did not see it as either bragging or humble ($M_1 = 4.31$, $SD_1 = 1.39$; $M_2 = 2.63$, $SD_2 = 1.37$; $M_3 = 3.11$, $SD_3 = 1.23$).

Table 1: Participants' perceptions of respective green marketing communication style

Perception of the bragging ad		Perception of the humble ad		Perception of the non-green ad		Scale - Minimum and maximum
M	SD	M	SD	M	SD	
3.03	1.20	5.14	1.35	4.31	1.39	1 - Not humble at all; 7 - Very humble
4.51	1.54	2.66	1.39	2.63	1.37	1 - Not bragging at all; 7 - Very bragging
4.60	1.38	2.74	1.29	3.11	1.23	1 - Very humble; 7 - Very bragging

The next step was to determine if there were any significant differences between the means of how participants viewed the bragging, humble and non-green advertisements and if they perceived them as such. The results from a repeated-measures ANOVA determined that the mean perception of the level of braggingness differed across the three groups ($F(2, 68) = 20.45$, $p = <0.001$). A post hoc pairwise comparison showed that there was a significant difference between the perception of the bragging and the humble ad ($p = <0.001$) as well as between the bragging and the non-green ad ($p = <0.001$). However, there was no significant difference in the way participants viewed the humble and non-green (control) ad with a significance of $p = 0.181$.

With regards to the news article involving a greenwashing scandal committed by H&M, the participants' perceptions of the actions described in it indicate that they clearly perceived it as

a greenwashing scandal involving H&M where the mean across all three questions was above the median ($M_1 = 6.09$, $SD_1 = 1.24$; $M_2 = 5.94$, $SD_2 = 1.08$; $M_3 = 5.63$, $SD_3 = 1.28$), meaning that it had fulfilled what it intended where the average mean across all three questions was closer to 7 ($M_{\text{Average}} = 5.89$, $SD_{\text{Average}} = 1.07$). Moreover, when it comes to the question of how realistic the participants perceived the news article to be, the results implied that they perceived it as quite realistic ($M_{\text{News-article}} = 5.23$, $SD_{\text{News-article}} = 1.19$), as intended.

Table 2: Participants' perception of the news article revealing the greenwashing scandal

Perception of the greenwashing (M)	Perception of the greenwashing (SD)	Scale - Minimum and maximum
6.09	1.24	1 - Not a greenwashing scandal at all; 7 - Clearly a greenwashing scandal
5.94	1.08	1 - Not a greenwashing scandal at all; 7 - Clearly a greenwashing scandal
5.63	1.28	1 - Not a greenwashing scandal at all; 7 - Clearly a greenwashing scandal
5.23	1.19	1 - Very unrealistic; 7 - Very realistic

5.3. Discussion

The pre-test survey revealed that the same participant viewed the three different advertisement messages they were presented with differently where they rated the bragging, humble and non-green (control) one as such, meaning that the stimuli fulfilled what they intended to and could be used for the main survey without checking for their intended effects. Additionally, it was shown in the pre-test results that the participants perceived the created news article revealing the greenwashing scandal and the actions described in it as realistic to the high extent, as intended and the article could thus be used in the main questionnaire as the context of the study.

6. Main Study - Step 3

6.1. Methodology

For the third and final stage of the study, a quantitative questionnaire was used similarly as in the pre-test, to gather data from the participants about the dependent and independent variables, the relationship between them as well as the data for the moderating effects tested in the study. (For the main study questionnaire, see *Appendix 6*) The methods used in the main study will be further explained below.

6.1.1. Study design

In order to answer the research question by testing the constructed hypotheses, the experimental research approach has been applied as the aim of the study was to measure the causal effects of three manipulated independent variables (the three different marketing efforts) on the two different dependent variables, brand attitude and purchase intention, in the context of a greenwashing scandal where two moderating effects of environmental concern and green-ad skepticism were considered. There are several critiques with using experimental approaches such as that the way in which the cause variable is translated into a specific treatment by experimenters may result in an artificial situation that is different from the situation outside of the experimental situation, i.e. different from the reality (Söderlund, 2018, p. 179-180). However, this is an approach that has been common and proven useful in among other areas, social psychology research throughout the past, while also being an effective method used to reduce methodological uncertainty surrounding the causal relationships between variables (Haslam & McGarty, 2001). Thus, experiments are good for studying casual claims such as the ones in this study, because they are able to address the conditions for causality relatively well (Söderlund, 2018, p. 15). Furthermore, it is even claimed that experiments are unexcelled in their ability to provide unambiguous evidence about causation (Aronson et al., 1985, p.443). Therefore, using experiment in this study and the quantitative method to quantify relationships between the dependent and independent variables, was seen as beneficial. Furthermore, the experiment used in the study was designed as a text-based and imagery-based role-playing experiment where the participant was assigned a role of an H&M customer in the survey and was situated in a situation of seeing one of the three marketing efforts (i.e. treatments) and a greenwashing scandal after which its reactions were measured (Söderlund, 2018, p. 81). Although criticized for making it difficult to achieve the same strength in the treatments compared to an event in reality, this experiment

type is simple and cheap compared to the other types and was thus most suitable for this study design (Söderlund, 2018, p. 82).

Through the application of the aforementioned experimental approach and between-subjects design, each individual participant was randomly allocated to one of the three groups which received different treatments (i.e. stimuli), in order to enable inferences about causation (Söderlund, 2018, p. 43). The allocation of participants to the three groups was randomized, meaning that the probability of each participant ending up in any of the groups of the experiment was the same for everyone which enabled the individual differences to be spread out between the groups so that they would cancel each other out (Söderlund, 2018, p. 34). The participating individuals were anonymous. Furthermore, this applied marketing experiment had a single-factor design as it consisted of one cause variable (Söderlund, 2018, p. 45-46). The factor in the study was the treatment, i.e. the stimuli which was the marketing effort that consisted of two different levels, the bragging green marketing and the humble green marketing as well as one control group, the non-green marketing effort. The two levels of the causal factor and the control group, with three separate groups of participants for each level as well as for the control group, were included to enable more precision with regard to the results of the study's treatment (Söderlund, 2018, p. 45).

6.1.2. Main study - Survey design

The survey used in the main stage of the study consisted of mainly interval multiple-choice questions on a 1-7 scale. The survey was structured through question blocks and was constructed with the following four parts: introduction, pre-scandal questions, treatment and reveal of the greenwashing scandal, and post-scandal questions. The language used in the survey was English, to enable the possibility of broader participation. (See *Appendix 6* for the whole survey)

Participants were first presented with a short introduction in the survey, explaining what the purpose of the survey was, after which they were asked a number of questions about their attitude towards the H&M brand as well as their purchase intention which were the dependent variables of the study. In the following part, each participant was randomly exposed to one of the stimuli, i.e. one of the two treatments or the control treatment, created and tested previously in the pre-test. (See *Appendix 2*) These treatments that depicted the independent variables of the study consisted of three marketing efforts previously explained, two of which

painted a bragging green marketing communication (Stimuli 1 - Treatment Group 1) and humble green marketing communication (Stimuli 2 - Treatment Group 2), respectively. The third marketing effort that was used as a control treatment (Stimuli 3 - Control Group 3) was presented as a regular non-green marketing effort aiming to communicate information about the H&M's newsletter and spring collection.

Thereafter, all participants were presented with the previously tested fictional article revealing a greenwashing scandal involving the H&M brand. (See *Appendix 3*) Lastly, participants were presented with the rest of the block questions, measuring the moderators of the study, control variables as well as participants' demographics and consumer behavior. These as well as all the other measures used in the questionnaire will be explained below.

6.1.3. Measures

In order to obtain a higher measurement-based aspect of validity, i.e. ensure that measurements used in fact measured what they were intended to, questions used in the main survey were based on and adapted from measures applied in previous research and theories (Söderlund, 2018, p.136). These were used to measure the dependent variables, the moderators and the control variables, where several similar questions testing the same reaction were used in the measures, and combined into indexes measuring all the different variables. The indexes were created in case of the Cronbach's Alpha value being above 0.70 for the chosen variables. This was done to ensure higher reliability of the measures used in the study (Söderlund, 2018, p. 135). A summary of the items and measures used in the main study survey can be found in the measure summary table in *Appendix 4*.

Dependent variables

The dependent variables were measured using the Likert 7-point scale, commonly applied in many quantitative studies (Likert, 1932). The answer options that participants of the survey were presented with were labeled from numbers 1 - 7, where only the endpoints were labeled with for instance 1 = Strongly disagree and 7 = Strongly agree.

Brand Attitude

The questions used for measuring brand attitude in the questionnaire were based on the previous research conducted by Park et al. (2010), that aimed to differentiate brand attitude from brand attachment. The following three questions, all measuring brand attitude, were

used: “How do you view H&M? (Endpoints: 1 = Bad; 7 = Good)”; “How do you view H&M? (Endpoints: 1 = Negative; 7 = Positive)”; “To what extent do you like H&M? (Endpoints: 1 = Dislike it; 7 = Like it)”. This was done in order to ensure validity and reliability and ensure that the measure used actually measured brand attitude towards the chosen company. The brand attitude was measured with the same block consisting of the above explained questions both before the presentation of the marketing effort and misconduct (pre-misconduct) as well as after (post-misconduct) in order to be able to test the hypothesized effect of changing brand attitude as a result of the misconduct and company’s choice of marketing. An index was created for both the pre-scandal and post-scandal brand attitude scales, where Cronbach’s Alpha for the pre-scandal attitude was 0.929 and for the post-scandal attitude 0.958. After creating these two indexes, a difference variable was created with these two indexes for the difference in the brand attitude pre-scandal and brand attitude post-scandal (i.e. a difference variable $Brand\ attitude_{post} - Brand\ attitude_{pre}$) which was then used as one of the dependent variables when conducting tests.

Purchase Intention

The questions used for measuring purchase intention in the questionnaire were based on the questions constructed by Lii Y.S. and Lee M. (2012), that aimed to measure the efficacy of CSR initiatives through brand attitude on consumer behaviors such as purchase intention, and on the questions developed by Schivinski, B. and Dabrowski, D. (2014) that aimed to measure the impact of firm-created and user-generated social media communication on amongst other things purchase intention in their research. The following four questions were then included to measure purchase intention: “I intend to purchase apparel from the H&M brand in the future: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I would consider buying the H&M brand next time when I need apparel items: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I will try to buy apparel items from the H&M company: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I would prefer purchasing apparel from H&M rather than any other brand available: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”. The purchase intention was measured with the same block consisting of the above explained questions both before the presentation of the marketing effort and misconduct (pre-misconduct) as well as after (post-misconduct), in order to be able to test the hypothesized effect of changing purchase intention as a result of the misconduct and company’s choice of marketing. An index was created for both the

pre-scandal and post-scandal purchase intention scales, where Cronbach's Alpha for the pre-scandal purchase intention was 0.914 and for the post-scandal purchase intention 0.848. After creating these two indexes, a difference variable was created with these two indexes for the difference in the purchase intention post-scandal and purchase intention pre-scandal (i.e. a difference variable $Purchase\ intention_{post} - Purchase\ intention_{pre}$) which was then used as one of the dependent variables when conducting tests.

Moderating variables

The moderators used in the study were tested through three blocks of questions, containing a mixture of questions testing the intended moderators' effects. Even here, variables were measured using the Likert 7-point scale.

The Level of Environmental Concern

The variables used to measure the levels of participants' environmental concern/attitude toward sustainability in the questionnaire were based on the questions established by Leonidou et al. (2017), in their study aimed to find the causes and consequences of green-ad skepticism. The questions in the questionnaire were then formulated as statements regarding environmental concern where participants were supposed to mark how much they agree/disagree with them, they looked as follows: "I am concerned about environmental issues: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)"; "I think too little attention is given to environmental issues: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)"; "I think that environmental issues are important: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)"; "To what extent do you dislike/like the idea of environmental protection: (Endpoints: 1 = I dislike it; 7 = I like it)". An index was created for the environmental concern scales, where Cronbach's Alpha for the scale was 0.866. The level of environmental concern was used as one of the moderating variables and was divided into two groups when conducting tests, consisting of two levels: low environmental concern ($M < 3.5$) and high environmental concern ($M > 3.5$).

