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Greenwashing:

a marketing strategy and its effects

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Introduction

In the last few years there has been an increasing concern for environmental issues. People's interest and knowledge in sustainability has risen and sustainable products are becoming more and more popular. Throughout the last few years many people have started to become more eco-consciousness. This has led to a shift in their buying behaviors. The aim of these people is to reduce the impact that their consumption habits have on the planet, and they try to achieve this by following a more environment-friendly consumption behavior; which is called green consumption. This increase in the consumption of green products and services has encouraged the adoption and communication of environmental practices in many organizations. In today's competitive scenario the environmental commitment from companies has become an important variable – to survive competition a company has to adjust its vision and mission in order to match the needs of the market. In fact, nowadays companies cannot concentrate exclusively on profits. A good and social environmental performance is fundamental. This is often referred to as "the triple-bottom line" or "people, plant, profit". In 1991 Carroll summarized these expectations in a four-layered "pyramid of social responsibilities". At the base of which are the economic responsibilities; these directly affect an organization's viability. On the next layer we find legal responsibilities; organizations are expected to comply with laws and regulations. The following layer is represented by ethical responsibilities; these are those behaviors that are seen as right and just but are not codified by laws and regulations. In the highest layer of this pyramid we find philanthropic responsibilities; this involves making additional contributions to society. It is in this context that companies have expressed an increasing interest in Corporate Social Responsibility (CSR). Organizations have come to realize that "doing good" can be beneficial for business. In fact, research have shown that CSR initiatives can positively affect corporate reputation, purchase intentions and consumer loyalty. Research also emphasizes the value of a solid and positive CSR tradition as a buffer in times of crises (Delmas, Cuerel Burbano 2011: 65). So, engaging in CSR policies can bring potential benefits for companies.

While many companies use green advertisements in order to communicate sincere efforts towards sustainability and eco-consciousness, some companies use advertisements to overstate or falsify the minimization of the environmental impact of their offerings (Naderer, Schmuch, Matthes 2017: 105). This practice is known has greenwashing. In this context of increasing environmental consciousness the companies that carry out greenwashing strategies are increasing. Several different studies show that this is a widespread phenomenon. In 2007, 2009, 2010 a Canadian-based environmental marketing agency called TerraChoice conducted a series of studies in different countries. These studies tasted a large number of products which presented some forms of green claims. The results showed that green marketing strategies are increasingly popular and that a vast majority of the green

claims that were made were in reality misleading. In fact, in 2010 TerraChoice analyzed more than 1000 self-described green or eco-friendly products, the agency found that all but one of these products exhibited some form of greenwashing.

With the increasing use of greenwashing it is fundamental that we learn more and more about this phenomenon. In this way we can better understand it and find a way to reduce the impact it has and its overall usage. Throughout this thesis we will be doing precisely this, we will be trying to better understand this marketing strategy. We will do so by first analyzing the meaning of the term and the incentives that companies have in adopting such strategy. After this we will take a look at various research, which focus on the effects of greenwashing, and their results. After which we will try to explain such results through the use of certain theories, heuristics and bias. In conclusion we will then be looking at the limitations the different research on the topic have.

What is greenwashing

Origin of the term

The term "greenwashing" was first used in 1986 by Jay Westervelt in one of his term papers. He wrote "it all comes out in the greenwash" referring to his experience a few years prior in a resort in Fiji. In fact, in 1983 he had gone to Fiji and the resort he was staying in invited all guests to reuse all towels as much as possible. The resort claimed to be adopting this new policy in order to reduce the ecological damage that washing towels everyday would have on the oceans and reefs of Fiji. So the resort claimed the aim of the new policy was to protect the island's ecosystem; while in reality it simply wanted to reduce its expenses. In fact, during the same period the resort was expanding and destroying land of the island. Westervelt was then asked, from a classmate of his, that worked at a literary magazine, to write an essay on such matter and on the concept of greenwashing. This magazine had a large readership in New York City and thanks to this the term started to gain popularity; which increased after the oil scandals of the 1990s (Planet-Friendly Living 2020).

Definition

In early research the concept of greenwashing was considered to be more or less straightforward; in fact it was seen as intentional communicative behavior aimed at deceiving stakeholders and consumers. So, greenwashing was labeled as "corporate disinformation" (Lauffer. 2003; Ramus and Montiel, 2005) and it was characterized as organizations combining bad environmental performance with positive claims about their environmental achievements. This idea of greenwashing has been deemed problematic by various authors (De Jong, Huluba, Beldad 2020: 41). In 2014 Bowen stated that the intentionality suggested by the original definitions is indeed problematic; she argued that greenwashing involves more than just information disclosure, it is often not deliberate, not necessarily initiated by companies and does not necessarily benefit companies and harm society. Bowen's statement is in line with the finding of different research. In fact, some studies suggest that deceit is only one part of the picture. Furthermore, some research view CSR as an aspirational talk; this notion suggests that the discrepancies between CSR communication and the actual behavior of organizations might have an aspirational function that might lead to actual organizational change. This is also in line with the idea carried out by Seele and Gatti in 2017. They suggest that greenwashing accusations might be based on unrealistic expectations or miscommunication for which the organization cannot be held responsible (De Jong, Huluba, Beldad 2020: 42). In addition to this, in their opinion, regardless of the level of deception of the green claim, greenwashing only exists

when a company is blamed by a third-party: "no accusation, no greenwashing". So, for a claim to be considered as greenwashing, it must combine both falsity and an accusation from a third-party. Furthermore, other researchers suggest that the more or less straightforward and defined concept of greenwashing mentioned in early research does not take into consideration its multidisciplinary character (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020). In fact, according to Lyon and Montgomery (2015) the concept of greenwashing represents an umbrella term under which fall a wide variety of potentially misleading behaviors. In their own words "given our broad conception of greenwash, any major mechanism of misleading communications can be a variety of greenwash if applied to environmental communications" (De Jong, Huluba, Beldad 2020: 42). Some scholars define the term as "the intentional misrepresentation of a firm's environmental efforts or the lack thereof" (Eng, Di Russo, Troy, Freeman, Liao, Sun 2021: 1601). Others say that greenwashing suggests that these companies try to reap the benefits of green positioning without behaving accordingly (De Jong, Huluba, Beldad 2020: 39). Greenpeace defines greenwashing as "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service" (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013: 1601). Several different researchers define greenwashing as selective disclosure. In this case companies carry out two different behaviors simultaneously. On the one hand these greenwashing companies retain the disclosure of negative information related to their company's environmental performance, while on the other hand they expose positive information regarding their environmental performance (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020: 6). TerraChioce defines greenwashing as "the act of misleading consumers regarding the environmental practices or performance of a company and positive communication about environmental performance"; and Delmas and Burbano define greenwashing as "poor environmental performance and positive communication about environmental performance". Other researchers associate greenwashing to a decoupling behavior. For example Siano relates greenwashing with symbolic actions which "tend to deflect attention to minor issues or lead to create 'great talk' through statements aimed at satisfying stakeholder requirements in terms of sustainability but without any concrete action". Some researchers also link greenwashing to corporate legitimacy theory. In this case, one can distinguish between three types of corporate legitimacy. The first one is cognitive legitimacy, which is based on the shared taken-for-granted assumptions of an organization's societal environment. The second type is moral legitimacy which relies on moral judgements about the organization and its behavior. The last type is pragmatic legitimacy, which is "the result of self-interested calculations of the organization's key stakeholders, and it is based on stakeholder's perceptions of their personal benefit deriving from corporate activities and communication".

As previously stated, and as one can see, there is no clear definition of greenwashing. Despite this, most of the definitions present some common characteristics. So, as mentioned by Lyon and Montgomery, greenwashing can be considered as an umbrella term, underneath which different forms of misleading communications applied to environmental topics fall. In order to better understand and define what greenwashing is some researchers have identified different forms and types of such practice.

Types

Greenpeace has identified four different forms of greenwashing. The first type is "dirty business", this is when firms show some green steps, but their overall production is unsustainable; we then have "ad bluster", this is when companies exaggerate green claims in marketing communication and spend more money on advertising than on real green actions. The third form is "political spin", this is linked to the hidden lobby against stricter environmental regulation. While the fourth form is when firms communicate their environmental actions as virtues although they are only fulfilling their legal requirements.

Furthermore, De Jong, Huluba and Beldad in their study distinguish between behavioral-claim greenwashing and motive greenwashing. Behavioral-claim greenwashing is when there is a discrepancy between the environmental claims and the environmental behavior of a company. In this case it is important to make a distinction between organizations that tell the truth, those that tell half-lies and those that lie. On the other hand, motive greenwashing is when an organization presents a discrepancy between communicated and real motives for environmentally friendly behavior, and even in this case a distinction has to be made between organizations that act green on their own initiative and those that take credit for simply complying with legal environmental obligations (De Jong, Huluba, Beldad 2020: 40).