Overall Skepticism Towards Green Marketing (i.e. Green-ad Skepticism)

Respondents' overall skepticism towards green marketing, which was one of the moderators tested, was measured through a mix of questions based on different researches. The questions were formulated as statements testing the level of participants' green-ad skepticism by seeing

how much they agreed/disagreed with the statements. The first part of the question block, consisting of four statements, was based on the research conducted by Soh et al. (2009), that aimed to develop a reliable and valid measure of the trust-in-advertising construct. The statements were expressed as follows: “Information conveyed in brands’ green advertising is credible: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)””; “Information conveyed in brands’ green advertising is reliable: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)””; “I believe my trust is decreasing towards products and companies that are labeling their green efforts: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)””; “How skeptical are you to green claims made by companies: (Endpoints: 1 = Not skeptical at all; 7 = Very skeptical)”. The second part of the question block contained statements that have been adapted from a previous study by Leonidou et al. (2017), that through their study aimed to further explain the sources and consequences of green-ad skepticism. These statements were formulated as follows: “Most companies mislead with words about the environmental features of their offerings: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)””; “Most companies provide vague or seemingly un-provable environmental claims for their offering: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)””; “Most companies overstate or exaggerate the environmental features of their offerings: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”. Some of the variables were re-coded for the purpose of all variables testing the overall green marketing skepticism going in the same direction. An index was then created for these scales, where Cronbach’s Alpha for the scale was 0.816. The level of overall skepticism towards green marketing was used as the other moderating variable and was divided into two groups when conducting tests, consisting of two levels: low level of green-ad skepticism ($M < 3.5$) and high level of green-ad skepticism ($M > 3.5$).

Control variables

The control variables that were included in the survey were measured by using the Likert 7-point scale, as in the previously explained measures.

Level of Shopping Engagement

The block of questions that followed in the survey aimed to measure participants’ level of shopping engagement/involvement, where the statements used were based on a previous study by Haas & Kenning (2014) that aimed to test utilitarian and hedonic motivations that affect shoppers’ decision to consult with salespeople. The question block tested the hedonic shopping behavior and customer engagement, and was built using the following statements:

“Going shopping is truly a joy: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I enjoy going shopping for its own sake, not just for the items I may purchase: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I go shopping not because I have to, but because I want to: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”. An index was created for the scales testing the shopping engagement, where Cronbach’s Alpha for the scale was 0.861. The variable measuring the level of shopping engagement was used as one of the two control variables and was divided into two groups when conducting tests, consisting of two levels: low level of shopping engagement ($M < 3.5$) and high level of shopping engagement ($M > 3.5$), where the low level on the scale was seen as showing utilitarian (less engaged) shopping involvement and the high level as more hedonic (more engaged). The shopping engagement was seen as a potential factor that could impact the relationships between the independent and dependent variables, i.e. the brand attitude and purchase intention and the marketing efforts. This was tested as the different levels of consumers’ shopping engagement (hedonic - more engaged vs. utilitarian - less engaged) affect the effort spent by a consumer on evaluating products, processing marketing advertising and brands overall (Krugman, 1965; Mueling et al., 1993). The level of involvement could depend on the degree to which the consumer views clothing in this case, as being important and meaningful for him/her (O’Cass, 2000; Kim, 2005). This could mean that for instance a hedonic consumer that is more actively engaged and willing to spend more time and effort in its shopping journey may be affected more by the effects of the treatments used in this study (i.e. the marketing efforts) and be more aware and affected while also paying more attention to the greenwashing scandal presented, compared to a more passively engaged utilitarian consumer that doesn’t spend as much time on evaluation processing and who’s brand attitude and purchase intention thus wouldn’t be affected to the same degree. This is why it was seen as important to control for this variable and explains the reason behind the decision to include it in the study, to see whether it would show any effects on the results.

Likelihood To Forgive

After measuring participants’ brand attitude and purchase intention after the greenwashing scandal occurred, the participants’ likelihood to forgive the H&M brand after the greenwashing scandal was measured as one of the control variables. This was measured through three statements that were adapted from the previous research by Boyle et al. (2015), that focused on developing measures of forgiveness. The developed statements in the questionnaire that were supposed to be answered with the presented greenwashing scandal in

mind, looked as follows: “Even though H&M’s actions hurt me, I still have goodwill for it: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “Despite what H&M did, I want us to have a positive relationship again: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”; “I forgive H&M for what it did: (Endpoints: 1 = Strongly disagree; 7 = Strongly agree)”. An index was created for the variable measuring forgiveness with the above questions, where Cronbach’s Alpha for the scale was 0.829. This control variable was included as a result of interesting consumer insights where the responses regarding the willingness to forgive the H&M brand varied. Thus, it was interesting to include this variable in order to see if consumers would be willing to forgive the brand in question and to what extent after a greenwashing scandal and also analyze if the ones that are more likely to forgive will show a weaker negative effect on the difference in brand attitude and purchase intention (post-pre the greenwashing scandal). According to literature, consumers are more forgiving when they have a strong relationship with the transgression brand even if the brand is at fault (Jayati & Fang, 2016), which is why the brand attitude and purchase intention of those that are more forgiving will not be as negatively affected as they have a stronger relationship with the brand. These interesting insights and possible effects were the reason for including the level of forgiveness as one of the control variables and testing it to see if this could have any interesting impact on the dependent variables and their relationship with the independent variables (i.e. the marketing efforts).

Demographics

At the end of the questionnaire, respondents were asked about their gender, age, country of residence and current occupation in life. These were then used to create segments (i.e. clusters) and to make sure that these individual differences did not substantially affect the study's findings. All of these questions were formed as multiple-choice questions. Gender, country of residence and current occupation in life were formed as nominal multiple-choice questions, as follows: “Gender: (Answer options provided: Male; Female; Other)”; “Country of residence: (Answer options provided: Sweden; Outside of Sweden: ____)”; “Current occupation in life: (Answer options provided: Student; Employed; Retired; Unemployed; Other)”. Finally, age was assessed as an open-ended ratio question: “Age (e.g. 22): ____”.

Respondents were also asked about their brand involvement with H&M when it comes to average spending at H&M. The question testing this was in the form of an ordinal multiple-choice question and was formulated as follows: “How much do you spend on

average when shopping at H&M? (Answer options provided: < 300 SEK; 300 SEK to 600 SEK; 601 SEK to 1000 SEK; 1001 SEK to 2000 SEK; > 2000 SEK)". This was amongst other demographic questions used to test the significant differences within the three marketing communication groups (Group1, Group 2 and the control group - Group 3).

Checks

Rather early in the questionnaire, after the survey's introduction, an instructional manipulation check question was presented to the participants. This question consisted of firstly a longer text about sustainability, after which the following instructions were given to the respondents: "Now, please select the option Other below and type the word "dog" in the blank box. (Answer options provided: Technology; Sustainability; Economics; Astrology; Other)". This manipulation check is well-known as instructional manipulation check and is commonly used in studies, especially the ones where participants come from different countries and may have an incentive to finish the survey quickly without paying attention. The instructional manipulation question of this kind was included for the purpose of ensuring that the participants understood what they were subjected to and were attentive to the survey and the instructions that they were presented with (Söderlund, 2018, p. 96-97).

An attention check question was included in the middle of the questionnaire, where participants were asked to answer the following question: "What is $9 + 4$ equal to ? (Answer options provided: 12; 65; 13; 27)". This in order to ensure that the participants were still attentive to the questions throughout the survey and not just randomly answering without thoroughly reading and understanding the questions stated. The question was in that way used as a means to filter out careless participants as they otherwise challenge the validity of the results and could lead to misleading findings (Bowling et al., 2016). The above stated math equation in the quantitative questionnaire is an attention check method often recommended by many researchers (e.g. Berinsky, Margolis & Sances, 2014), to avoid careless responses.

In the end of the questionnaire, as participants were near to completing the survey, two additional control check questions were included. Including additional manipulation check question(s) in the end, is a commonly used method to ensure participants' attentiveness once again and avoid the results being inconclusive and meaningless (Cambell and Stanley, 1963; Söderlund, 2018, p. 96) The questions presented to the participants were the following: "What was this survey about? (Answer options provided: Transport industry; Finance

industry; Fashion industry)”; “What was this survey about? (Answer options provided: ZARA; H&M; MONKI; UNIQLO)”.

The participants that have not completed the whole survey or that have failed to follow the instructions and thus did not answer correctly to the above explained manipulation check questions throughout the survey, were excluded from the analysis as their responses were seen as meaningless for drawing significant conclusions.

6.2. Sampling and Data Collection

The gathered responses from the participants in the main study were intended to depict a sample of a bigger population of people, representing part of the whole population. Despite the most optimal alternative of including the whole population’s responses in the study, due to limited time, resources and population size, non-probability sampling was applied by using units from the population which has to be considered as using a smaller-sized sample in this manner may lead to misleading conclusions that can not be generalized to the entire population (Eliasson, 2018, p. 47).

The main survey was created in Qualtrics and was distributed to the participants between April 18th and April 27th, 2022. Furthermore, the data was gathered through convenience non-probability sampling as the survey was distributed through convenient sources (Eliasson, 2018, p.47). The respondents were gathered by using authors’ personal networks and social media channels (e.g. Facebook, Instagram and LinkedIn), as well as by using the survey platform “SurveyCircle” which enables users to promote their surveys for academic or commercial purposes. Additionally, the survey was distributed to several participants physically through a QR code, mainly in one specific location in Stockholm, the KTH university. Despite the fact that the research studies the effects of green marketing on consumers in the case of a greenwashing scandal, no specific target group was specified for the study and survey responses.

The survey was completed by 320 respondents in total. After removing the participants that failed to follow the instructions and answer the manipulation check questions correctly, 213 valid responses remained and were used for the analysis. Out of the remaining respondents, 60.1% were females (N = 128), 38.5% were males (N = 82) and 1.4% were others (N = 3).

The age of the respondents ranged between 18 and 64 years where the mean age was 26 (SD = 7.5). The majority of the respondents were students (72.8%, N = 155), while the rest were employed (23%, N = 49) or retired, unemployed and others (4.2%, N = 9). When it comes to the country of residence of the pre-test participants, the majority of the participants marked that their residence was in Sweden (56.8%, N = 121). The rest of the participants marked that their residents was outside of Sweden (43.2 %, N = 92), amongst other countries in the United Kingdom (N = 15), US (N = 7), Italy (N = 7), Germany (N = 6), Egypt (N = 5), Serbia (N = 4) and France (N = 4).

6.3. Assessment of Validity and Reliability

6.3.1. Validity

One of the crucial aspects to consider in a study is its validity, where the results of the tests carried out should not be the final verdict regarding the causality in the experiment. Instead, results in this study were assessed based on other criteria defined as internal and external validity as well, in order to ensure the validity of the results (Söderlund, 2018, p. 171).

Internal Validity

Internal validity refers to the extent to which the treatment explains participants' reactions in the experiment and is essentially concerned with causality (Söderlund, 2018, p. 172). In order to test the internal validity, significance tests were used in the study, which is a method recommended by Campbell (1986). But validity can also be threatened by other factors than the statistical inference and the treatment, that may affect the results and have to be considered. One such threatening factor that may be relevant for the study is history, i.e. events other than the treatment which may affect participants' reactions. Additional threats when it comes to internal validity that may affect the results of this study, can include participant defection (mortality) or selection effects, which refers to the participants in different groups being different already from the outset (i.e. before they receive a particular treatment) (Söderlund, 2018, p. 173). These were mitigated by designing the study in a way that the participants from the pre-test would not be included in the main study as well as by using randomization when it comes to allocation of the participants to the treatment groups. Furthermore, to ensure that there were no systematic and significant differences between participants within the treatment groups, demographic variables (gender, age, country of residence, current occupation in life and average spending at H&M) were measured and

tested for systematic differences. This is an important factor to consider in experiments when it comes to internal validity as it can still occur despite the random allocation of the participants to the treatment groups (Söderlund, 2018, p. 37). All in all, internal validity was seen to be established according to the above requirements.

External Validity

Existence of internal validity is the first requirement for reaching high validity and as this was fulfilled by the study, meaning that there was something to generalize (Anderson & Bushman, 1997; Söderlund, 2018, p.174), external validity was considered as the next step. External validity concerns to what extent the results from the experiment may be assumed to be valid in other situations, if one for instance uses other versions of the treatment, other measurements of the effects or other people than the participants included in the experiment in question. This means that external validity addresses to what extent the results from the experiment are generalizable (Campbell, 1969; Cook & Campbell, 1976). In order to reach high external validity in the study, participants were only exposed to one of the treatments through random allocation as previously mentioned. Pre-measurements of brand attitude and purchase intention were included, as testing brand attitude and purchase intention before the treatment and after was the main part of the study. This has to be considered when it comes to external validity, as it may lead to the results being affected and being less generalizable to the situations without the pre-measurement (Söderlund, 2018, p. 174). Furthermore, treatments and situations created for the study represented artificial situations which might make it hard to generalize to real situations (Söderlund, 2018, p. 174). To mitigate this threat, it was made sure that the marketing efforts and the greenwashing scandal article used in the survey were inspired by real-life examples and real-life events. Also, the perceptions of these, such as the extent to which they were perceived as being realistic and presenting what they were intended to present, were tested through a pre-test study previously explained in order to increase the study's external validity further. All things considered, the results from this experimental study are considered to exhibit external validity, according to the above requirements. However, external validity is by some seen as something that can not even be obtained from the experiment in itself but rather through a comparison of the results of other studies (Liyanarachchi, 2007), which should further be considered when evaluating the validity of the experiments' results.