Delmas and Burbano distinguish between greenwashing at a firm-level, that is "the act of misleading consumers regarding the environmental practices of an organization", and greenwashing at a product/service-level, which is "the act of misleading consumers regarding the environmental benefits of a product or service". At both levels one can encounter claim greenwashing and executional greenwashing. This is probably the most important distinction. Claim greenwashing uses "textual arguments that explicitly or implicitly refer to the ecological benefits of a product or service to create a misleading environmental claim" (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020). In 1991 Kangun, Carlson and Grove distinguished three categories of claim greenwashing advertising. The first category is those advertisements that employ false claims, so that present a straight out lie. In the second category one can find those advertisements that omit important

information, which could help evaluate the sincerity of the claim, so lying by omission. The third and last category presents those advertisements that employee vague or ambiguous terms, so lying through lack of clarity. Furthermore, another study, conducted by Carlson et al., distinguished between two typologies of green claims: claim type and claim deceptiveness. Claim type involves five other typological categories: product orientation, process orientation, image orientation, environmental fact and combination. Product orientation claims center on the ecological attribute of a product. Process orientation claims center on the ecological high performance of a production process technique and/or an ecological disposal method; image orientation claims center on boosting the eco-friendly image of an organization. While environmental fact claims involve an independent statement that is seemingly factual in nature from an organization about the environment at large, or its condition and combination claim present two or more of the above-mentioned categories. These five typological categories of claim type can be classified in a second typology, claim deceptiveness, which also involves five other typological categories. Vague/ambiguous claims, that are overly ambiguous, too broad and/or lack a clear definition; omission claims that miss the necessary information to evaluate its validity; false/outright lie claims that are inaccurate or a fabrication; combination claims that present two or more of the above-mentioned categories; and finally acceptable claims that do not contain a deceptive feature. To better understand claim greenwashing and the ways in which companies can mislead consumers, TerraChoice created a classification called "the seven sins of greenwashing" (2010). It is important to underline that these seven sins refer to product-level claim greenwashing.

1. The sin of the hidden trade-off: "a claim suggesting that a product is 'green' based on a narrow set of attributes without attention to other important environmental issues

2. The sin of no proof: "an environmental claim that cannot be substantiated by easily accessible supporting information or by a reliable third-party certification"

3. The sin of vagueness: "a claim that is poorly defined or to broad, a claim lacking in specifics that its real meaning is inclined to be misunderstood by the consumer"

4. The sin of worshipping false labels: "a product that, through a false suggestion or certification-like image, mislead consumers into thinking that it has been through a legitimate green certification process"

5. The sin of irrelevance: "an environmental claim that may be truthful but is unimportant or unhelpful for consumers seeking environmentally preferable products"

6. The sin of lesser of two evils: "a claim that may be true within the product category, but that risks distracting the consumer from the greater environmental impacts of the category as a whole"

7. The sin of fibbing: "environmental claims that are simply false"

The distinction between claim greenwashing and executional greenwashing was made in 2015 by Parguel, Benoit-Moreay and Russell. In this second form greenness is not explicitly claimed, like in claim greenwashing. In fact, greenness is suggested by peripheral cues such as imagery that evoke nature. Executional greenwashing is defined as "the practice of presenting so-called, nature-evoking elements in association with a product that is not factually eco-conscious". Some examples used in this form of greenwashing are particular colors, like green or blue; sounds, sea or birds; backgrounds representing natural landscapes, like mountains, forests or pictures of endangered animal species, or renewable sources of energy, like wind and waterfalls. These nature-evoking elements may induce false perceptions of a brand's greenness without having to refer to its actual sustainable product or service features. The effect of this nature-evoking images is even stronger if paired with green catchphrases and catchwords, such as "natural" or "go green". According to Hartmann and Apaolaza-Ibanez these elements can "trigger ecological inferences subtly by activating implicit references to nature through nature imagery".

Why greenwashing? – drivers and incentives

There are several different reasons behind a company's decision to carry out greenwashing practices. Research have shown that organizations are incentivized by both external and internal drivers. External drivers might include scarce regulations on greenwashing, pressure from both consumers and investors and competitor-induced incentives. When it comes to greenwashing regulations, there are no international industry-wide laws that regulate green promotion (Naderer, Schmuch, Matthes 2017) and in addition to this many countries, including most developing countries, do not present any type of regulation on environmental claims. Furthermore, in those countries that do present some sort of regulations, which are limited and barely implemented, regulatory standards vary depending on the country. In addition to this lack of regulation, companies are now facing increasing pressure from both consumers and investors to be more eco-friendly. This is due to the increase in consumers' demand for environmentally friendly products. So, in order to consolidate themselves in the market these brown companies start being more vocal about their environmental performances, and as a consequence they start carrying out greenwashing practices. Another reason beyond a company's choice of greenwashing is the competitor-induced incentives. When green practices start to become more and more common within a group of competing companies, brown firms within the group are also more likely to positively communicate about their environmental practices and as a consequence carry out greenwashing. This is because these companies fear falling behind their competitors who have already begun to communicate about their supposed green practices. In addition to these external

drivers, greenwashing is also the result of some internal drivers, which might include firm characteristics, organizational inertia and individual-level psychological drivers. Firm-level characteristics, such as size, industry, profitability, and particular resources and competences, influence the strategies available to a firm, the costs and benefits which are associated to any particular action, and the degree to which a firm experiences external pressures. For example consumer products firms are more likely to face higher consumer pressure to be environmentally friendly in comparison to non-consumer products industries and service firms. Moreover, large, publicly traded firms tend to face higher levels of investor pressure in comparison to smaller, private firms. In addition consumer products firms are more likely to be subject to product-level regulation and to be targets of campaigns against greenwashing. Also companies that belong to industries renowned for poor environmental performance, such as oil industries for example, are more likely to be targeted by activists and NGOs. In addition to this higher-profitable firms, which present higher margins are better able to withstand bottom-line shocks from reputational damage if being caught for greenwashing and can easily incur fines, unlike less-profitable firms with lower margins. Another important factor that influences greenwashing choices is organizational inertia, which is "the strong persistence of existing form and function that underlies and hampers strategic change" (Delmas, Cuerel Burbano 2011: 74). So, organizational inertia is more likely to occur in larger, older firms in respect to smaller, newer firms. This phenomenon can explain the gap between a manager's declaration of green intent and the implementation of this intent, or between CEO's declaration of commitment to greening the company and the actual alteration of structure and processes to truly making the company more sustainable.

Finally, another important variable that helps explain why companies carry out greenwashing are individual-level psychological drivers. In fact, behind every company there are leaders and individuals that make the final decisions, which might be taken in a context of uncertainty and imperfect information. As a consequence of this these leaders might be subject to certain psychological drivers, such as narrow decision framing, hyperbolic intertemporal discounting, and optimistic bias. Narrow decision framing is the tendency to make decisions in isolation. In this case leaders might decide today to communicate about the greenness of a product or of the firm without adequately considering what will actually be required in order to implement such actions in the future. Leader might also solely focus on the short-term gains from greenwashing without adequately weighing the long-term potential effects on loss of reputation. Furthermore, when it comes to discount functions psychologists have found that they are to be considered hyperbolic. This means that they are characterized by a relatively high discount rate, that is impatient, over short horizons and a relatively low discount rate, which is patient, over long horizons. This generates what is known as

dynamic inconsistency. To better understand this phenomenon let us look at the behavior of certain consumers; which exhibit a gap between their long-run goals and their short-run behavior. So, for example they will not achieve their savings goal due to their short-run preferences for instantaneous gratification. When a firm has to make a decision on whether or not to communicate about their environmental performance, the leader might choose to actively communicate about their environmental sustainability and social responsibility with the intention of bearing the costs of implementing green practices in the future. Then when this future comes the leader once again acts impatiently and rechooses greenwashing. Lastly, optimistic bias is the tendency to over-estimate the likelihood of positive events and to under-estimate the likelihood of negative events. In this case company leaders over-estimate the likelihood of the positive results of greenwashing, that is gaining green market share and attracting capital from investors. At the same time they under-estimate the likelihood of negative events resulting from greenwashing, which might include being caught by law enforcement, facing consumer litigation or receiving negative media or NGO's scrutiny.

Some examples

Due to the large usage of greenwashing practices, it is impossible to list all the examples of this phenomenon. In fact, as we have seen there are innumerable companies that carry out greenwashing, and in their everyday life a consumer can encounter countless examples of this. In 2019 the fast-food chain McDonald's introduced paper straws, which then turned out to be non-recyclable. In addition to this, the company was also found to be unethically cutting down trees in order to make these disposable straws (Peel-Yates 2021). Another example is the American multinational General Electric Company, which highlighted the work it was doing in the environmental arena in its EcoImagination campaign. At the same time, in 2000, the company went as far as the Supreme Court to fight the new clean air EPA requirements. In addition to this, the company is still fighting, to this day, the EPA-ordered cleanup of the Hudson River where it dumped PCBs (Polychlorinated biphenyls, a highly toxic product) between 1940 and 1977 (Furlow: 2). Furthermore, a perfect example of greenwashing is the fast fashion industry. According to Earth.org this term refers "to a large sector of the fashion industry whose business model relies on cheap and speedy production of low-quality clothing, which gets pumped quickly through stores in order to meet the latest and newest trends". Why is this industry so bad? First of all 92 million tons of textile waste is estimated to being produced every year; on top of this the fast fashion industry is estimated to account for nearly 10% of global carbon emissions, which is double the aviation and shipping sectors combined. According to the UN Environment Program this industry accounts for nearly 20% of global wastewater. Despite these negative data, many fast fashion brands are increasingly making green and sustainable claims.

In 2021 Changing Markets Foundation carried out a report on these claims and found that approximately 60% were misleading. In particular, the report found that 96% of the green and sustainable claims made by H&M did not hold up.