6.3.2. Reliability

The reliability is concerned with the extent to which the study's results are reliable, i.e. to what extent they can be trusted and how well the study is able to produce similar results if it was recreated (Jacobsen, 2017). Higher reliability in the study was ensured by using several variables to test the same reaction in the quantitative survey (Söderlund, 2018, p. 135). By using multi-item measures in this way, errors connected to psychological reactions that may occur when measuring reactions such as participant's brand attitude as in this study, are more likely to be avoided. Cronbach's alpha level of 0.7 or higher, which is a common reliability indicator, was then used to ensure that the indexes could be created from the multi-items used, indicating to what extent those observations were testing the same thing (Söderlund, 2018, p. 136; Rosengren & Dahlén, 2013). In order to further increase the reliability of the results, missing cases were excluded from the analysis as well as the participants that failed to answer correctly on the manipulation check questions throughout the survey.

6.4. Results

As previously reported the data consists of 213 participants, out of which 67 were subjected to the bragging green marketing treatment and were assigned to group number 1, 83 received the humble marketing treatment and were assigned to group number 2 and finally, 63 participants saw the non-green marketing effort and were assigned to group number 3, which is also the control group.

Table 3: Distribution of the respondents to the Treatment groups

Group	Conditions	N	%
1	Bragging green marketing (treatment group)	67	31.4
2	Humble green marketing (treatment group)	83	39.0
3	Non-green marketing (control group)	63	29.6
Total		213	100

There are several notions from critiques regarding the confirmation and rejection of a null hypothesis and its dependence on the sample size where it is noted that the more people included in the sample, the easier it is to obtain significant results (Bakan, 1966; Berk &

Brewer, 1978; Söderlund, 2018, p. 161). Considering this and the relatively small size of the sample used in the study ($N = 213$), the decided significance p-value used for testing significance levels was 0.05 (i.e. $p \leq 5$). Furthermore, 0.05 is the most commonly used level of significance in research practice (Söderlund, 2018, p.155-156).

To perform the tests for the hypotheses, the dependent variables used were the created index for the difference in brand attitude before the presented advertisement and after the greenwashing scandal, as well as the created index for the purchase intention prior to the advertisement seen and post greenwashing scandal. To test the effect of the moderators; environmental concern and green-ad skepticism, respective created indexes were also used.

Systematic Differences Within the Two Treatment Groups and the Control Group

To ensure that there were no significant differences within the three groups (i.e. bragging-, humble- and non-green control marketing effort), a Chi-Square test was employed. This was considered in order to ensure higher internal validity, as explained previously in the methodology-internal validity section 6.3.1. A Chi-Square Test of Independence was performed to assess the relationship between gender and the treatment groups. There was not a significant relationship between the two variables ($X^2(4, 213) = 5.15, p = 0.272$), i.e. no significant differences were found within the treatment groups as intended. The same Chi-Square Test of Independence was performed to assess the relationship between age and the treatment groups. Even here, no significant relationship was found in regards to age ($X^2(58, 213) = 59.28, p = 0.429$), i.e. no significant differences were found within the treatment groups. Accordingly, there were no significant differences within the groups in regards to the demographics variable country of residence, Sweden or Outside of Sweden ($X^2(2, 213) = 0.97, p = 0.615$), countries of residence only outside of Sweden ($X^2(68, 213) = 63.25, p = 0.640$), and current occupation in life ($X^2(8, 213) = 5.02, p = 0.76$). The same Chi-Square Test of Independence was performed to assess the relationship between the variable average spending at H&M and the treatment groups and showed no significant relationship between the two variables ($X^2(8, 213) = 11.81, p = 0.16$).

Table 4: Systematic differences within the two treatment groups and within the control group

Variable	χ^2	df	p
Gender	5.15	4	0.272
Age	59.28	58	0.429
Country of residence (Sweden or Outside of Sweden)	0.97	2	0.615
Countries of residence only outside of Sweden	63.25	68	0.640
Current occupation in life	5.02	8	0.76
Average spendings at H&M	11.81	8	0.16
Total number of participants (N) 213			

Assessing the Impact of the Communication Style on Brand Attitude

Hypothesis 1a predicted that when the firm communicates their green efforts in a bragging compared to a more humble manner, this will have a stronger negative effect on brand attitude. Hence, a paired samples t-test was first conducted to determine if the effect of respective marketing effort on brand attitude within each group was significant. The results showed that there is a significant difference in brand attitude before and after ($M_{\text{Before}} = 4.30$, $SD_{\text{Before}} = 1.35$, $M_{\text{After}} = 3.02$, $SD_{\text{After}} = 1.65$, $t(66) = 7.14$, $p = <0.001$) for the first group presented with the bragging marketing effort. The second group that was subjected to the humble marketing effort, also reported significant differences in brand attitude before ($M_{\text{Before}} = 4.17$, $SD_{\text{Before}} = 1.43$, $M_{\text{After}} = 3.12$, $SD_{\text{After}} = 1.46$, $t(82) = 7.95$, $p = <0.001$). Finally, there was also a significant difference in brand attitude before and after ($M_{\text{Before}} = 4.14$, $SD_{\text{Before}} = 1.42$, $M_{\text{After}} = 3.02$, $SD_{\text{After}} = 1.43$, $t(62) = 6.87$, $p = <0.001$) for the third group that saw the non green marketing effort. These results indicate that there is a statistically significant difference in brand attitude before seeing the presented green communication and after the greenwashing scandal within each group where brand attitude got negatively affected after each respective marketing effort.

Table 5: Difference in Brand Attitude Before and After the Greenwashing Scandal for All Three Groups

Marketing strategy	Brand attitude before		Brand attitude after		p-value
	M	SD	M	SD	
Bragging green marketing	4.30	1.35	3.02	1.65	<0.001
Humble green marketing	4.17	1.43	3.12	1.46	<0.001
Non-green marketing	4.14	1.42	3.02	1.43	<0.001

Thereafter, to test whether there was a significant difference between the means in brand attitude before and after the greenwashing scandal depending on which marketing effort that has been presented, an independent two-samples t-test was performed to compare the difference in brand attitude between the bragging and humble group. The test revealed that there was no statistically significant difference in brand attitude difference between the bragging group ($M = -1.28$, $SD = 1.47$) and the humble group ($M = -1.05$, $SD = 1.20$, $t(126.97) = -1.04$, $p = 0.151$). This means that the bragging group did not report a significantly higher difference in brand attitude when presented with a more aggressive green communication message compared to the humble group. However, the test shows that the significance is in the right direction for our hypothesis.

Table 6: Impact of Marketing Communication Style on Brand Attitude Before and After Greenwashing Scandal

Greenwashing Scandal						
	Marketing effort seen				t	One-sided p
	Bragging Group		Humble Group			
	M	SD	M	SD		
Difference in Brand Attitude	-1.28	1.20	-1.05	1.20	-1.04	0.151

Furthermore, a one-way ANOVA was performed to test the two groups against the control group. The test revealed that there was no statistically significant difference in brand attitude before and after the greenwashing scandal between at least two of the groups ($F(2, 210) = 0.59$, $p = 0.555$) and in this case, there was no significance between any of the group combinations.

Table 7: Impact of Marketing Communication Style on Brand Attitude Before and After Greenwashing Scandal (*including the control group*)

Source	Sum of Squares	df	Mean Squares	F	p
Between Groups	2.05	2	1.03	0.59	0.55
Within Groups	364.86	210	1.74		
Total	366.91	212			

Therefore, despite having a significant difference within the groups where the first bragging group had a higher negative difference in brand attitude after the greenwashing scandal compared to the humble and the control group, the differences were not statistically significant between the three groups since p-value was greater than 5% which is the set alpha level for this thesis which suggests that the bragging marketing strategy does not have a stronger negative impact on brand attitude difference than the humble marketing strategy in the case of a greenwashing scandal, as previously predicted. *Thus, H1a cannot be supported.*

Assessing the Impact of the Communication Style on Purchase Intention

Hypothesis 1b predicted that when the firm communicates their green efforts in a bragging compared to a more humble manner, this will not have a stronger negative effect on purchase intention for the bragging group. The same method as for the testing of the differences within and between groups for the difference in brand attitude before and after a greenwashing scandal has been used but for purchase intention instead. Hence, a paired samples t-test was first conducted to determine if the effect of respective marketing effort on purchase intention within each group was significant. The results show that there was significant difference in purchase intention before and after the greenwashing scandal ($M_{\text{Before}} = 3.92$, $SD_{\text{Before}} = 1.65$, $M_{\text{After}} = 3.55$, $SD_{\text{After}} = 1.98$, $t(66) = 1.75$, $p = 0.043$) for the first group presented with the bragging marketing effort. The second group that was subjected to the humble marketing effort, reported non-significant differences in purchase intention before and after ($M_{\text{Before}} = 3.82$, $SD_{\text{Before}} = 1.43$, $M_{\text{After}} = 3.59$, $SD_{\text{After}} = 1.94$, $t(82) = 1.40$, $p = 0.082$). Finally, there was a significant difference in purchase intention before and after ($M_{\text{Before}} = 3.66$, $SD_{\text{Before}} = 1.66$, $M_{\text{After}} = 3.19$, $SD_{\text{After}} = 1.89$, $t(62) = 3.06$, $p = 0.002$) the greenwashing scandal for the third group that saw the non green marketing effort. These results indicate that there was a statistically significant difference in purchase intention before and after the greenwashing scandal within the first and the third group since the p-values are below the alpha level of 5%

whereas the second group reported a non statistically significant difference in purchase intention within the group as $p = 0.082$ which is above the chosen alpha level.

Table 8: Difference in Purchase Intention Before and After the Greenwashing Scandal for All Three Groups

Marketing strategy	Purchase Intention before		Purchase Intention after		p-value
	M	SD	M	SD	
Bragging green marketing	3.92	1.65	3.55	1.98	0.043
Humble green marketing	3.82	1.43	3.59	1.94	0.082
Non-green marketing	3.66	1.66	3.19	1.89	0.002

Thereafter, to test whether there was a significant difference between the means in purchase intention before and after the greenwashing scandal depending on which marketing effort that has been presented, an independent two-samples t-test was performed to compare the difference in purchase intention between the bragging and humble group. The test revealed that there was no statistically significant difference in the purchase intention difference between the bragging and humble group ($M_{\text{Bragging}} = -0.37$, $SD_{\text{Bragging}} = 1.73$, $M_{\text{Humble}} = -0.23$, $SD_{\text{Humble}} = 1.46$, $t(129.45) = -0.54$, $p = 0.295$). This means that the bragging communication effort did not have a stronger effect on purchase intention than the humble one.

Table 9: Impact of Marketing Communication Style on Purchase Intention Before and After Greenwashing Scandal

	Marketing effort seen				t	One-sided p
	Bragging Group		Humble Group			
	M	SD	M	SD		
Difference in Purchase Intention	-0.37	1.73	-0.23	1.46	-1.04	0.295

Furthermore, a one-way ANOVA was performed in order to test the bragging and humble group against the control group, where the test revealed that there was no statistically

significant difference in purchase intention before and after the greenwashing scandal between the groups ($F(2, 210) = 0.47, p = 0.628$).

Table 10: Impact of Marketing Communication Style on Purchase Intention Before and After Greenwashing Scandal (*including the control group*)

Source	Sum of Squares	df	Mean Squares	F	p
Between Groups	2.05	2	1.02	0.47	0.628
Within Groups	461.40	210	2.20		
Total	463.45	212			

To conclude, there was a significant difference in purchase intention within two out of three groups, where on average participants' purchase intention is lower after the greenwashing scandal compared to the purchase intention prior to the scandal, for the groups that were presented with the bragging and non-green marketing efforts. On the other hand, the humble marketing group's participants' purchase intention was not affected to the same extent and hence there was no significant difference before and after the greenwashing scandal. However, the results from the independent samples t.test and ANOVA for comparison of these differences between the groups, indicate that there is no significant difference between the three groups meaning that customer's purchase intention will not be affected more or less negatively depending on which marketing effort they were subjected to and therefore, *H1b is supported*.

Examining the Effects of the Moderating Variable Environmental Concern

In hypothesis 2a, it was hypothesized that the customers' level of environmental concern will moderate the effect of marketing communication efforts on brand attitude in such a way that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern. This means that we will look for whether the level of environmental concern will have a stronger or weaker effect on the difference in brand attitude depending on the marketing effort seen.

First, a two-way ANOVA was performed to compare the impact of environmental concern on the difference in brand attitude between the bragging and humble groups. The simple main effects test showed that environmental concern did have a statistically significant effect on the difference in brand attitude ($p = 0.047$) but the marketing strategy used did not have a

statistically significant effect on the difference in brand attitude in this setting ($p = 0.488$). The test also showed that there was not a statistically significant interaction between the effects of environmental concern and the two marketing groups ($F(1, 146) = 0.15$, $p = 0.904$).

Table 11: The Moderating Effect of Environmental Concern on Brand Attitude Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	0.84	1	0.84	0.48	0.488
Environmental Concern	6.99	1	6.99	4.00	0.047
Interaction	0.03	1	0.03	0.15	0.904
Within	254.85	146			
Total	262.71	149			

Furthermore, a two-way ANOVA was performed to analyze this moderation effect on the relationship between the difference in brand attitude and marketing effort used, including the control group. Again, the simple main effects test showed that environmental concern did have a statistically significant effect on the difference in brand attitude ($p = 0.018$) but the marketing strategy used did not have a statistically significant effect on the difference in brand attitude in this setting ($p = 0.721$). The test also showed that there was not a statistically significant interaction between the effects of environmental concern and the marketing effort seen ($F(2, 207) = 0.28$, $p = 0.972$). This suggests that the environmental concern of the customer did have an impact on brand attitude before and after but this impact was not statistically different between the two communication groups as well as between the two communication groups and the control group.

Table 12: The Moderating Effect of Environmental Concern on Brand Attitude Difference (*including the control group*)

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	1.12	2	0.56	0.33	0.721
Environmental Concern	9.78	1	0.78	5.70	0.018
Interaction	0.09	2	0.05	0.03	0.972
Within	354.75	207			
Total	365.74	212			

Therefore, despite that environmental concern impacts the brand attitude before and after the greenwashing scandal, this effect will not be stronger or weaker for respective communication groups. *Hence, 2a hypothesis is not supported as there is no evidence for it.*

In hypothesis 2b, it was hypothesized that the customers' level of environmental concern will moderate the effect of marketing communication efforts on purchase intention in such a way that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern. Therefore, we will look for whether the level of environmental concern will have a stronger or weaker effect on the difference in purchase intention depending on the marketing effort seen. A two-way ANOVA test was thus performed to analyze the effect of environmental concern and the marketing strategy used but on the difference in purchase intention. The test included the bragging and humble groups only, where the simple main effects test showed that environmental concern did not have a statistically significant effect on the difference in purchase intention ($p = 0.131$) but the marketing strategy used did not have a statistically significant effect on the difference in purchase intention in this setting ($p = 0.543$). The test also showed that there was not a statistically significant interaction between the effects of environmental concern and the two marketing groups involved ($F(1, 146) = 0.15, p = 0.703$).

Table 13: The Moderating Effect of Environmental Concern on Purchase Intention Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	0.93	1	0.93	0.37	0.543
Environmental Concern	5.79	1	5.79	2.31	0.131
Interaction	0.37	1	0.37	0.15	0.703
Within	366.11	146			
Total	373.20	149			

Another ANOVA test including the control group as well as the bragging and the humble group was performed where the simple main effects analysis showed that environmental concern did have a statistically significant effect on the difference in purchase intention ($p = 0.003$) whereas the marketing strategy used did not have a statistically significant effect on

the difference in purchase intention ($p = 0.616$). The test revealed that there was not a statistically significant interaction between the effects of environmental concern and the marketing effort ($F(2, 207) = 1.29, p = 0.277$). This also indicates that environmental concern of the customer did have an impact on the purchase intention before and after but this effect is not stronger or weaker between the different marketing groups.

Table 14: The Moderating Effect of Environmental Concern on Purchase Intention Difference (*including the control group*)

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	2.06	2	1.03	0.49	0.616
Environmental Concern	19.69	1	19.69	9.29	0.003
Interaction	5.47	2	2.74	1.29	0.277
Within	438.92	207			
Total	466.14	212			

Therefore, despite the fact that environmental concern impacts the purchase intention before and after a greenwashing scandal, this effect will not be stronger or weaker for respective communication groups. *Hence, there is no evidence for hypothesis 2b and it is not supported.*

Examining the Effects of the Moderating Variable Green-ad Skepticism

In the 3a hypothesis, it was assumed that the customers' level of skepticism towards corporate green marketing communication will moderate the effect of marketing communication efforts on brand attitude in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of green-ad skepticism. Thus, a two-way ANOVA test was performed to analyze the effect of the level of green-ad skepticism and the marketing communication on the brand attitude difference. The test included the bragging and humble groups only, where the simple main effects test showed that skepticism did not have a statistically significant effect on the difference in brand attitude ($p = 0.566$) and neither did the marketing efforts in this setting ($p = 0.069$). However, the test showed that there was a statistically significant interaction between the effects of green-ad skepticism and the two marketing groups involved ($F(1, 146) = 5.25, p = 0.023$). Therefore from these results, we can conclude that the level of

the customer's green-ad skepticism does moderate the relationship between the marketing effort seen and the difference in brand attitude.

Table 15: The Moderating Effect of Green-ad Skepticism on Brand Attitude Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	5.76	1	5.76	3.36	0.069
Ad Skepticism	0.57	1	0.57	0.33	0.566
Interaction	9.00	1	9.00	5.25	0.023
Within	250.34	146			
Total	265.67	149			

A two-way ANOVA test was also conducted to evaluate the effects of green-ad skepticism and all the marketing effort groups including the control group, on the difference in brand attitude. The simple main effects test showed that the level of skepticism did not have a statistically significant effect on brand attitude ($p = 0.333$) and neither did the marketing strategy used ($p = 0.182$). Furthermore, the results showed that there was not a statistically significant interaction between the effects of green-ad skepticism and the marketing effort ($F(2, 207) = 2.65, p = 0.073$). Looking further into the post-hoc multiple comparisons, the results seem to be in accordance with the two-way ANOVA test that was conducted with only the humble and bragging group, where this difference in brand attitude between the bragging and the humble group has a significance of $p = 0.067$ ($M_{\text{Difference}} = 0.45, 95\% \text{ C.I} = [-0.03; 0.94]$), the difference between the bragging and control group has a $p = 0.204$ ($M_{\text{Difference}} = 0.33, 95\% \text{ C.I} = [-0.18; 0.84]$) and finally the difference between the humble and control group is the least significant where $p = 0.59$ ($M_{\text{Difference}} = 0.12, 95\% \text{ C.I} = [-0.32; 0.57]$).

Table 16: The Moderating Effect of Green-ad Skepticism on Brand Attitude Difference *(including the control group)*

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	5.84	2	2.92	1.71	0.182
Skepticism	1.60	1	1.60	0.94	0.333
Interaction	9.00	2	4.50	2.65	0.073
Within	351.98	207			
Total	368.42	212			

Therefore, from these results, we can conclude that green-ad skepticism does moderate the relationship between the marketing strategy used and the difference in brand attitude where this moderator has a stronger effect on the difference in brand attitude for the bragging group compared to the humble one. Hence, *the 3a hypothesis is therefore supported.*

In the 3b hypothesis, it was assumed that the customers' level of skepticism towards corporate green marketing communication will moderate the effect of marketing communication efforts on purchase intention in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of green-ad skepticism. Thus, a two-way ANOVA test was performed to analyze the effect of the level of skepticism and the marketing communication on the purchase intention difference. The test included the bragging and humble groups only, where the simple main effects test showed that customer's green-ad skepticism did not have a statistically significant effect on purchase intention ($p = 0.358$) and the marketing efforts, did not have a statistically significant effect on the difference in purchase intention either in this setting ($p = 0.477$). The test also showed that there was not a statistically significant interaction between the effects of green-ad skepticism and the two marketing groups involved ($F(1, 146) = 0.76, p = 0.386$). Therefore from these results, we can conclude that the level of the customer's green-ad skepticism does not moderate the relationship between the marketing effort seen and the difference in purchase intention.

Table 17: The Moderating Effect of Green-ad Skepticism on Purchase Intention Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	1.28	1	1.28	0.51	0.477
Skepticism	2.14	1	2.14	0.85	0.358
Interaction	1.90	1	1.90	0.76	0.386
Within	367.48	146			
Total	372.80	149			

Again, another two-way ANOVA test was performed to look at the effects of green-ad skepticism and the marketing effort used but on the difference in purchase intention. According to the test, the simple main effects showed that skepticism alone did not have a statistically significant effect on purchase intention ($p = 0.128$) nor did the marketing strategy

used ($p = 0.585$). Furthermore, the test revealed that there was not a statistically significant interaction between the level of green-ad skepticism and marketing effort ($F(2, 207) = 0.48$, $p = 0.620$).

Table 18: The Moderating Effect of Green-ad Skepticism on Purchase Intention Difference (including the control group)

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	2.35	2	1.18	0.54	0.585
Skepticism	5.10	1	5.10	2.33	0.128
Interaction	2.10	2	0.48	0.48	0.620
Within	452.44	207			
Total	461.99	212			

From these results, since neither the two-way ANOVA with the bragging and humble group only and neither the two-way ANOVA including the control group showed any statistical significance for the interaction effect of level of skepticism on purchase intention difference, *there is no support for the 3b hypothesis.*

Examining the effects of the Control variables

In the methodology, it was assumed that the level of shopping engagement might moderate the relationship between the marketing effort used and the brand attitude before and after a greenwashing scandal. This essentially means that the customers' level of shopping engagement moderates the effect of marketing communication efforts on the difference in brand attitude in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) shopping engagement. To test this, shopping engagement was used as a control variable and a two-way ANOVA test was performed where the effects of shopping engagement and marketing effort seen on brand attitude difference were analyzed. The test included the bragging and humble groups only, where the simple main effects test showed that shopper engagement did not have a statistically significant effect on the difference in brand attitude ($p = 0.284$) and the marketing efforts did not have a statistically significant effect on the difference in brand attitude either in this setting ($p = 0.326$). The test also showed that there was not a statistically significant

interaction between the effects of shopping engagement and the two marketing groups involved ($F(1, 146) = 0.07, p = 0.786$).

Table 19: The Moderating Effect of Shopping Engagement on Brand Attitude Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	1.73	1	1.73	0.97	0.326
Shopping Engagement	2.05	1	2.05	1.15	0.284
Interaction	0.13	1	0.13	0.07	0.786
Within	259.83	146			
Total	263.74	149			

Another two-way ANOVA test was also conducted to evaluate the effects of the shopping engagement level and marketing effort seen on brand attitude differences including the control group. The simple main effects test showed that level of engagement alone did not have a statistically significant effect on the difference in brand attitude ($p = 0.460$) and neither did the marketing strategy used ($p = 0.590$). The results indicated that there was not a statistically significant interaction between the level of engagement and the marketing effort ($F(2, 207) = 0.32, p = 0.729$). This means that the level of shopping engagement does not moderate the relationship between the marketing effort used and the difference in brand attitude after a greenwashing scandal.

Table 20: The Moderating Effect of Shopping Engagement on Brand Attitude Difference *(including the control group)*

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	1.85	2	0.93	0.53	0.590
Shopping Engagement	0.96	1	0.96	0.55	0.460
Interaction	1.11	2	0.55	0.32	0.729
Within	362.69	207			
Total	366.26	212			

In the same section, it was assumed that the level of shopping engagement might moderate the relationship between the marketing effort used and the purchase intention before and after

a greenwashing scandal. This means that the customers' level of shopping engagement would moderate the effect of marketing communication efforts on the difference in purchase intention in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) shopping engagement. To test this, shopping engagement was used as a control variable again and a two-way ANOVA test was performed where the effects of shopping engagement and marketing effort seen on the purchase intention difference were analyzed. The test included the bragging and humble groups only, where the simple main effects test showed that shopping engagement did not have a statistically significant effect on purchase intention ($p = 0.437$) and the marketing efforts did not have a statistically significant effect on the difference in purchase intention in this setting ($p = 0.559$). The test also showed that there was not a statistically significant interaction between the effects of shopping engagement and the two marketing groups involved ($F(1, 146) = 0.05, p = 0.822$).