Other important definitions for the following work

Corporate Social Responsibility (CSR) can be defined as "the relation between major economic actors and society at large, in the light of the general principles of justice, equality, responsibility and reciprocity". One of the main goals of CSR is *sustainable development*, which can be defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020: 2). There are three motives for CSR policies and activities: to contribute to society, to generate financial benefits, or to meet social expectations and alleviate stakeholder pressures. Usually companies carry out CSR policies as a consequence of the combination of these three motives. Within CSR one can find *green marketing*, which is considered and viewed as the best strategy to respond to the markets' needs and wants. That is, an increase in consumers' interest for environmentally friendly products (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013: 1599). According to Dangelico and Vocalelli (2017) green marketing is "part of a strategic framework and it relates to the commitment and long-term investment in environmental practices and strategies" and according to Polonsky (1994) green marketing "comprises a set of activities that pursue satisfying the consumers' needs and wishes, but with the smallest environmental impact possible". In 2010 Papadopoulos stated that the creation of green marketing strategies is a difficult process due to the lack of environmental knowledge consumers have and the low trust they hold in companies when it comes to the protection of the environment (Mangini, Amaral, Conejero, Pires 2020: 231). In order to show consumers the company's commitment to CSR policies and activities many engage in *green advertisements*, which is used to "describe all commercial messages that promote environmental sustainability or convey ecological messages that target the needs of eco-conscious customers, regulators and other stakeholders" (Naderer, Schmuch, Matthes 2017: 105).

As we will see the following chapter of this paper greenwashing has effects on green consumer confusion, perceived risk and trust. *Green consumer confusion* was defined by Mitchell and Papavassiliou in 1999 as "a state of mind that affects information processing and decision-making to that the consumer may or may not be aware of being confused" (Eng, Di Russo, Troy, Freeman, Liao, Sun 2021: 1602). In 2005 Mitchell, Walsh and Yamin categorized three types of green consumer confusion:

I. unclarity confusion, which is defined as a lack of understanding in which consumers are forced to re-evaluate their current beliefs about a product

II. similarity confusion, this represents the potential alteration of a consumer's choice, or an incorrect brand evaluation caused by a perceived physical similarity of products or services

III. overload confusion, this is caused by a too much decision-relevant information regarding the choice of brands. In fact, with a vast quantity of information available it might be difficult for consumers to focus on the vital points.

In the opinion of Peter and Ryan (1976) *perceived risk* is connected with the possible consequences of a wrong decisions and in 2004 Assael identified different types of perceived risk:

I. financial risk, that is a function of the cost of a product relative to the consumer's disposable income

II. social risk, that is the failure of the purchase to meet the standards of an important reference group

III. psychological risk, the loss of self-esteem when the consumer recognizes that they made an error

IV. performance risk, the possibility that the purchased product will not function as anticipated

V. physical risk, the possibility of being physically harmed as result of product performance (Eng, Di Russo, Troy, Freeman, Liao, Sun 2021: 1605).

In 1998 Rousseau defines *trust* as "the intention of accepting something based on positive behavior expectations or intentions of the second part of the commercial involvement".

The effects of greenwashing

When analyzing the research that has been carried out on greenwashing and on its effects one can make a distinction between macrolevel and microlevel studies. The latter can be divided in survey-based studies and in experimental studies. Macrolevel studies focus on the relationship between companies' greenwashing practices and their overall financial performance. While microlevel studies focus on the effects that the use of greenwashing practices has on consumers.

Macro-level studies

Macro-level studies suggest that greenwashing does not have positive effects and might even have negative effects on companies' overall performance. In 2012 Walker and Wan investigated the financial implications of greenwashing and substantive actions for Canadian firms in polluting industries and found that substantive action has neither positive nor negative financial implications. So, their study suggests that environmental performance is unrelated to financial performance indicators. They also found that greenwashing is negatively related to financial performance. In 2013 Wu and Shen carried out a study on banks in 22 countries and found that there was a positive relation between CSR and financial performance, but not for those banks practicing greenwashing. Furthermore, in 2015 Du analyzed the Chinese stock market and found that greenwashing has a negative relationship with companies' cumulative abnormal returns (CAR), while corporate environmental performance has a significantly positive relationship with CAR. So, his study suggests that environmental performance is positively related to financial performance indicators, while greenwashing is negatively related to financial performance. In 2017 Berrone, Fosfuri and Gelabert carried out a macro-level study in which they used environmental legitimacy as the dependent variable in their study and came to conclusions that were similar to the above-mentioned studies. They also stated that "especially in the presence of vigilant environmental NGOs, such environmental tactics do not seem to pay off".

Survey-based studies

Survey-based studies focus on the correlation between perceived greenwashing practices and consumers attitudes. These studies have shown that discovered greenwashing practices are related to negative attitudes in consumers.

In 2013 Lim, Ting, Bonaventure, Sendiawan and Tanusina carried out in-depth interviews exploring consumers' reactions to green claims and the effects when they realized that the claims involved greenwashing. They found that consumers are often uncertain about green claims, in fact, the

participants had trouble evaluating the actual greenness behind the green claims. From the participants' answer it was clear that they were unsure about the green offerings they purchase and that they have little knowledge about the actual greenness of the offerings. When confronted with greenwashing and having had the opportunity to reflect and recall on past green purchase experiences, the participants presented strong reactions of distrust and cautiousness towards, both the product in question and green products more in general. This sense of distrust towards green products, developed after having realized the existence of greenwashing, will affect consumers' future purchase behavior and social influences. Some participants stated that they will no longer be buying green products, since they did not trust such products anymore. While others stated that they will be more cautious when purchasing green products by seeking further information. It was also found that consumers' exposure to the existence of greenwashing will bring more negative influence on other consumers. This because many of these consumers are determined to let other consumers know about the greenwashing practices that are used in the market.

In the same year Chen and Chang studied the relationship between perceived greenwashing and different outcome variables. In this case, participants were asked to answer some questions while thinking of a self-selected "information and electronics product" of a Taiwanese firm. Their study focused on the effects that greenwashing has on consumer confusion, green perceived risk, and green trust. They were able to find that greenwashing is negatively related to green trust, this is both directly and through green consumer confusion and green perceived risk. In fact, the results show that greenwashing is positively associated with green consumer confusion and green perceived risk, these two variables in turn have a negative effect on green trust. In the following year, that is 2014, Chen, Lin and Chang carried out another study with the same setting of Chen and Chang's one. In this case, they focused on the effects that greenwashing has on green perceived quality, green satisfaction and green word of mouth. This last term, green word of mouth, refers to "the extent of to which a customer would infer friends, relatives, and colleagues about positive environmental messages of a product or a brand" (Soderlund 1998). In their study they showed that perceived greenwashing is negatively related to green word of mouth, this is both directly and through green perceived quality and green satisfaction. In fact, the results show that greenwashing negatively affects both green perceived quality and green satisfaction, which are both positively associated with green word of mouth.

In 2014 Atkinson and Kim found that consumers' reactions to greenwashing claims were much less straightforward. In fact, the participants, who were divided in focus groups, used various rationalization techniques in order to balance their skepticism with their acceptance of green claims, and their green intentions with their nongreen behaviors. In 2015 Aji and Sutikno conducted a study analyzing relations between greenwashing and five other variables. They took into consideration the

four variables analyzed by Chen and Chang in 2013 and also included perceived consumer skepticism (PCS) and the problem of switching intention. The study was carried out in Indonesia and all the participants selected for the sample presented a basic knowledge of green products and green advertising. The data showed that five out of the six variables presented positive correlations – greenwashing, green consumer confusion, perceived consumer skepticism, green perceived risk, and switching intention. On the other hand, it was found that green trust had negative correlation with all five other variables. The results showed that an increase in greenwashing causes an increase in consumer confusion, skepticism, and perceived risk relating to the environment and the consumers' green image. Furthermore, they found an insignificant effect between green consumer confusion and green trust. In contrast with the results of Chen and Chang they found "an insignificant path estimation between green consumer confusion and green trust". The data of the study also showed that negative effects of green perceived risk are associated on green trust. So, the more skepticism that consumers perceive, the lower their level of trust in the green product. Another finding of the study is the fact that switching intention does not have a significant direct relationship to green consumer confusion, perceived customer skepticism, and green perceived risk. From this it can be inferred that consumers do not easily decide to switch to non-green products. It is important to say that these three variables – green consumer confusion, perceived customer skepticism, and green perceived risk - had a significant relationship to green trust, so it could be implied that green trust mediated the link between these three variables to switching intention.

Experimental studies

Experimental studies compare the effects of greenwashing and non-greenwashing practices. In these types of research participants are confronted with companies' communication including green claims and with additional information about the actual environmental performance about the company, which is provided by a third party. In these studies it was found that greenwashing negatively affected consumers' perceptions of the greenhouse of a company, this varied between merely reducing the effects of the green claims to backfiring on the company.

In 1998 Newell, Goldsmith and Banzhaf carried out a study in which they used two variables of the same advertisement, one presented misleading environmental claims while the other did not. They wanted to study the effects of greenwashing on perceived deception, advertiser credibility, and consumers' attitude toward the advertisement. They were able to find significant effects only on perceived deception and advertiser credibility. In fact, they found that the misleading environmental claims led to an increase in perceived deception and a decrease in advertiser credibility. In a structural equation analysis with the independent variable being perceived deception, however, they found

significant negative relationships with the other variables. This finding suggests that those consumers who feel misled by an advertisement think more negatively about the brand and have lower purchase intentions. The results seem to suggest that the relationship between actual greenwashing and perceived deception is not strong, this might be due to consumers' lack of skills in distinguishing true from false green claims.