Table 21: The Moderating Effect of Shopping Engagement on Purchase Intention Difference

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	0.87	1	0.87	0.34	0.559
Shopping Engagement	1.54	1	1.54	0.61	0.437
Interaction	0.13	1	0.13	0.05	0.822
Within	371.39	146			
Total	373.93	149			

Furthermore, another two-way ANOVA test was performed to look at the effects of the level of shopping engagement and the marketing effort used but on purchase intention including the control group to look at the differences between all three. According to the test, the simple main effects test showed that the level of shopping engagement did have a statistically significant effect on purchase intention ($p = 0.001$) while the marketing strategy used did not have a statistically significant effect ($p = 0.591$). Furthermore, there was no statistically significant interaction between the level of shopping engagement and marketing effort used ($F(2, 207) = 0.07, p = 0.512$). This means that the level of shopping engagement does not moderate the relationship between the marketing effort used and the difference in purchase intention after a greenwashing scandal.

Table 22: The Moderating Effect of Shopping Engagement on Purchase Intention Difference (including the control group)

Source	Sum of Squares	df	Mean Squares	F	p
Marketing Effort	2.59	1	1.30	0.53	0.591
Shopping Engagement	37.61	2	37.61	15.28	0.001
Interaction	3.30	1	1.65	0.07	0.512
Within	509.47	207			
Total	552.97	212			

Furthermore, likeliness to forgive was also suggested as a control variable in the methodology section, where we wanted to look at how willing the participants would be to forgive the company after the greenwashing scandal depending on whether they were subjected to the bragging or humble marketing effort. An independent two-samples t-test was performed to compare the likeliness to forgive between the bragging and humble groups. The test revealed that there was no statistically significant difference in the likeliness to forgive mean between the bragging and humble group ($M_{\text{Bragging}} = 3.27$, $SD_{\text{Bragging}} = 1.47$, $M_{\text{Humble}} = 3.35$, $SD_{\text{Humble}} = 1.36$, $t(137.03) = -0.83$, $p = 0.353$). This means that there was no difference between the bragging and the humble groups when it comes to the likelihood to forgive the company.

Table 23: Impact of Marketing Communication Style on Likeliness of Forgiveness

	Marketing effort seen				t	One-sided p
	Bragging Group		Humble Group			
	M	SD	M	SD		
Likeliness to Forgive	3.27	1.47	3.35	1.36	-0.83	0.353

Table 24: Summary of the hypotheses tested

Hypotheses		Results
H1a	When the firm communicates its green efforts in a bragging (vs. humble) manner, this has a stronger (weaker) negative effect on brand attitude.	Not Supported (p = 0.151)
H1b	When the firm communicates its green efforts in a bragging (vs. humble) manner, this does not have a stronger (weaker) negative effect on purchase intention.	Supported (p = 0.295)
H2a	Customers' level of environmental concern moderates the effect of marketing communication efforts on brand attitude in such a way that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern.	Not supported (p = 0.904)
H2b	Customers' level of environmental concern moderates the effect of marketing communication efforts on purchase intention in such a way that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) environmental concern.	Not supported (p = 0.703)
H3a	Customers' level of skepticism towards corporate green marketing communication moderates the effect of marketing communication efforts on brand attitude in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of skepticism.	Supported (p = 0.023)
H3b	Customers' level of skepticism towards corporate green marketing communication moderates the effect of marketing communication efforts on purchase intention in such a way, that the negative effect of communicating aggressively (vs. humbly) is stronger (vs. weaker) for consumers with high (vs. low) level of skepticism.	Not Supported (p = 0.386)

7. General Discussion

In this study we aimed to investigate if the effects of a corporate greenwashing scandal are dependent on the choice of the green marketing efforts and messages communicated by the company prior to the greenwashing scandal. More specifically, we sought to answer the question on whether companies should apply more bragging or humble green marketing communication and if these marketing efforts would yield different effect results on the customers' brand attitude and purchase intention after a greenwashing scandal.

Brand Attitude & Purchase Intention

Contrary to the study's first hypothesis (H1a), the results indicate that the bragging green marketing effort does not have a greater negative impact on the brand attitude in the context of a greenwashing scandal compared to the humble green marketing, as expected. Consequently, H1 could not be supported. However, it could be observed that there was a significant negative effect on brand attitude within each group in the context of a greenwashing scandal but this effect cannot be concluded as a result of the marketing effort itself. These findings imply that regardless of which marketing effort, bragging- or humble green marketing the company chooses, the effects after a greenwashing scandal will be negative to relatively the same degree. A possible speculated explanation for the obtained results could be that the marketing efforts used were not perceived as that opposing to each other in the main study, as was shown in the pre-test perceptions, and could have possibly been formulated even more towards their respective directions, i.e. the bragging one as even more bragging and the humble one as even more humble, which would then potentially lead to significant results. Another explanation could be that the results are just not in line with the theory and literature reviewed in the beginning of the report which claims that brand attitude is not only dependent and affected by a company's green performance but also by how this performance is communicated through green marketing strategies (Nyilasy et al., 2014; Liao et al., 2020). Indeed, this literature also states that brand attitude is negatively affected by low firm performance revealed through a greenwashing scandal where this effect becomes stronger in the presence of green advertising compared to general corporate advertising and no advertising at all (Nyilasy et al., 2014). Opposed to this, people's attitudes were not affected differently after a greenwashing scandal depending on the marketing effort in this study. It could also be speculated that other mediating factors could have had an impact on the result.

On the other hand, the bragging communication effort did not have a stronger effect on purchase intention than the humble one, and hence regardless of the communication effort used, this will have the same negative effect on purchase intention after a greenwashing scandal, which implies that H1b could be supported. This is consistent with the previously reviewed literature that claimed that there is an attitude-behavior gap, meaning that regardless of if the customer is exposed to the bragging green marketing and claims that its attitude towards the brand is lower after a greenwashing scandal, the negative effect on its purchase intention will not be stronger as a result of the seen marketing effort but this will rather have to be moderated by other factors.

Environmental Concern

While the second hypothesis argued that environmental concern would have a greater impact on brand attitude (H2a) and purchase intention (H2b) before and after the greenwashing scandal for the bragging group, the results showed the opposite. This means, that despite the fact that a lot of studies found environmental concern to be a major predictor of brand attitude and purchase intention, this was not entirely the case in this study. According to the results, environmental concern did have an impact on the difference in brand attitude itself in case of a greenwashing scandal, but this difference was not stronger or weaker for the two communication groups. This can be explained by the fact that if a consumer exhibits a higher level of environmental concern, then their attitude after the greenwashing scandal will be more negatively affected by it regardless of the marketing communication seen and thus, this impact will be observed for both the bragging and the humble group. Another reason why we did not observe a significant difference between the groups could be because, as previously explained, the bragging and humble communication styles were perhaps not perceived as that different, where the bragging one was not aggressive enough and the humble one was and therefore, these communication strategies could not have their intended effects on consumers.

When it comes to the impact of environmental concern on the difference in purchase intentions as a result of the green communication style used in the context of a greenwashing scandal, the results showed that even if a consumer is more concerned by the environment their purchase intention after seeing the greenwashing scandal is not more or less negatively impacted if they were subjected to the bragging advertisement, meaning that H2b could not be supported. There can be several reasons for this, where one of them is the attitude-behavior gap, where consumers' attitudes towards the environment and green

products do not necessarily translate into positive purchase intentions. For instance, Smith and Paladino (2010) used the theory of reasoned action in order to investigate the function of various antecedents on attitudes, purchase intentions and purchase behaviors of green products and found that environmental concern did not have an impact on the consumers' purchase intentions. Lockie et al. (2002) explain this phenomenon by arguing that despite the fact that consumers' express positive attitudes towards the environment, they might still be skeptical of the claims being made which are reflected in their purchases. Even Hwang (2016) found in their studies that environmental concern did not have an influence on purchase intentions for green products due to psychological motivations.

Green-ad Skepticism

Consistent with the predictions in the third hypothesis (H3a), the results showed that the level of the customer's green-ad skepticism does have an impact on the relationship between the marketing effort used and the difference in brand attitude, where this moderator has a stronger effect on the difference in brand attitude for the bragging group compared to the humble one. Furthermore, this finding is supported by the previously discussed literature that claimed that skepticism of green marketing has an impact on customers' response to advertisement (Obermiller and Spangenberg, 1998), and that highly skeptical customers have a less favorable, i.e. a more negative attitude towards advertisement as well as that the attitude towards the company also is affected highly negatively in this way (Zhang, Lu, et al., 2018). As discussed, the advertisement credibility could be negatively affected in the case of when consumers perceive that a firm is exaggerating their green performance such as in the case of bragging, which in turn creates a negative evaluation of the company, meaning that the attitude towards the company (i.e. brand) will also be affected negatively (Zhang, Lu, et al. 2018). This is in line with the findings of this study when also considering the context of a greenwashing scandal involving the brand in question.

In contrast to the fourth hypothesis (H3b), the study's results indicate that customers' level of skepticism towards corporate green marketing does not affect the relationship between the marketing efforts and the difference in purchase intention. This finding contradicts what was found in the previously presented literature, where it was emphasized that when the brand attitude is affected negatively when the firm exaggerates its green performance and communication, this will have a negative impact on purchase intention as well (Zhang, Lu, et al., 2018; Lyon and Montgomery, 2015). Speculation as to why the results ended up not

supporting this hypothesis is because customers that have a high level of skepticism towards green marketing communication from the beginning may not be as surprised in the case of a greenwash revelation as they perhaps already expected it to happen, regardless of the marketing communication style they were subjected to. This reduced communication credibility already from the beginning could have led to them not being more negatively affected when the greenwashing scandal occurred when it comes to their purchase intention, as it was expected. This speculation could be connected to the literature that says that highly skeptical customers that doubt the credibility of the green marketing claims may undertake a heuristic evaluation process that could diminish their concern towards the environmental behaviors, which can further decrease customers' concern and discount the informal utility of the green advertisement (Goh & Balaji, 2016).

Control Variables - shopping engagement and likeliness to forgive

When it comes to the level of shopping engagement, the results showed that this does not have an effect on the relationship between the marketing effort used and the difference in brand attitude as well as purchase intention after a greenwashing scandal, contrary to what was expected. Speculation regarding this result could be that even the less engaged customers put effort and attention to the green marketing efforts used by companies and that regardless of their level of engagement, their brand attitude and purchase intention do get negatively affected to the same extent for both those that are exposed to bragging or humble green marketing efforts. Another speculation that could be considered is that the less engaged customers that are assumed to pay less attention to the marketing, pay more attention when something big happens such as a greenwashing scandal involving the company in question which is why their brand attitude and purchase intention gets negatively impacted to relatively the same level as for more engaged customers.

Furthermore, opposite to what was expected, the findings show that there is no difference in the means for the likelihood to forgive the company for the greenwashing after it has occurred, between the bragging and humble group, which means that the likelihood to forgive depends on other factors and the marketing itself does not mitigate this. We speculate that this could be due to the fact that when a firm commits greenwashing, the degree to which it has lied about it prior to the greenwashing in its marketing, is not taken into consideration and does not matter as much for customers' perception of the company and their willingness to forgive as they ended up lying about their green efforts anyway. This could potentially also

be explained by what has been revealed in the consumer insights where interviewees state that it is rather the actions a company takes to fix its misconduct and redeem itself which increases their likelihood to forgive the firm for the greenwashing.

8. Theoretical Contribution & Managerial Implications

This study offers significant theoretical contributions to the existing CSR and business ethics literature while providing important practical implications. Insights from this study show the effects of differently formulated green messages in case of a greenwashing scandal on consumers, i.e., consumers' perceptions towards the different green communication styles and to what extent their perceptions towards the company would change based on that. This can help managers in their decisions in choosing an appropriate green marketing strategy depending on their short- and long-term goals, knowing the consequences they might face in the future on the company's reputation and bottom line based on that.

As it was found that the brand attitude and purchase intention are not affected any significantly differently regardless of the marketing effort used prior to the greenwashing scandal. This means that companies do not need to invest large amounts of resources and time into choosing the right green communication style which they currently might be doing as both green marketing efforts (bragging and humble) yield the same negative effects on customers' brand attitude and purchase intention after a greenwashing scandal. Furthermore, since the customer's level of environmental concern does not have an effect either on the effects on brand attitude and purchase intention, this means that marketers cannot mitigate these negative effects by for instance having more humble green marketing prior to the greenwashing scandal, instead, their choice when it comes to bragging vs. humble green marketing will not make a difference in this case.

On the other hand, since customer skepticism towards green marketing has proven to diminish the positive impact of green communication while also enhancing the negative consequences of bragging green marketing communication on brand attitude in the case of a greenwashing scandal, this finding can help companies choose the right strategy depending on what type of customers their offering aims to target. For instance, if they primarily target the customers that are naturally more skeptical of green marketing they should make sure to use a humble green marketing strategy over a more bragging one, as that will lead to less

negative detrimental effects on those customers' brand attitude if or when a greenwashing scandal occurs. Furthermore, knowing that the level of green-ad skepticism does not have the same effect on the relationship between the green communication style and purchase intention in the context of a greenwashing scandal, this implies that managers can still expect customers to continue making purchases even if or when a greenwashing scandal occurs and even if the highly skeptical customers' attitude becomes worse towards the brand. This could further imply that marketers can as a result of this know what to focus on repairing when it comes to their relationship with customers after a greenwashing scandal. In this case, the focus should be on improving the brand attitude back to where it once was before the greenwashing scandal.

9. Limitations and Future Research

One of the main limitations of this study is the relatively small sample size. This is believed to have had an impact on the results as perhaps having more respondents might have led to significant results at least for the difference in brand attitude and even for the moderating effect of environmental concern on brand attitude and purchase intention difference. Thus, further empirical studies are needed to evaluate the effectiveness of these marketing communication styles. Additionally, based on the discussion above, it could be established that perhaps the marketing efforts were not that different in terms of aggressiveness or humbleness, and hence designing these messages to go more in those two different directions, might have yielded significant results.

Another limitation is that H&M is one of the biggest companies within the fashion industry and has a long history of greenwashing as presented in the introduction. This means that the participants in our survey might have had pre-existing assumptions about the brand and already had a negative attitude towards the company. This might have led to biased reactions and would imply that the marketing communication style that they were presented with in relation to a greenwashing scandal would have had little to no effect on their attitude towards the brand as it would have lived up to their expectations and would not be as effective. Thus, this could be something to take into consideration, and conducting a similar study with a fictitious company instead might yield different results, where the brand attitude could be more negatively impacted compared to our results and this might even be the case for purchase intention. Another suggestion for future research would be to carry out a field

experiment instead of an experiment based on an artificial situation, i.e. create an experiment in the form of an actual situation where the treatment would be handed out in a real environment where the participant would be present without realizing that he or she is part of an experiment which would enable higher generalization from the experimental situation to other situations and is a way to avoid criticism with role-play experiment used in this study.

Furthermore, one thing that this thesis did not go into depth in was studying consumers' willingness to forgive the company for the misconduct based on the given green marketing communication strategy undertaken by the company in order to remedy the misconduct consequences. Investigating what actions after a greenwashing scandal has occurred are most effective and yield the best results when it comes to reversing the produced damage can be an interesting area of research to look into in the future. This would give an even more comprehensive picture of greenwashing and its negative impacts while also giving firms a guideline of what to do even after a greenwashing scandal has occurred to minimize the damages of it and not only show the effects of the actions prior to the scandal (i.e. marketing used prior to the scandal), as we investigate in our thesis.

Finally, the study is also made from the point of view of the consumers and perhaps a similar study from the firm's point of view on this matter might be useful in understanding the effects of green marketing communications strategies and the reasons they choose one over the other.

10. Conclusion

This thesis aimed to answer the question: "How is the customer's attitude towards a brand and purchase intention affected after a greenwashing scandal has happened, depending on which green marketing communication strategy has been used by the brand prior to the revelation of the scandal?". Overall, it can be concluded that regardless of the marketing communication style used prior to a greenwashing scandal, this will have the same negative effect on brand attitude and purchase intention and these effects will not be stronger or weaker if the consumer is highly concerned by the environment. However, it was shown that these negative effects on brand attitude were enhanced for the bragging communication in case the consumer yields a high level of green-ad skepticism compared to the humble one. Yet, these negative effects were not enhanced by the level of green-ad skepticism on purchase intention.

11. Bibliography

Anderson, C.A. and Bushman, B.J., 1997. External validity of “trivial” experiments: The case of laboratory aggression. *Review of General Psychology*, 1(1), pp.19-41.

Ajzen, I., 1988. *Attitudes, personality, and behavior*. Milton Keynes, UK: Open University Press.

Aji, H.M. and Sutikno, B., 2015. The extended consequence of greenwashing: Perceived consumer skepticism. *International Journal of Business and Information*, 10(4), p.433.

Akehurst, G., Afonso, C. and Gonçalves, H.M., 2012. Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management decision*.

Ammenberg, J., 2006. *Miljöledning i byggsektorn – En studie av olika angreppssätt i miljöarbetet*. Linköping: Minasa AB.

Aronson, E. and Carlsmith, J.M., 1968. Experimentation in social psychology. *The handbook of social psychology*, 2(2), pp.1-79.

Atkinson, L. and Kim, Y., 2015. “I drink it anyway and I know I shouldn't”: Understanding green consumers' positive evaluations of norm-violating non-green products and misleading green advertising. *Environmental Communication*, 9(1), pp.37-57.

Bakan, D., 1966. The test of significance in psychological research. *Psychological bulletin*, 66(6), p.423.

Balmer, J.M. and Greyser, S.A., 2006. Corporate marketing: Integrating corporate identity, corporate branding, corporate communications, corporate image and corporate reputation. *European journal of marketing*.

Banytė, J. and Gadeikienė, A., 2008. Corporate social responsibility as a marketing means in Lithuanian business practice. *Ekonomika ir vadyba*, (13), pp.227-238.

Baum, L.M., 2012. It's not easy being green... or is it? A content analysis of environmental claims in magazine advertisements from the United States and United Kingdom. *Environmental Communication: A Journal of Nature and Culture*, 6(4), pp.423-440.

Bearden, W.O., Lichtenstein, D.R. and Teel, J.E., 1984. Comparison price, coupon, and brand effects on consumer reactions to retail newspaper advertisements. *Journal of Retailing*, 60(2), pp.11-34.

Berinsky, A.J., Margolis, M.F. and Sances, M.W., 2014. Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, 58(3), pp.739-753.

Biswas, A. and Roy, M., 2015. Leveraging factors for sustained green consumption behavior based on consumption value perceptions: testing the structural model. *Journal of Cleaner production*, 95, pp.332-340.

Boyle, G.J., Saklofske, D.H. and Matthews, G., 2015. Criteria for selection and evaluation of scales and measures. In *Measures of personality and social psychological constructs* (pp. 3-15). Academic Press.

Bowling, N.A., Huang, J.L., Bragg, C.B., Khazon, S., Liu, M. and Blackmore, C.E., 2016. Who cares and who is careless? Insufficient effort responding as a reflection of respondent personality. *Journal of Personality and Social Psychology*, 111(2), p.218.

Campbell, D.T. and Stanley, J.C., 2015. *Experimental and quasi-experimental designs for research*. Ravenio books.

Campbell, D.T., 1969. Reforms as experiments. *American psychologist*, 24(4), p.409.

Campbell, D.T., 1986. Relabeling internal and external validity for applied social scientists. *New Directions for Program Evaluation*, 1986(31), pp.67-77.

Caruana, R., Carrington, M.J. and Chatzidakis, A., 2016. "Beyond the attitude-behaviour gap: Novel perspectives in consumer ethics": Introduction to the thematic symposium. *Journal of Business Ethics*, 136(2), pp.215-218.

Carrington, M.J., Neville, B.A. and Whitwell, G.J., 2010. Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of business ethics*, 97(1), pp.139-158.

Chen, Y.S. and Chang, C.H., 2012. Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*.

Chen, Y.S. and Chang, C.H., 2013. Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of business ethics*, 114(3), pp.489-500.

Chen, Y.S., Hung, S.T., Wang, T.Y., Huang, A.F. and Liao, Y.W., 2017. The influence of excessive product packaging on green brand attachment: The mediation roles of green brand attitude and green brand image. *Sustainability*, 9(4), p.654.

Chitra, B., 2015. A study on evolution of green products and green marketing. *Journal of Research in Business and Management*, 3(5), pp.35-38.

De Jong, M.D., Harkink, K.M. and Barth, S., 2018. Making green stuff? Effects of corporate greenwashing on consumers. *Journal of business and technical communication*, 32(1), pp.77-112.

de Jong, M.D., Huluba, G. and Beldad, A.D., 2020. Different shades of greenwashing: Consumers' reactions to environmental lies, half-lies, and organizations taking credit for following legal obligations. *Journal of business and technical communication*, 34(1), pp.38-76.

Delmas, M.A. and Burbano, V.C., 2011. The drivers of greenwashing. *California management review*, 54(1), pp.64-87.

D'souza, C. and Taghian, M., 2005. Green advertising effects on attitude and choice of advertising themes. *Asia Pacific journal of marketing and logistics*.

Easterling, D., Kenworthy, A. and Nemzoff, R., 1996. The greening of advertising: a twenty-five year look at environmental advertising. *Journal of Marketing Theory and Practice*, 4(1), pp.20-34.

Eliasson, A., 2018. *Kvantitativ metod från början*. 4th Ed. Lund: Studentlitteratur AB.

Forsberg, Y. and Kaplanová, M., 2019. A report on the sustainability communication of the Nasdaq OMX Stockholm large cap index companies 2019." Hhs.se.

Fuller, D.A., 1999. *Sustainable marketing: Managerial-ecological issues*. Sage Publications.

GfK., 2010. American consumers lead the world in environmental skepticism.[Online]. Accessed: 20-03-2022.

Url:https://www.gfkamerica.com/newsroom/press_releases/single_sites/006588/index.en.html

Ginsberg, J.M. and Bloom, P.N., 2004. Choosing the right green marketing strategy. *MIT Sloan management review*, 46(1), pp.79-84.

Goh, S.K. and Balaji, M.S., 2016. Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, pp.629-638.

Groza, M.D., Pronschinske, M.R. and Walker, M., 2011. Perceived organizational motives and consumer responses to proactive and reactive CSR. *Journal of business ethics*, 102(4), pp.639-652.

Gupta, S. and Ogden, D., 2006. The attitude-behavior gap in environmental consumerism. *APUBEF Proceedings*, 3(1), pp.199-206.

Haas, A. and Kenning, P., 2014. Utilitarian and hedonic motivators of shoppers' decision to consult with salespeople. *Journal of retailing*, 90(3), pp.428-441.

Hartmann, P., Ibáñez, V.A. and Sainz, F.J.F., 2005. Green branding effects on attitude: functional versus emotional positioning strategies. *Marketing intelligence & planning*.

Hartmann, P. and Apaolaza-Ibáñez, V., 2010. Beyond savanna: An evolutionary and environmental psychology approach to behavioral effects of nature scenery in green advertising. *Journal of Environmental Psychology*, 30(1), pp.119-128.

Haslam, S.A. and McGarty, C., 2001. A 100 years of certitude? Social psychology, the experimental method and the management of scientific uncertainty. *British Journal of Social Psychology*, 40(1), pp.1-21.

Ho, S. (2022). Nearly 60% Of Sustainable Fashion Claims Are Greenwashing, Report Finds. *Green Queen*. [Online]. Accessed: 04-05-2022.

Url:<https://www.greenqueen.com.hk/fashion-brands-sustainability-claims-greenwashing/#:~:text=H%26M%20topped%20the%20list%20for,%2C%20and%20M%26S%20with%2088%25>

.

Hoeffler, S., Bloom, P.N. and Keller, K.L., 2010. Understanding stakeholder responses to corporate citizenship initiatives: Managerial guidelines and research directions. *Journal of Public Policy & Marketing*, 29(1), pp.78-88.

Hwang, J., 2016. Organic food as self-presentation: The role of psychological motivation in older consumers' purchase intention of organic food. *Journal of Retailing and Consumer Services*, 28, pp.281-287.

Keller, K.L., 2001. Building customer-based brand equity: A blueprint for creating strong brands.

Kim, H.S., 2005. Consumer profiles of apparel product involvement and values. *Journal of Fashion Marketing and Management: An International Journal*.

Kim, Y. and Choi, S.M., 2005. Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *ACR North American Advances*.

Kotler, P. and Keller, K.L., 2008. *Marketing strategy*. In London: London Business Forum.

Kronrod, A., Grinstein, A. and Wathieu, L., 2012. Go green! Should environmental messages be so assertive?. *Journal of Marketing*, 76(1), pp.95-102.

Krugman, H.E., 1965. The impact of television advertising: Learning without involvement. *Public opinion quarterly*, 29(3), pp.349-356.

LaBarbera, P.A. and Mazursky, D., 1983. A longitudinal assessment of consumer satisfaction/dissatisfaction: the dynamic aspect of the cognitive process. *Journal of marketing research*, 20(4), pp.393-404.