In 2011 Parguel, Benoit-Moreau and Larceneux investigated the effects of third-party sustainability ratings on consumers' interpretation of sustainability information on a company's website. The study involved three different experimental conditions: good, poor and no rating. While the sustainability information on the company's website remained the same in all conditions. The condition with the poor rating can be seen as a greenwashing position, while the condition with the good rating can be seen as a vocal green position. First, participants were introduced to the company and its product. In order to do so, they were exposed to the website of a fake furniture and home improvement retailer. After this, they were presented with a facsimile newspaper article that contained the company's sustainability rating, this step was skipped in the case of the no-rating condition. Lastly, the participants were presented with the company's website containing sustainability information. The study found that the greenwashing condition led to considerably lower scores on perceived CSR efforts, perceived intrinsic motives and corporate brand evaluation. So, the study suggests that greenwashing might lead to negative effects.

In 2014 Nyilasy, Gangadharbatla and Paladino carried out a study describing an experiment in which the environmental performance (high, low and no information) and green advertising messaging (green, general and no advertisement) of a fictitious chemical company were manipulated. Brand attitude and purchase intentions were the dependent variables. Participants were first exposed to an advertisement, which was either a general corporate advertisement or a green one. Afterwards, they were exposed to independent information on environmental performance. Nyilasy, Gangadharbatla and Paladino claimed to have found that greenwashing strengthens the negative attitudinal effects of a low environmental performance. In their own words "additional information about companies' environmental efforts in advertising decreases consumers' attitudes to advertising and purchase intentions when a company's actual environmental performance is low". So, they concluded that greenwashing has negative effect on consumers. Despite this, their data does not seem to support their claim. In fact, the results of their study show that corporate environmental performance has positive effects on consumers' attitudes and intentions, while green advertising has no significant effects. They did find an interaction effect between environmental performance and green advertising, however this effect appeared to be caused solely by the unrealistic "no advertisement" condition. Moreover, the "no advertisement" condition seemed to strengthen the positive effect of high environmental

performance but did not significantly affect the negative effect of low environmental performance. The results of the study suggest that high environmental performance has a positive effect; that in the absence of environmental performance indicators corporate and environmental advertisements have similar effects; and that greenwashing has no effect on consumer evaluations.

In 2018 De Jong, Harkink, and Barth carried out a randomized experimental study based on a 4 x 2 design. Based on Delmas and Burbano's (2011) typology of environmental strategies of companies, they distinguished between vocal green, silent green, greenwashing and silent brown conditions. They also carried out a distinction between utilitarian and hedonic products. Utilitarian consumption refers to "goal-oriented behaviors, with a strong emphasis on usefulness, functionality, and practicality". In this case, this was represented by a detergent. While a hedonic consumption refers to "pleasure-oriented behaviors, with a strong emphasis on enjoyment and fun (Kim & Kim, 2016). In this case the hedonic product was a unisex perfume. The study was framed as a marketing study, rather than a study on environmental performance. Links to the online questionnaire were published on Facebook and LinkedIn, and they were also distributed via students' networks using snowball sampling. There were 261 original participants, but 11 were excluded from the study. The two products used in the study were fictitious ones, "Proper detergent" and "DewDrops perfume". These two products were introduced to the participants as new products of new companies. For each condition, the participants were presented with three types of product information. First of all, they were introduced to a product advertisement. After that, they were presented with the home page of the company's website. In the case of the vocal green and greenwashing conditions, both the advertisement and home page made explicit environmental claims. Furthermore, all the texts of advertisements and home pages were of comparable size. Finally, the participants received a test report of three competing products, one of which was the product under study. This test report contained price information, an overall score, and a brief review of each product, it resembled those in consumer magazines. In the test report one could also find the environmental performance of the products and companies. The results of the study show that participants recognized that both greenwashing and vocal green companies used environmental claims more than did silent green and silent companies. Furthermore, the results also show that greenwashing has the potential to positively affect consumers' impressions of companies' environmental claims and performance. In fact, the environmental performance of the greenwashing companies was regarded higher in comparison to the silent brown organizations. However, the participants' impression was significantly less positive than their impression of vocal green and silent green companies. So, even when consumers are aware that a company's green information is not entirely true, greenwashing companies, that is companies that explicitly communicate an interest in environmental issues, create a more favorable image than silent brown companies, that is of those

companies that entirely neglect environmental topics. "These results are an important amendment to most of the research on greenwashing, which seems to suggest that greenwashing only has negative consequences. As such, this finding explains the widespread use of greenwashing by organizations because it suggests that they can use greenwashing to manage consumers' impressions of their environmental performance." Furthermore, the results of the study show that greenwashing has a detrimental effect on consumers' views of the communicative integrity of a company. In fact, the greenwashing condition was the only one with a relatively low score on integrity. It seems that consumers have a similar appreciation of companies that communicate about their positive environmental behavior, those that are silent about their positive environmental behavior, and those that consistently neither care nor communicate about the environment. The results have also shown that consumers' purchase interests are not affected by greenwashing. In fact, the results suggest that greenwashing does not contribute to the success of a company. "Only a true commitment to environmental issues that is backed by environmentally friendly behavior will have the desired positive effects on consumers". This is in line with the results of macrolevel studies, which show that greenwashing does not have the same positive relationship with financial performance that a true environmental commitment has. So, on the one hand the results have shown that greenwashing contributes to the perceived environmental performance of a company, but on the other hand this benefit appears to be short-term and does not seem to result in an increase in consumers' purchase interest. Furthermore, greenwashing threatens consumers' perceptions of the communicative integrity of an organization.

Two years later, in 2020 de Jong, Huluba, and Beldad carried out a randomized 3 x 2 online experimental study. The two independent variables were behavioral-claim greenwashing and motive greenwashing. Behavioral-claim greenwashing was operationalized by three situations, that is an organization that told the truth, one that told half-lies, and one that told lies about its environmental performance. Motive greenwashing was operationalized by two different situations, an organization that implemented green behaviors on its own initiative and one that merely took credit for complying with legal requirements. While the three dependent variables were three corporate reputation constructs, more precisely environmental performance, product and service quality, and financial performance. Throughout the study participants answered questions about the company's reputation twice. The first time was after reading the company information, which included its environmental claims. The second time was after reading a third-party message about the veracity of the environmental information. The data of the study supports the idea that, when discovered, behavioral-claim greenwashing has detrimental effects on corporate reputation. So, both telling lies and telling half-lies about ones environmentally friendly behavior seems to have detrimental effects on all of the

three corporate reputation constructs. The originality of this study is the finding that the negative effects of greenwashing also occur in a less severe and less obvious cases of greenwashing. These effects are strongest on environmental performance, but the results have also shown significant effects on the perceived quality of the products and services and on perceived financial performance. Furthermore, results of the study show that if a company is guilty of behavioral-claim greenwashing, motive greenwashing does not increase much the reputational damage. The data also shows that the negative effects of behavioral-claim greenwashing are larger than those of motive greenwashing. In fact, the data shows that behavioral-claim greenwashing has significant negative effects on all the three corporate reputation constructs, but at the same time motive greenwashing have no significant effects. Despite this, results of the study suggest that the effect of motive greenwashing is considerable when a company actually puts the promised environmentally friendly behaviors into practice. So, the data suggests that companies must "first make sure that their behavior is completely in accordance with their environmental communication, and then they must ensure that they are completely honest about their motives". Furthermore, data also shows that there are no differences in the consequences of partial and full behavioral-claim greenwashing on a company's reputation. The results of this research imply that individuals care more about a company's environmental policy deception that the degree to which its claims and actions are misaligned. As a result, partial lies might have the same negative consequences as complete lies.

Contrasting results?

An important survey-based study is the one carried out by Parguel, Benoit-Moreau and Russell in 2015. They studied the effects of executional greenwashing; that is they studied the effects of nature-evoking elements in advertisements. They carried three different studies. The first provides empirical evidence on the effects of executional greenwashing. The second study shows that providing environmental performance indicators (EPI) about a product is not enough to counterbalance the effects of executional greenwashing. The third and last study shows that the use of traffic-light type of labels with the aim of displaying environmental performance information is able to remove the effects of executional greenwashing. In the first study data was collected by web survey. The participants were asked to review the home page of a company's website, which presented a new vehicle constructed by a fictitious car manufacturer called LUNA. Participants were told that "In the context of the launch of the launch of its new vehicle, an international carmaker invites you to complete a questionnaire". In the first phase of the experiment the participants were introduced to the webpage presenting the new vehicle. The participants could stay on this page as long as they wished. In the second phase they completed the online survey. The study followed a 2 (present or absent

advertising executional elements evoking nature) by 2 (expertise and non-expertise about the topic) design. Executional elements evoking nature were introduced on the webpages by manipulating graphics and sound. Some nature-evoking elements included a picture representing a forest, the color green in tinted areas and the auditory diffusion of a birdsong. While, on the other hand, the control condition displayed no picture, that is a white background, and no sound. This design was implemented in order to prevent any distracting associations, in addition it is also a valid design as it is actually used in the car industry. The results show that executional greenwashing affect consumers' perception of a company's ecological image and lead to more positive brand attitudes. The effects vary as a function of consumers' topic knowledge. In fact, non-expert consumers present a large "executional greenwashing" effect, while expert consumers present a marginally significant effect. In this case it is important to remember that the participants were presented with no additional information to evaluate the greenness of a product. So, even the more expert participants had little reason to question the sincerity of the message. The procedure of the second study followed the one of the previous study. In this case two more variables were added to the previous design, that is average vs. poor EPI. The advertising executional elements were manipulated as in the previous study. While the EPI was operationalized as the indication of the vehicle carbon emission raw figure. The results show that a lower EPI leads to a higher perceptions of the company's ecological image, this amongst both the non-expert and the expert participants. This is particularly true for the expert consumers. So, presenting consumers with an EPI is not sufficient to counterbalance the effects of executional greenwashing. In fact, the display of an EPI reduced the ecological perceptions of the brand by expert participants, but the overall main effect of executional greenwashing still remained. The procedure and variables used in the third study were the same used in study 1. In this case it was the first variable that was manipulated, that is the advertising executional elements that invoked nature. In fact, all conditions included a traffic-light label that graphically represented the carbon emission value of 149g/km. The results show that advertising executional elements evoking nature have no main effect and that there is no interaction effect between topic knowledge and advertising executional elements evoking nature. The participants' perceptions of the company's ecological image are not much different in the presence vs. the absence of advertising execution elements that evoke nature; this is true for both expert and non-expert participants. So, traffic-light label displaying environmental performance information is able to remove the misleading effect of executional greenwashing.

In 2016 Schmuch, Matthes and Naderer carried out a study in which they analyzed the effects of different types of greenwashing claims on perceived deception among consumers depending on their environmental concern or knowledge. It was found that, no matter the level of environmental concern

or knowledge of the consumers, they were not able to recognize vague greenwashing advertisements. It was also found that vague claims combined with pleasing nature imagery can actually promote brand attitudes. So, according to this study consumers do not recognize greenwashing carried out by vague ambiguous claims. Instead these claims even have a positive effect on consumers' attitudinal outcomes. Furthermore, when it comes to false green claims which present an outright lie, Schmuck, Matthes and Nadered found that consumers with a higher environmental knowledge were able to detect the advertisement's misleading intention. While, when presented with false green claims, less knowledgeable individuals did not have a negative reaction in response to the advertisement, this is thought to be because of a less critical elaboration of the presented claims. In spite of this, when a nature-evoking image was added to the false claims highly knowledgeable consumers, which were able to identify the advertisement's misleading intention before, were not able to identify the false claim. So, the affective process overrides the critical elaboration and as a consequence of this highly knowledgeable individuals can identify less greenwashing in the advertisements that present a false claim accompanied by a nature imagery in comparison to the advertisements which presented only a false claim. On the other hand, individuals with lower environmental knowledge were able to recognize the greenwashing intention behind the advertisement when a nature-image was added. This nature-image is less persuasive for these individuals. The study showed that the nature-image actually results in the opposite effect: it draws greater attention to the contrast between the false claim and the image and this facilitates the unmasking of the greenwashing strategy. So, less involved individuals are less persuaded by emotive images.

In the same year Brouwer carried out a study using focus groups discussions with undergraduate marketing students at a major Australian university, aged between 19 and 25 years old. The sampling strategy used was homogenous sampling. The participants were approached during one of their classes, they were asked to voluntarily participate after ethics clearance was carried out. The participants to the study were presented with three different products. A global soft drink company introducing a new natural and healthier product, a supermarket owned green home-brand which presented a recycling logo on it, and a large tuna company claiming to be dolphin safe. The claims made by the green home-brand and the tuna brand were seen as trustworthy. While the advertisement of the soft drink was seen as less trustful; in the consumers' view "X is always going to be unhealthy". According to many participants consumers are aware of the fact that a soft drink will never be natural and healthy. In their opinion the marketing message of the soft drink company was obviously misleading, but according to them many consumers that drink such beverage probably do not care whether or not it came from natural sources and whether or not it contained a little less sugar. Furthermore, it was found that participants' intention to buy was not necessarily linked to the

environmental aspect of a product. In fact, none of the participants explicitly stated that they intended to buy the products because of their green claims. The environmental aspect of the products was seen as an extra benefit, with price, quality, newness and likeability of the products being the main factors in the decisions of the participants. The reason behind the purchase of the soft drink was the fact that at the moment of the research it was new on the market. While the main reason behind the purchase of the green home-brand was the fact that it was a store brand, so participants expected it to be cheaper; the fact that it was recycled was a bonus point. After being presented with the products the participants were presented with the greenwashing information. They were also explained the specific sins the marketing messages were suspected of. The participants' immediate responses were mainly surprise or shock. In fact, many of these participants did not expect for all of the marketing messages to be somehow misleading. In the eyes of many participants greenwashing "just became another marketing strategy" (Brouwer 2016). Overall their responses ranged from "they're not lies, they're just exaggerating" to "all companies make these sort of claims". The negative feedback was mainly targeted at the tuna company and at the green home-brand rather than the soft drink company. In fact, in the case of the soft drink company most of the participants were not surprised and it did not seem to cause much harm to the participants' perception of the brand. On the other hand, the participants did not expect the use of greenwashing from the other two companies. The green home-brand got some negative feedback, mainly due to the fact that the marketing was built on the brand being green. Furthermore, none of the participants were aware of the fact despite the product being sincere, the money earned with this product ended up in the hands of a large polluting company. One participant mentioned that they were particularly disappointed in the green home-brand; they stated, "you buy the greener version because you think it is better than the normal brand and then it turns out that the money from both goes to the same big mining investing company". In addition the dolphin safe label in the tuna message was a meaningless label, despite this one of the participants stated, "at least you know this one for sure is dolphin safe". This shows how greenwashing techniques can be effective. The research shown that once these greenwashing practices were revealed the participants' responses focused on a brand or a company-level rather than on a product-level. After the greenwashing strategies were disclosed, the participants were asked whether or not they would still consider purchasing the products, the majority of them answered yes, while for some it depended on the price of the products. This was particularly important for the green home-brand product, in fact, the product would be purchased only if it was not much more expensive than the normal home-brand. While for the tuna brand many participants were not likely to change simply because they liked the brand. Most participants' opinion was influenced by one's attitude towards the brand as a whole rather than just the actual marketing message. This shows the strength of brand influence and of previous knowledge

of products and brands. In fact, as in case of the tuna company showed us, people's opinions were strong because they were presented to already existing brand that they probably already had seen and experienced. So, this research suggests that if the purchase intention is not necessarily green, the greenwashing practices do not influence purchase intentions. In fact, only very few participants stated that they would think twice before buying one of the products. Despite this, participants generally agreed that it is not doable to take into consideration the background of each product and company. For example, in the case of the green home-brand participants stated that once chosen to go to a certain supermarket the rest of the information becomes irrelevant, they also stated that "you cannot investigate the company behind every product". After the study was concluded some participants approached the researcher expressing the concerns they had when they found out that information about greenwashing is not easily available to consumers. So, results of this study show the strength of brand influence and of prior knowledge of products and companies. In fact, many participants showed a tendency for their opinions to be influenced by their attitude toward the brand. Furthermore, claims like "100% recycled" and "dolphin safe" were seen by participants to be important indicators of trustworthiness. Despite being confronted with greenwashing, many of the participants did not change their buying behavior. The main reasons behind this choice were the fact that it is too hard to investigate how green companies actually are, and the fact that, in the opinion of the participants, "all companies do it so there is no point in changing". In fact, when confronted with greenwashing, the participants did not present a negative attitude towards the products and the brands.

So…in conclusion what are the effects of greenwashing?

Some studies suggest that in the short-term greenwashing might actually contribute to increasing the perceived environmental performance of a company (De Jong, Harkink, Barth 2018; Parguel, Benoit-Moreau, Russell 2015; Schmuch, Matthes and Naderer 2016); however majority of the studies suggest that, in the long-term, greenwashing is not a marketing strategy which is worth carrying out for companies. In fact, some studies show that when greenwashing is discovered consumers present strong reactions of distrust, cautiousness (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013) surprise, or shock (Brouwer 2016). Data shows that such practices lead to an increase in consumer confusion (Aji, Sutikno 2015; Chen, Chang 2013) and skepticism (Aji, Sutikno 2015) in regard to green and sustainable products (or products labeled as such under greenwashing attempts). Greenwashing also leads to a decrease in green trust (Chen, Chang 2013; Aji, Sutikno 2015) and in advertiser credibility (Newell, Goldsmith, Banzhaf 1998). In addition, it leads to lower scores on corporate brand evaluation (Parguel, Benoit-Moreau, Larceneux 2011). Another important result is that greenwashing is positively associated with green word of mouth (Chen, Lin, Chang 2014; Lim,

Ting, Bonaventure, Sendiawan, Tanusina 2013). Once people find out about the use of greenwashing, they want to tell other people about the usage of such practices. This, of course, is valid if the greenwashing attempts are brought to light. In fact, studies show that consumers present uncertainty about green claims, they have difficulties evaluating the actual greenness of these claims (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013). Greenwashing ads are hard to spot, even for the more informed consumers. In addition, some of these strategies are harder to spot compared to others. For example, non-expert consumers present a large "executional greenwashing" effect (expert consumers present a marginally significant effect) (Parguel, Benoit-Moreau, Larceneux 2011). This "executional greenwashing" effects is counterbalanced when consumers are presented with a traffic-light label on products (Parguel, Benoit-Moreau, Larceneux 2011). Furthermore, according to some results, consumers, independently from their level of environmental concern or knowledge, are not able to recognize vague greenwashing advertisements (Schmuch, Matthes, Naderer 2016). In this case, consumers with a higher environmental knowledge are able to detect false green claims which present an outright lie better than less knowledgeable individuals. On the other hand, when nature-image were added to the advertisement the highly knowledgeable consumers were not able to identify the false claims; unlike, the individuals with lower environmental knowledge (Schmuch, Matthes, Naderer 2016). One important consideration to make is the fact that macro-level studies have shown that greenwashing does not have a positive effect on companies' overall performance (Wu and Shen 2013). In fact, it could even have negative effects on companies' overall performance (Walker and Wan 2012; Du 2015; Berrone, Fosfuri and Gelabert 2017).