Leonidou, C.N. and Skarmas, D., 2017. Gray shades of green: Causes and consequences of green skepticism. *Journal of Business Ethics*, 144(2), pp.401-415.

Likert, R., 1932. A technique for the measurement of attitudes. *Archives of psychology*.

Lii, Y.S. and Lee, M., 2012. Doing right leads to doing well: When the type of CSR and reputation interact to affect consumer evaluations of the firm. *Journal of business ethics*, 105(1), pp.69-81.

Liao, Y.K., Wu, W.Y. and Pham, T.T., 2020. Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention. *Sustainability*, 12(18), p.7461.

Liyanarachchi, G.A., 2007. Feasibility of using student subjects in accounting experiments: a review. *Pacific Accounting Review*.

Lockie, S., Lyons, K., Lawrence, G. and Mummery, K., 2002. Eating 'green': motivations behind organic food consumption in Australia. *Sociologia ruralis*, 42(1), pp.23-40.

Lord, K.R., 1994. Motivating recycling behavior: A quasiexperimental investigation of message and source strategies. *Psychology & Marketing*, 11(4), pp.341-358.

Lu, L., Bock, D. and Joseph, M., 2013. Green marketing: what the Millennials buy. *Journal of business strategy*.

Lutz, R.J., 1985. Affective and cognitive antecedents of attitude toward the ad: A conceptual framework. *Psychological process and advertising effects: Theory, research, and application*, pp.45-63.

Lyon, T.P. and Montgomery, A.W., 2015. The means and end of greenwash. *Organization & Environment*, 28(2), pp.223-249.

Majeed, M., 2022. Green Marketing Communication and Consumer Response in Emerging Markets. In *Green Marketing in Emerging Economies* (pp. 43-73). Palgrave Macmillan, Cham.

Matthes, J., Wonneberger, A. and Schmuck, D., 2014. Consumers' green involvement and the persuasive effects of emotional versus functional ads. *Journal of Business Research*, 67(9), pp.1885-1893.

Mitchell, A.A. and Olson, J.C., 1981. Are product attribute beliefs the only mediator of advertising effects on brand attitude?. *Journal of marketing research*, 18(3), pp.318-332.

Mohr, L.A., Eroğlu, D. and Ellen, P.S., 1998. The development and testing of a measure of skepticism toward environmental claims in marketers' communications. *Journal of consumer affairs*, 32(1), pp.30-55.

Morgan, R.M. and Hunt, S.D., 1994. The commitment-trust theory of relationship marketing. *Journal of marketing*, 58(3), pp.20-38.

Muehling, D.D., Lacznia, R.N. and Andrews, J.C., 1993. Defining, operationalizing, and using involvement in advertising research: A review. *Journal of Current Issues & Research in Advertising*, 15(1), pp.21-57.

Newton, J.D., Tsarenko, Y., Ferraro, C. and Sands, S., 2015. Environmental concern and environmental purchase intentions: The mediating role of learning strategy. *Journal of Business Research*, 68(9), pp.1974-1981.

Newell, S.J., Goldsmith, R.E. and Banzhaf, E.J., 1998. The effect of misleading environmental claims on consumer perceptions of advertisements. *Journal of Marketing Theory and Practice*, 6(2), pp.48-60.

Nielsen's 2015 Global Corporate Sustainability Report. [Online]. Accessed: 23-03-2022.
Url: <https://www.nielsen.com/us/en/insights/reports/2015/the-sustainability-imperative.html>.

Nyilasy, G., Gangadharbatla, H. and Paladino, A., 2014. Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions. *Journal of Business Ethics*, 125(4), pp.693-707.

O'Cass, A., 2000. An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of economic psychology*, 21(5), pp.545-576.

Obermiller, C. and Spangenberg, E.R., 1998. Development of a scale to measure consumer skepticism toward advertising. *Journal of consumer psychology*, 7(2), pp.159-186.

Orazi, D.C. and Chan, E.Y., 2020. "They did not walk the green talk!:" How information specificity influences consumer evaluations of disconfirmed environmental claims. *Journal of business ethics*, 163(1), pp.107-123.

Parguel, B., Benoît-Moreau, F. and Larceneux, F., 2011. How sustainability ratings might deter 'greenwashing': A closer look at ethical corporate communication. *Journal of business ethics*, 102(1), pp.15-28.

Park, C.W., MacInnis, D.J., Priester, J., Eisingerich, A.B. and Iacobucci, D., 2010. Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of marketing*, 74(6), pp.1-17.

Pickens, J., 2005. Attitudes and perceptions. *Organizational behavior in health care*, 4(7), pp.43-76.

Pearcy, A., 2021. H&M Greenwashing Is 'Disguising The Reality' Of Fast Fashion - The Big Issue. *The Big Issue*. [Online] Accessed: 17-03-2022.
Url: <https://www.bigissue.com/news/environment/hm-greenwashing-is-disguising-the-reality-of-fast-fashion/>.

Prothero, A. and McDonagh, P., 1992. Producing environmentally acceptable cosmetics? The impact of environmentalism on the United Kingdom cosmetics and toiletries industry. *Journal of Marketing Management*, 8(2), pp.147-166.

Prothero, A., Peattie, K. and McDonagh, P., 1997. Communicating greener strategies: a study of on-pack communication. *Business Strategy and the Environment*, 6(2), pp.74-82.

Race, S., 2022. Companies are lying to us by greenwashing their products. *The Central Trend*. [Online]. Accessed: 22-03-2022.

Url:<https://thecentraltrend.com/109010/opinion/companies-are-lying-to-us-by-greenwashing-their-products/>

Rosengren, S. and Dahmén, M., 2013. Judging a magazine by its advertising: Exploring the effects of advertising content on perceptions of a media vehicle. *Journal of Advertising Research*, 53(1), pp.61-70.

Schivinski, B. and Dabrowski, D., 2016. The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 22(2), pp.189-214.

Shrum, L.J., Lowrey, T.M. and McCarty, J.A., 1994. Recycling as a marketing problem: A framework for strategy development. *Psychology & Marketing*, 11(4), pp.393-416.

Smith, S. and Paladino, A., 2010. Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal (AMJ)*, 18(2), pp.93-104.

Soh, H., Reid, L.N. and King, K.W., 2009. Measuring trust in advertising. *Journal of advertising*, 38(2), pp.83-104.

Stainer, A. and Stainer, L., 1997. Ethical dimensions of environmental management. *European Business Review*.

Söderlund, M., 2018. Experiments in marketing. Lund: Studentlitteratur AB.

TerraChoice., 2007. The six sins of greenwashing™. A study of environmental claims in North American consumer markets. [Online]. Accessed: 16-04-2022.

Url:https://sustainability.usask.ca/documents/Six_Sins_of_Greenwashing_nov2007.pdf

TerraChoice., 2009. The seven sins of greenwashing™. Environmental claims in consumer markets. Summary report: North America. [Online]. Accessed: 16-04-2022.

Url:https://www.map-testing.com/assets/files/2009-04-xx-The_Seven_Sins_of_Greenwashing_low_res.pdf

TerraChoice., 2010. The sins of greenwashing. Home and family edition 2010: Report on environmental claims made in the North American consumer market. [Online]. Accessed: 11-04-2022.

Url: <http://faculty.wvu.edu/dunnc3/rprnts.TheSinsofGreenwashing2010.pdf>

Wiederhold, M. and Martinez, L.F., 2018. Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. *International Journal of Consumer Studies*, 42(4), pp.419-429.

Wu, P.C. and Wang, Y.C., 2011. The influences of electronic word-of-mouth message appeal and message source credibility on brand attitude. *Asia Pacific Journal of Marketing and Logistics*.

Yadav, R. and Pathak, G.S., 2016. Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, pp.732-739.

Yin, R.K., 1994. Discovering the future of the case study. *Method in evaluation research. Evaluation practice*, 15(3), pp.283-290.

Zhang, L., Li, D., Cao, C. and Huang, S., 2018. The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. *Journal of Cleaner Production*, 187, pp.740-750.

1. Appendices

Appendix 1

Questions used - Qualitative/Exploratory interviews - Consumer insights:

1. Age
2. Gender
3. What is the first thing you think of when you hear the word corporate misconduct/greenwashing scandal? What do you associate it with?
4. What is the first thing you think of when you hear the word corporate misconduct/greenwashing scandal in the context of greenwashing within the fashion industry?
5. What fashion companies do you think are more prone to commit misconduct and why?
6. Can you think of any corporate misconduct/greenwashing scandal within fashion? Can you tell us more about it and how it affected you? Give an example (maybe a real-life example if you already have experienced/witnessed misconduct by some fashion company)
7. When greenwashing misconduct does occur, how do you think that would affect your attitude towards the brand depending on your relationship with the brand?
8. What specific word/thing makes you think that a certain situation is a misconduct? (is there a specific trigger word? or something similar?)
9. How trusting are you of companies' marketing efforts? (Are you usually skeptical of their claims)?
10. On a scale of 1-10, how much do you care about sustainability?
 - Would this affect reaction/attitude towards a company after a greenwashing scandal/misconduct?
11. If misconduct would occur by a company, would you act on it? (ex: not buying from it anymore)
 - How willing would you be to forgive the company?
 - Would that be affected by whether you have a relationship with the brand or not?

Appendix 2

Stimuli used in the study - Marketing efforts:

Stimuli 1: Treatment - Group 1



Don't let fashion go to waste!

Our Garment Collecting Program is the biggest in the world. Our efforts to collect garments are unmatched and we contribute a large part to a more sustainable fashion industry.

We collected over 62.300 tons of unwanted clothes and textiles in 2021 alone.



Stimuli 2: Treatment - Group 2



Be part of the change!

With our Garment Collecting Program, we aim to contribute a small part to a more sustainable fashion industry.

This is only a small step in the right direction. We collect garments to prolong the product lifecycle.



Stimuli 3: Control group - Group 3



The spring collection is finally here!

Sign up for our newsletter to stay updated.

By signing up for our newsletter you will get to learn more about our products.



The news article revealing the greenwashing scandal involving the H&M brand

Stockholm, Sweden

April 9th 2022

LATEST NEWS

Report reveals scandalous practices at H&M's Garment Collecting Program



H&M Scandal

According to H&M, over 10% of a garment's total impact on the climate happens after you've left the store. Therefore, as part of their sustainability efforts to contribute to a circular fashion economy and reduce its environmental impact, H&M claimed to have developed a Garment Collecting programme. To put the programme into use, they were supposed to create recycling boxes that they would put in their stores across the globe and take in any unwanted clothes or textiles, no matter the brand.

Then, depending on their condition, H&M would either sell them as second hand, reuse or recycle them by shredding them into textile fibers and use to make other materials, aiming to contribute to a greener world through a more sustainable production and consumption process.



What happened?

H&M collected about 30,000 tonnes of textiles and garments in the past 6 months and only sold the garments that were still in good condition as second hand to make more profits from it, which makes up at most 15% of the total collected amount of clothes. As for the rest, it was too expensive for H&M to actually send them and recycle the materials or put them to use due to current lack of facilities and widespread infrastructure. Instead, they were sent and burnt in landfills which of course releases large amounts of carbon dioxide and greenhouse gases into the atmosphere and exacerbates global warming, harming the environment. H&M's marketing tactic seems obvious: sustainability is on-trend right now!

Author: Taylor H.