Bias and theories – a better understanding of the effects

When trying to comprehend the effects that greenwashing has, heuristics and bias can be useful tools to explain consumers' reactions to this marketing strategy. A heuristic is a way to shorten decisions. It "is a mental shortcut that allows people to solve problems and make judgments quickly and efficiently" (Cherry 2022). However, like most things, heuristics have both benefits and disadvantages. In fact, despite them being helpful in many different situations, they can also lead to bias. Bias are systematic mistakes; they can be thought as unintended side effects of adaptive processes. This might explain the results of certain studies on greenwashing. People make use of heuristics on an everyday base, even when carrying out purchasing decisions. So, when consumers are deciding which product to buy, they will probably use some sort of mental shortcut in order to find an approximately correct solution in a cognitive economical way. This might lead them to a right decision or in error. In the case of greenwashing, consumers' mental process might be altered by anchoring bias, the framing effect, non-adaptive choices switching, and authority bias. In addition, throughout the years different theories have been developed in order to understand the consequences of greenwashing. The following chapter will analyze the most important ones – attribution theory and cognitive dissonance.

Attribution theory

Attribution theory attempts to "explain how human beings evaluate and determine the cause of other people's behaviors" (Hopper 2018). It focuses on the process of determining whether a behavior is caused by external factors (situationally caused) or by internal characteristics (dispositionally caused). Parguel, Benoit-Moreau, Larceneux (2011) and Nyilasy, Gangadharbatla, Paladino (2014) proposed attribution theory as a framework to better understand the effects of greenwashing. In fact, in marketing it may happen that consumers attribute causes to companies' behavior in order to explain why a certain event happened. For example, if a consumer notices a company's environmental behavior, they may form cognitive explanations for why the company does such things. In the same may, when consumers observe a company's communications (as opposed to its actual behavior) they may do the same (Nyilasy, Gangadharbatla, Paladino 2012: 117). In their respective studies, Parguel and Nyilasy argued that greenwashing affects the way consumers attribute intrinsic or extrinsic motives to a companies' environmentally friendly activities. According to Parguel "the main issue is whether consumers recognize an organization's intrinsic motives for its green initiatives". So, according to this theory consumers believe that a greenwashing company actually behaves in an environmentally friendly way and so, they only assign different motives to the company's behavior (De Jong, Harkink, Barth 2018: 87). Furthermore, linked to attribution theory is attitude change

theory. Which, when applied to advertising, predicts that "a stimulus object causes attitude change as moderated by the routes persuasion takes or the stage at which the subject is versus the persuasion process". When consumers show a pre-existing negative attitude towards a company, the latter carries out a positive marketing strategy in the hopes of shifting the consumers' attitudes in a positive direction. This form of thinking presupposes that attitudes are additive, which means that they add up. So, if a company adds a positive attitude-shifting stimulus to a pre-existing negative one, attitudes will improve (Nyilasy, Gangadharbatla, Paladino 2012: 117). In this case attribution theory suggests that internal mental processes could accelerate or decelerate the attitude change process. An example of this might be the fact that the attributional processes that "kick in" may reverse any effect that a supposedly positive advertising message may achieve if customers are already doubtful about a company's green credentials or about an entire industry. So, due to such attributions, advertising messages may in reality trigger a backlash against the company (Nyilasy, Gangadharbatla, Paladino 2012: 117).

Cognitive dissonance

The concept of cognitive dissonance was theorized by Festinger in 1957. It states that "whenever people are presented with two conflicting claims, they will try to reduce the resulting dissonance". They might do so in several different ways. One way people might try to reduce such dissonance is by deciding to believe one of the two conflicting claims. Another way consumers might do so is by using ambiguities in both claims to explore ways to reconcile them. In 2018 De Jong, Harkink, and Barth proposed the theoretical framework of cognitive dissonance to better understand consumers' reactions to greenwashing. This framework is based on the premise that when a consumer initially believes companies' green claims, and is then presented with contradictory third-party information, the person will present a state of cognitive dissonance and a desire to restore the balance between the conflicting pieces of information. Theoretically, resolving the dissonance can be done in three different ways. On the one hand, one can reject the third-party information that criticizes the company's environmental performance and claim. On the other hand, one could reject the environmental claims of the company. The third way one could resolve this dissonance is by seeking an intermediate position, which acknowledges the company's green intentions but rejects the environmental claims that are disputed. The two first options assume that one of the two parties involved is deliberately lying, while the third option assumes that the situation is characterized by ambiguity. For people to recognize something as a lie, they need to believe that it is an intentional deception, but in the majority of greenwashing cases consumers do not think that the company is deliberately lying. In fact, many instances of greenwashing involve ambiguous situations (De Jong,

Huluba, Beldad 2020; TerraChoice). Furthermore, Seele and Gatti (2017: 248) stated that "greenwashing only exists in the combination of the misleading CSR communication with an accusation from a third party". So, unless there is a reliable third-party accusing companies of carrying out greenwashing practices, reconciliation is the most plausible option (Brouwer 2016). As shown by the results of Atkinson and Kim (2014) the consumers tend to use rationalization techniques in order to reconcile their skepticism with their acceptance of green claims, and their green intents with their nongreen activities. For example, consumers might believe that the greenwashing company is acting in good faith, that the unsubstantiated green claims are only part of the company's green initiatives or that the third-party information is too rigid (De Jong, Harkink, Barth 2018: 87). Cognitive dissonance theory can also help us better understand the results of Brouwer's research. As mentioned in the above chapter once consumers found out about the use of greenwashing their immediate response was mainly of surprise or of shock; but after that, greenwashing "just became another marketing strategy" (Brouwer 2016). In this case, the participants tried resolving the dissonance following one of the three options possible. In particular, they did so by seeking an intermediate position which would acknowledge the company's green intentions, while still rejecting the environmental claims stated. In fact, the main response from participants stated that many other companies made the same claims, that they were not lies but simply exaggerations and in the case of the tuna company at least one had the certainty it was not harmful towards dolphins – despite this being an irrelevant information. Furthermore, cognitive theory can help us better understand the findings that both telling lies and half-lies about ones environmentally friendly behavior seems to have detrimental effects on all of the three corporate reputation constructs (De Jong, Huluba, Beldad 2020). In fact, this finding might suggest that participants in both conditions reconciled the gap between the company's self-reported environmental behaviors and the third-party information by assuming that, despite the specific allegations, the company is still likely to care about the environment (De Jong, Huluba, Beldad 2020: 66).

Authority bias:

The authority bias is "the tendency to attribute greater weight and accuracy to the opinion of an authority figure" (Rezaiezadeh 2017). This means that people tend to trust authority figures because, usually, it leads to relatively optimal assessments and decisions which benefits us and society (Effectiviology 2022). This might aid us in understanding why environmentally friendly advertisement claims by a company have positive effects on consumers (De Jong, Harkink, Barth 2018; Parguel, Benoit-Moreau, Russell 2015; Schmuch, Matthes and Naderer 2016), even though there is no information about their validity and said claims could therefore just as well be

greenwashing. In this case consumers tend to attribute accuracy and a greater weight to the opinion of the company, which represents the authority figure. They trust what the company's green claims state and decide to buy such product without second questioning the truthfulness of such advertisement. Second questioning requires background knowledge, effort and time that consumers do not have in their everyday life. So, using this heuristic represents an easy way to decide which product to purchase, without sacrificing the sustainability factor. Following the same reasoning, authority bias can also help us understand the first way in which a consumer can resolve the dissonance that they encounter when they initially believe a company's green claims and they are then presented with contradictory third-party information (cognitive dissonance theory). Also in this case consumers view the company as the authority figure, attributing it greater weight and accuracy, and as a consequence of this they reject the third-party information that criticizes the company's environmental performance and claim.

Non-adaptive choice switching:

Non-adaptive choice switching bias tells us that "when a good decision leads to a bad outcome, the experience of regret can bias subsequent choices" (Marcatto, Cosulich, Ferrante 2015). In fact, people will be less likely to re-select the alternative that produced the negative and regretted outcome. This might help us better understand the results found in the study carried out by Lim, Ting, Bonaventure, Sendiawan and Tanusina (2013), and any results similar to such findings. It was found that the sense of distrust due to the discovery of greenwashing affected consumers' future purchase behavior. In fact, some of these participants stated that they will no longer be buying green products, since they did not trust such products anymore. In this case, the good decision, which is buying green products, led to a bad outcome, that is buying a product that was advertised as green but in reality, was not. As a consequence of this negative outcome, and with the aim of avoiding the same result, these consumers decided to not purchase green products again.

The framing effect:

The framing effect is a cognitive bias in which "the brain makes decisions about information depending upon on how the information is presented" (Lavery 2017). Generally speaking, consumers want certainty with gains – they are risk-averse when facing gains, but at the same time are risk-prone with loss (Finkle 2019). So, when presented with a positive frame people will tend to avoid risk. While, on the other hand, when presented with a negative frame they tend to seek risks. This is because the positive frame denotes the gain, while the negative one denotes the loss. In marketing this bias can be used to frame one's messages in such a way that highlights all the benefits of one's

product or service. When applying greenwashing strategies, companies use the framing effect in order to stress all the environmentally friendly characteristics, hence the benefits, of one's product. This can be done through the use of images, words, contexts and similar things. In fact, as previously seen, while carrying out greenwashing strategies, companies use vague claims and appealing nature imagery [fonte 7]. Some examples of vague claims might be abstract catchphrases, as "environmentally friendly", "degradable", or "sustainable". These terms and imagery emphasize the fact that the product is good for the environment, hence they highlight the desirable attribute and end goal – having a positive impact on the environment while still benefiting from the purchase - of the commodity. Furthermore, it is important to highlight that four different types of framing exist: visual frames, auditory frames, value frames and positive and negative frames (Boyce 2021). Visual frames include factors such as color, imagery, font-size and style, and similar things. This is extremely important especially when considering executional greenwashing, in which one can see the use of particular colors and backgrounds that recall nature. Furthermore, many companies combine both a negative and positive framing in one. They first create the problem and then present the consumer with the solution, that is the product they are selling. A perfect example of this, are companies that sell reusable products. Many of these companies advertise these products by presenting a problem, that is the wastefulness of single-use products, and then introduce the solution, that is the reusable item they are selling. This technique can be seen both in green marketing strategies and in greenwashing. So, the framing effect leads a consumer to choose a certain product rather than an identical one, based on how certain values and characteristics are presented, framed.

Anchoring bias

The anchoring bias is a cognitive bias "that causes us to rely too heavily on the first piece of information we are given about a topic" (The decision lab). So, when one receives new information they will interpret it from the reference point of their anchor, that is the older information they have, instead of seeing it objectively. This, of course, can alter one's judgment and prevent them from updating their opinions, predictions, and plans. This bias can help us explain what happens in those studies in which participants are presented with different pieces of information at different times throughout the study. As for example, those cases in which participants are first presented with the website of a company that contains green advertising messages. These participants are then presented with third-party information, which states the actual greenness of the company and the product advertised. Once presented with the third-party information the participants will already have a more or less established opinion on the product and the company; opinion which is based on and anchored to the company's webpage. As previously seen, the study carried out by De Jong, Harkink, and Barth

in 2017 adopts the procedure just mentioned. In this research it was found that participants had a higher regard for the environmental performance of the greenwashing companies, compared with silent brown organizations. So, these results could be explained by the fact that participants, when looking at the third-party information and reviewing the greenwashing company were anchored to the company's green advertisement on the website and the opinion they developed while viewing it. This cannot be said about brown companies, due to the fact that they do not present any green advertisements on their website, so when given the third-party information the participants have no previous anchor. Another study that adopts the abovementioned procedure is the one carried out by Brouwer in 2016. In this case the majority of participants found that the companies were not lying but just exaggerating or that many, if not all, companies did the same sort of claims. Also in this case the participants were anchored to the information they received before being told about greenwashing; so they were not able to objectively look at the new information that was given to them. Furthermore, when the participants were asked if they would continue to buy the products in question, many answered yes. In particular in the case of the tuna company many were anchored to the fact that they already knew the brand and liked the product.

In addition, eventually, the same could be said in those cases in which participants are first presented with third-party information, and then with the company's website.

Limitations

Despite the fact that the term greenwashing was coined in 1986, that is 36 years ago, and despite the increasing popularity of this phenomenon, overall research on this marketing strategy and its effects is still very scarce. The materials are limited to a few documents and the majority of these studies include a small quantity of products, generally speaking from one to three products. Additionally the participants of these studies are relatively homogenous. In fact, each study focuses its attention to a specific group, ranging from ethnicity, age and geographical area. It is important to highlight that the information one obtains from a particular ethnic group might be different from the one obtained from a different one. In addition to this, green marketing and greenwashing practices can be found more in certain geographical areas in comparison to others. For example in emerging countries it is not a formal practice as it is in developed countries (Aji, Sutikno 2015). As a consequence of this consumers in such countries might be less aware of greenwashing practices and have less knowledge regarding sustainable products. Furthermore, many of these studies focus only on specific situations. They present an artificial situation, which does not correspond to 99% of the greenwashing cases found by TerraChoice. Many of these studies invariably expose participants to obvious and serious cases of greenwashing. These types of cases are far from real-life situations. In fact, greenwashing cases are more ambiguous and less conspicuous (De Jong, Huluba, Beldad 2020: 63). Consumers are presented with less structured and more complex information; which can differ in valence, emphasis and tone. They might be presented with different types of information, not simply environmental data, which might not be the most striking. However, this is not the case for several of these studies. For example, the company mentioned in the study carried out by Parguel, Benoit-Moreau, and Larceneux's (2011) received a sustainability rating of 2 out of 10. It was also stated that the company fell "amongst the worst companies in its sector". In Nyilasy, Gangadharbatla, and Paladino's (2014) study participants were told that the company in question "was responsible for a major environmental catastrophe recently – a large-scale chemical leak in one of their US-based plants". In De Jong, Harkink, and Barth's (2018) study all green claims made by the company were then contradicted by the third-party information. The environmental performance of these researches are described in extreme terms, and are presented as an indisputable fact. In addition, most studies give out explicit tasks of reading through given information. Participants might be urged to read everything with equal attention and in a particular order, or they might be confronted with the third-party information immediately after having read the company's website (or viceversa). Again, this does not happen in real-life scenarios of greenwashing. Like previously stated, consumers are presented with different and unclear information at different moments. Moreover, some of these studies involve fictious

companies and products. This does not account for already existing prejudice and/or opinions on a particular company and/or product that consumers might have in real-life scenarios.

Conclusion

In the last few years there has been a rapid increase in people's concern for the environment. In fact, people are becoming more and more eco-consciousness, and this has led to a shift in their buying behaviors; they now try to buy more sustainable alternatives. As a consequence of this raise in the consumption of green products and services, companies have started to adopt and communicate their environmental practices, through the use of Corporate Social Responsibility. Which can be defined as "the relation between major economic actors and society at large, in the light of the general principles of justice, equality, responsibility and reciprocity". In today's competitive society a company cannot concentrate exclusively on profits; a good and social environmental performance is necessary. Furthermore, studies have shown that engaging in CSR policies can bring potential benefits for companies. Unfortunately not all companies are sincere regarding their environmental claims. In fact, with the increase in green consumption and CSR policies, some companies decided to try and reap the benefits of green positioning without behaving accordingly (De Jong, Huluba, Beldad 2020).

How do they do so? Through the use of a widespread and increasingly used phenomenon called greenwashing (TerraChoice). This term was first used in 1986 by Jay Westervelt and nowadays there is no fixed and universally accepted definition. In early research the concept of greenwashing was more or less straightforward. It was seen has an intentional communicative behavior aimed at deceiving stakeholders and consumers – "corporate disinformation" (Lauffer. 2003; Ramus and Montiel, 2005). Throughout the years various authors have deemed this idea problematic. In 2014 Bowen argued that greenwashing involved more than just information disclosure. She stated that it is often not deliberate, not necessarily initiated by companies and does not necessarily benefit companies and harm society. Furthermore, in 2017 Seele and Gatti stated that for a claim to be greenwashing it must combine both falsity and a third-party accusation. In addition, many researchers suggest that the idea of greenwashing that can be found in earlier studies does not take into consideration the multidisciplinary character of this phenomenon (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020). Despite the confusion that surrounds the term greenwashing, it can be said that most of the definitions present some common characteristics, and the term can be considered as an umbrella one (Lyon, Montgomery 2015).

To better understand this marketing strategy researchers have identified different forms of greenwashing. This phenomenon can be distinguished between firm-level, that is when consumers are misled regarding the environmental practices of a company, and product/service-level, that is when consumers are misled regarding the environmental benefits of a product or service (Delmas and

Burbano 2011). De Jong, Huluba and Beldad also distinguished between behavioral-claim greenwashing, that is when a company presents a discrepancy between its environmental claims and its environmental behaviors, and motive greenwashing, that is when a company presents a discrepancy between its communicated and real motives for environmentally friendly behavior. Another important division is the one between claim greenwashing and executional greenwashing (Parguel, Benoit-Moreay, Russell 2015). In the second form greenness is not explicitly claimed as it is in claim greenwashing. It is, in fact suggested by peripheral cues such as nature-evoking imagery. Another important factor to consider when trying to understand greenwashing is the drivers and incentives that companies have to carry out such practice. Companies are motivated by both external and internal drivers. The external drivers are scarce regulations on greenwashing, pressure from both consumers and investors and competitor-induced incentives. While the internal drivers include firm characteristics, organizational inertia and individual-level psychological drivers.