Appendix 4

Summary table - Items used in the Main study Survey

Item	Measurement scale	Source of the measurement	Cronbach's Alpha
Dependent variables			
<u>Brand attitude:</u>		Park et al. (2010)	0.929
·How do you view H&M?	1 = Bad; 7 = Good		(Pre-scandal index)
·How do you view H&M?	1 = Negative; 7 = Positive		0.958
·To what extent do you like H&M?	1 = Dislike it; 7 = Like it		(Post-scandal index)
<u>Purchase intention:</u>			0.914
·I intend to purchase apparel from the H&M brand in the future:	1 = Strongly disagree; 7 = Strongly agree	Schivinski, B. and Dabrowski, D. (2014)	(Pre-scandal index)
·I would prefer purchasing apparel from H&M rather than any other brand available:	1 = Strongly disagree; 7 = Strongly agree		0.958
·I would consider buying the H&M brand next time when I need apparel items:	1 = Strongly disagree; 7 = Strongly agree		(Post-scandal index)
·I will try to buy apparel items from the H&M company:	1 = Strongly disagree; 7 = Strongly agree		
Moderating variables			
<u>The level of environmental concern:</u>			0.866
·I am concerned about environmental issues:	1 = Strongly disagree; 7 = Strongly agree	Leonidou et al. (2017)	
·I think too little attention is given to environmental issues:	1 = Strongly disagree; 7 = Strongly agree		
·I think that environmental issues are important:	1 = Strongly disagree; 7 = Strongly agree		
·To what extent do you dislike/like the idea of environmental protection:	1 = I dislike it; 7 = I like it		
<u>Overall skepticism towards green marketing:</u>			0.816
·Information conveyed in brands' green advertising is credible:	1 = Strongly disagree; 7 = Strongly agree	Soh et al. (2009)	
·Information conveyed in brands' green advertising is reliable:	1 = Strongly disagree; 7 = Strongly agree		

·I believe my trust is decreasing towards products and companies that are labeling their green efforts:	1 = Strongly disagree; 7 = Strongly agree		
·How skeptical are you to green claims made by companies:	1 = Not skeptical at all; 7 = Very skeptical		
·Most companies mislead with words about the environmental features of their offerings:	1 = Strongly disagree; 7 = Strongly agree	Leonidou et al. (2017)	
·Most companies provide vague or seemingly un-provable environmental claims for their offering:	1 = Strongly disagree; 7 = Strongly agree		
·Most companies overstate or exaggerate the environmental features of their offerings:	1 = Strongly disagree; 7 = Strongly agree		
Control variables			
<u>Level of shopping engagement:</u>			
·Going shopping is truly a joy:	1 = Strongly disagree; 7 = Strongly agree	Haas & Kenning (2014)	0.861
·I enjoy going shopping for its own sake, not just for the items I may purchase:	1 = Strongly disagree; 7 = Strongly agree		
·I go shopping not because I have to, but because I want to:	1 = Strongly disagree; 7 = Strongly agree		
<u>Likeliness to forgive:</u>			
·Even though H&M's actions hurt me, I still have goodwill for it:	1 = Strongly disagree; 7 = Strongly agree	Boyle et al. (2015)	0.829
·Despite what H&M did, I want us to have a positive relationship again:	1 = Strongly disagree; 7 = Strongly agree		
·I forgive H&M for what it did:	1 = Strongly disagree; 7 = Strongly agree		

Appendix 5

Pre-test Survey

Hi and welcome to a survey that will form the basis of our bachelor thesis at the Stockholm School of Economics!

In this study, you will be exposed to information about the fashion retailer H&M. H&M is a global fashion retailer with a wide assortment of garments. After seeing the information about H&M, you will be asked to answer several questions.

All responses will be treated anonymously. No answers are right or wrong, so please respond to the questions based on your own opinions. The survey will take approximately 5 minutes to fill in and it is important that you focus on the survey while you complete it. Please be aware that the survey features attention checks to ensure that you have read the questions.

If you have any questions about the questionnaire or the study, please do not hesitate to contact us. Thank you for participating!

Ana Desnica (50689@student.hhs.se) & Sara Hawat (50657@student.hhs.se)

I have taken part of the terms provided above and consent to take part in this study:

- ☐ Yes, I consent to participate in this study
- ☐ No, I do not consent to participate in this study

Please read the following text and follow the below instructions:

Sustainability is a normative concept that stresses intergenerational equity and is commonly considered to have three dimensions (also called pillars): the environmental, economic and social dimension. The concept can be used to guide decisions at all scales: at the global, national and individual consumer level scale. A closely related and overlapping concept is that of sustainable development. Both terms are often used synonymously.

Q1

Now, please select the option **Other** below and type the word "dog" in the blank box:

- ☐ Technology
- ☐ Sustainability
- ☐ Economics
- ☐ Astrology
- ☐ Other:

On the next pages, you will see three different advertisements. Please look at each advertisement carefully and answer the questions. It is vital for our study that you pay close attention to the different advertisements.

The presentation of the three marketing efforts:

- Bragging marketing advertisement (Treatment 1) - Stimuli 1

Q2

After seeing the advertisement, how do you perceive the ad message/the firm's communication?

I perceive it as:

1 = Not humble at all

7 = Very humble

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Not bragging at all

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Very humble

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

- Humble marketing advertisement (Treatment 2) - Stimuli 2

Q3

After seeing the advertisement, how do you perceive the ad message/the firm's communication?

I perceive it as:

1 = Not humble at all

7 = Very humble

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Not bragging at all

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Very humble

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

○ Non-green marketing advertisement (Control treatment) - Stimuli 3

Q4

After seeing the advertisement, how do you perceive the ad message/the firm's communication?

I perceive it as:

1 = Not humble at all

7 = Very humble

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Not bragging at all

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive it as:

1 = Very humble

7 = Very bragging

☐ ☐ ☐ ☐ ☐ ☐ ☐

You will now be shown a newspaper article, please read it carefully and keep it in mind when answering questions later on.

- Greenwashing scandal is revealed through the news article

Q5

After reading the newspaper article, to what extent do you perceive the actions described in the article as a greenwashing scandal?

1 = Not a greenwashing
scandal at all

7 = Clearly a greenwashing
scandal

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q6

To what extent do you agree with the following statements:

I would say that the newspaper article I just saw can be classified as a corporate misconduct involving the H&M brand:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I perceive the situation presented in the newspaper article I just saw to be a corporate fraud committed by H&M:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q7

How realistic do you perceive the newspaper article to be?

I perceive it as:

1 = Very unrealistic

7 = Very realistic

☐ ☐ ☐ ☐ ☐ ☐ ☐

Please take a moment and think back to the newspaper article that you just read. Now, answer the following questions with that in mind.

Q8

Please answer the following question:

What is $9 + 4$ equal to?

- ☐ 12
- ☐ 65
- ☐ 13
- ☐ 27

Q9

Gender:

- ☐ Male
- ☐ Female
- ☐ Other

Q10

Age (e.g. 22): _____

Country of residence:

- ☐ Sweden
- ☐ Outside of Sweden:

Q11

Current occupation in life:

- ☐ Student
- ☐ Employed
- ☐ Retired
- ☐ Unemployed
- ☐ Other

Q12

What was this survey about?

- ☐ ZARA
- ☐ H&M
- ☐ MONKI
- ☐ UNIQLO

This was the end of the survey. Thank you for your participation! The purpose of this questionnaire was to examine whether there is an effect on customers' brand attitude and purchase intention regarding a specific brand after a misconduct occurs involving the previously mentioned brand and if the level of the effect differs depending on the marketing efforts used by the brand prior to the misconduct. We also investigate whether this can be moderated by sustainability attitude and overall customer skepticism towards the company's green marketing efforts. Note that both the advertisement and the newspaper article that were presented to you in this survey were fictional. Please demonstrate that you have understood this by answering the following question.

I have understood that the survey that I just partook in portrayed a completely fictional situation:

- ☐ Yes
- ☐ No

If you have any questions or feedback, you are welcome to contact:

Ana Desnica (50689@student.hhs.se) & Sara Hawat (50657@student.hhs.se)

Appendix 6

Main-study Survey

Hi and welcome to a survey that will form the basis of our bachelor thesis at the Stockholm School of Economics!

In this study, you will be exposed to information about the fashion retailer H&M. H&M is a global fashion retailer with a wide assortment of garments. After seeing the information about H&M, you will be asked to answer several questions.

All responses will be treated anonymously. No answers are right or wrong, so please respond to the questions based on your own opinions. The survey will take approximately 5 minutes to fill in and it is important that you focus on the survey while you complete it. Please be aware that the survey features attention checks to ensure that you have read the questions.

If you have any questions about the questionnaire or the study, please do not hesitate to contact us. Thank you for participating!

Ana Desnica (50689@student.hhs.se) & Sara Hawat (50657@student.hhs.se)

I have taken part of the terms provided above and consent to take part in this study:

- ☐ Yes, I consent to participate in this study
- ☐ No, I do not consent to participate in this study

Please read the following text and follow the below instructions:

Sustainability is a normative concept that stresses intergenerational equity and is commonly considered to have three dimensions (also called pillars): the environmental, economic and social dimension. The concept can be used to guide decisions at all scales: at the global, national and individual consumer level scale. A closely related and overlapping concept is that of sustainable development. Both terms are often used synonymously.

Q1

Now, please select the option Other below and type the word "dog" in the blank box:

- ☐ Technology
- ☐ Sustainability
- ☐ Economics
- ☐ Astrology
- ☐ Other:

Q2

Please answer the following questions:

How do you view H&M?

1 = Bad

7 = Good

☐ ☐ ☐ ☐ ☐ ☐ ☐

How do you view H&M?

1 = Negative

7 = Positive

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent do you like H&M?

1 = Dislike it

7 = Like it

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q3

Please answer the following statements:

I intend to purchase apparel from the H&M brand in the future:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I would consider buying the H&M brand next time when I need apparel items:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I will try to buy apparel items from the H&M company:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I would prefer purchasing apparel from H&M rather than any other brand available:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

You will now be shown a marketing advertisement, please pay attention to it and keep it in mind when answering questions later on.

- Random allocation to one of the three marketing efforts (bragging, humble or control)

You will now be shown a newspaper article, please read it carefully and keep it in mind when answering questions later on.

- Greenwashing scandal is revealed through the news article

Please take a moment and think back to the newspaper article that you just read. Now, answer the following questions with that in mind.

Q4

Please answer the following questions:

How do you view H&M?

1 = Bad

7 = Good

☐ ☐ ☐ ☐ ☐ ☐ ☐

How do you view H&M?

1 = Negative

7 = Positive

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent do you like H&M?

1 = Dislike it

7 = Like it

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q5

Please answer the following statements:

I intend to purchase apparel from the H&M brand in the future:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I would consider buying the H&M brand next time when I need apparel items:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I will try to buy apparel items from the H&M company:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I would prefer purchasing apparel from H&M rather than any other brand available:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q6

To what extent do you agree with the following statements (keep in mind the greenwashing scandal that was just revealed to you)

Even though H&M's actions hurt me, I still have goodwill for it:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Despite what H&M did, I want us to have a positive relationship again:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I forgive H&M for what it did:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q7

Please answer the following question:

What is $9 + 4$ equal to?

- ☐ 12
- ☐ 65
- ☐ 13
- ☐ 27

Q8

To what extent do you agree with the following statements:

I am concerned about environmental issues:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I think too little attention is given to environmental issues:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I think that environmental issues are important:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent do you dislike/like the idea of environmental protection?

1 = I dislike it

7 = I like it

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q9

To what extent do you agree with the following statements:

Information conveyed in brands' green advertising is credible:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Information conveyed in brands' green advertising is reliable:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

How skeptical are you to green claims made by companies?

1 = Not skeptical at all

7 = Very skeptical

☐ ☐ ☐ ☐ ☐ ☐ ☐

I believe my trust is decreasing towards products and companies that are labeling their green efforts:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Most companies mislead with words about the environmental features of their offerings:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Most companies provide vague or seemingly un-provable environmental claims for their offerings:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Most companies overstate or exaggerate the environmental features of their offerings:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q10

To what extent do you agree with the following statements:

Going shopping is truly a joy:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I enjoy going shopping for its own sake, not just for the items I may purchase:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I go shopping not because I have to, but because I want to:

1 = Strongly disagree

7 = Strongly agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

Q11

How much do you spend on average when shopping at H&M?

- ☐ < 300 SEK
- ☐ 300 SEK to 600 SEK
- ☐ 601 SEK to 1000 SEK
- ☐ 1001 SEK to 2000 SEK
- ☐ > 2000 SEK

Q12

What was this survey about?

- ☐ Transport industry
- ☐ Finance industry
- ☐ Fashion industry

Q13

Gender:

- ☐ Male
- ☐ Female
- ☐ Other

Q14

Age (e.g. 22): _____

Q15**Country of residence:**

- ☐ Sweden
 - ☐ Outside of Sweden:
-

Q16**Current occupation in life:**

- ☐ Student
- ☐ Employed
- ☐ Retired
- ☐ Unemployed
- ☐ Other

Q17**What was this survey about?**

- ☐ ZARA
- ☐ H&M
- ☐ MONKI
- ☐ UNIQLO

This was the end of the survey. Thank you for your participation! The purpose of this questionnaire was to examine whether there is an effect on customers' brand attitude and purchase intention regarding a specific brand after a misconduct occurs involving the previously mentioned brand and if the level of the effect differs depending on the marketing efforts used by the brand prior to the misconduct. We also investigate whether this can be moderated by sustainability attitude and overall customer skepticism towards the company's green marketing efforts. Note that both the advertisement and the newspaper article that were presented to you in this survey were fictional. Please demonstrate that you have understood this by answering the following question.

I have understood that the survey that I just partook in portrayed a completely fictional situation:

☐ Yes

☐ No

If you have any questions or feedback, you are welcome to contact:

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