Furthermore, when carrying out studies on greenwashing researchers tend to make a distinction between different types: macrolevel and microlevel studies. Macrolevel studies focus on the relation between companies' greenwashing practices and their overall financial performance. While microlevel studies, which can be divided into survey-based studies and in experimental studies, focus on the effects that the use of greenwashing practices has on consumers. Some of these studies suggest that, in the short-term, greenwashing might contribute to increasing the perceived environmental performance of a company (De Jong, Harkink, Barth 2018; Parguel, Benoit-Moreau, Russell 2015; Schmuch, Matthes and Naderer 2016). Despite this, the majority of the studies suggest that in the long-term greenwashing is not a convenient marketing strategy for companies. Studies show that when consumers find out about greenwashing, they present strong reactions of distrust, cautiousness, surprise and/or shock (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013; Brouwer 2016). Furthermore, data shows that such strategies lead to an increase in consumer confusion (Aji, Sutikno 2015; Chen, Chang 2013), skepticism (Aji, Sutikno 2015) and green word of mouth (Chen, Lin, Chang 2014; Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013). On the other hand they lead to a decrease in green trust (Chen, Chang 2013; Aji, Sutikno 2015) and in advertiser credibility (Newell, Goldsmith, Banzhaf 1998). These results are valid only if greenwashing is brought to light. In fact, studies show that consumers present difficulties in evaluating the actual truthiness of green claims (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013). Greenwashing advertisements are hard to identify and some of the strategies used are harder to spot compared to others. For example executional greenwashing presents a larger effect on non-expert consumers when compared to the effect of claim greenwashing (Parguel, Benoit-Moreau, Larceneux 2011). Another example is the fact that consumers with a higher environmental knowledge are able to detect false green claims better

than less knowledgeable individuals. Nevertheless, this does not hold true when nature-evoking images are added to the advertisement. In this case, higher knowledgeable consumers have a harder time identifying the false claims than the less knowledgeable consumers (Schmuch, Matthes, Naderer 2016). One important consideration to make is the fact that macro-level studies have shown that greenwashing does not have positive effects on companies' overall performance.

In order to better understand the results of these findings one can use various theories and bias. Two important theories that can help understand the effects of greenwashing are attribution theory and cognitive dissonance. Attribution theory suggests that consumers might attribute causes to companies' behavior in order to explain why a certain event happened. For example if a consumer notices a company's environmental behavior, they might form cognitive explanations for such action. So, consumers might believe that a greenwashing company actually behaves in an environmentally friendly way, they only assign different motives to its behavior. While cognitive dissonance tells us that when people are presented with two conflicting claims, they will try to reduce the dissonance there is between the two claims. Consumers can reduce this dissonance in three different ways. They could reject the third-party information; or they could reject the environmental claims of the company. The third option involves seeking an intermediate position that acknowledges the company's green intentions but rejects the environmental claims that are disputed. When consumers are confronted with greenwashing accusations, they might tend to reduce the dissonance between the information they already have and the one they just acquired, through the use of rationalization techniques (Atkinson, Kim 2014). In addition consumers' mental process might be altered by anchoring bias, the framing effect, non-adaptive choices switching, and authority bias. Bias are systematic mistakes, which can be thought as unintended side effects of adaptive processes. Anchoring bias causes us to rely too heavily on the first piece of information we receive. So, if a consumer is first presented with a company's website, which contains green advertising messages, and they are then presented with third-party information, which states the actual greenness of the company, the consumer will not be able to objectively look at the third third-party information due to the fact that they are anchored to the first information they received – that is the company's website. The framing effect is a bias in which people carry out decisions depending on how the information is presented. So, when carrying out greenwashing, companies use the framing effect in order to highlight all the environmentally friendly characteristics of a product and/or of the company. This can be done through the use of visual frames, auditory frames, value frames and positive and negative frames. Non-adaptive choices switching tells us that once a good decision leads to a negative outcome, the person will try to avoid the same result due to the regret they experienced. This also happens when a consumer buys a green product (good decision), and they then find out that the purchased good was actually greenwashing

(negative outcome). They will try to avoid repeating the same mistake and they will do so by not purchasing green products again. Due to authority bias people tend to trust authority figures more, this is because it usually leads them to relatively optimal assessments and decisions which benefit both them and society. In this case, consumers see the company as the authority figure. So, they trust its green claims more than the third-party information, which they might have encountered later on and/or might be ambiguous. For consumers using this heuristic represents an easy way to decide which product to purchase, without having to sacrifice the sustainability factor.

When talking about greenwashing it is important to underline that, unfortunately, overall research on this topic is still limited and presents several different problems. In fact, majority of the studies analyze a small quantity of products, and the participants are relatively homogenous – each study focuses on a specific group, ranging from ethnicity, age or geographical area. In addition, many of these studies represent an artificial situation which is far from real-life cases of greenwashing. Participants might be presented with clear and explicit environmental information and might be urged to read everything with equal attention and in a particular order. This is not an accurate representation of real-life scenarios; in which consumers are usually presented with unclear and, sometimes, contrasting information.

In conclusion, some studies show that, in the short-term, greenwashing might have some positive effects for companies. In order to fully understand these results one needs to analyze them through various theories, heuristics and bias, which consumers might use with the aim of accelerating their decision-making processes. This could lead people into error. Furthermore, these results are in contrast with many other data. In fact, studies suggest that, in the long-term, greenwashing is not convenient for companies – in certain cases they are even faced with the negative consequences of this marketing strategy. Greenwashing is an increasingly popular phenomenon, but despite this resource on the matter is still very limited and presents several different limitations. Being sustainability a progressively important topic it is of fundamental importance that other research on such marketing strategy is carried out. Doing so, will aid the understanding of the effects it has, and will also help in finding a way to decrease its usage.

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Summary in Italian

Negli ultimi anni la sensibilità nei confronti delle questioni ambientali ha acquisito un notevole sviluppo. Le persone sono sempre più consapevoli dell'impatto ecologico delle loro scelte e ciò induce un cambiamento nei loro comportamenti, anche nel modo di fare acquisti con una rinnovata attenzione alla sostenibilità. Il consumo del pubblico si sta sempre più rivolgendo verso prodotti sostenibili; pertanto, le aziende stanno dando sempre più importanza all'aspetto ecologico della filiera di produzione, perseguendo il concetto della responsabilità sociale d'impresa. Nella moderna società competitiva un'azienda non può più permettersi di essere concentrata esclusivamente sul profitto: una performance ambientale e sociale sono necessarie. Numerosi studi dimostrano inoltre che attuare policies di responsabilità sociale d'impresa comporta numerosi benefici alle aziende. Purtroppo, però, non tutte le aziende adottano una postura etica corretta in quanto, a fronte dell'aumento nei consumi, ci sono alcune aziende che provano ad avere i benefici dell'essere sostenibili senza esserlo per davvero (De Jong, Huluba, Beldad 2020) attraverso una strategia di marketing nota come *greenwashing*, termine utilizzato per la prima volta nel 1986 da Jay Westervelt.

Oggigiorno non esiste una definizione precisa e universalmente accettata di tale termine. Nel corso dei primi studi sull'argomento, il *greenwashing* veniva definito come un comportamento comunicativo intenzionale, volto ad ingannare consumatori e stakeholders. Questa definizione è però considerata problematica da diversi ricercatori. Secondo Bowen (2014) il *greenwashing* spesso non è intenzionale, non è necessariamente innescato dall'aziende e non comporta intrinsecamente benefici alle aziende, nuocendo comunque alla società. Secondo Seele e Gatti (2017) un'affermazione può essere considerata *greenwashing* solo quando presenta sia una menzogna che un'accusa proveniente da un terzo. Inoltre, molti ricercatori condividono l'idea che la definizione usata inizialmente di *greenwashing* non prenda in considerazione il carattere multidisciplinare di questo fenomeno (Vieira de Freitas Netto, Falcao Sobral, Bezerra Ribeiro, da Luz Soares 2020). Malgrado la confusione legata al termine *greenwashing*, è possibile affermare che tutte le definizioni sono caratterizzate da alcune caratteristiche comuni che riconducono il termine ad una sorta di ombrello (Lyon, Montgomery 2015).

Per meglio circoscrivere questa strategia di marketing i ricercatori hanno identificato diverse forme di *greenwashing*, essendo possibile individuare un *greenwashing* a livello di azienda e uno a livello di prodotto(venduto)/servizio(erogato). Nel primo caso i consumatori vengono ingannati sull'organizzazione co sostenibile dell'azienda, mentre nel secondo caso i consumatori vengono ingannati sui benefici ambientali di un prodotto o di un servizio (Delmas and Burbano 2011). De Jong, Huluba e Beldad hanno anche fatto una distinzione fra *behavioral-claim greenwashing* e *motive*

greenwashing. Nel *behavioral-claim greenwashing* nell'azienda è possibile individuare una discrepanza fra la sua comunicazione ambientale e i suoi reali comportamenti ambientali, mentre nel *motive greenwashing* l'azienda presenta una discrepanza fra i motivi comunicati ai consumatori e quelli reali per un comportamento sostenibile. Un'altra divisione importante è quella fra *claim greenwashing* ed *executional greenwashing* (Parguel, Benoit-Moreay, Russell 2015). Il claim *greewashing* è un comportamento evidentemente assertivo, mentre il secondo è una strategia attuata attraverso l'utilizzo di immagini che richiamano la natura. Un altro fattore da tenere in considerazione nel meglio interpretare il sono gli incentivi (sia interni che esterni) che spingono un'azienda ad attuare tale strategia. Costituiscono ad esempio incentivi esterni la scarsa normativa di settore che induce comportamenti al limite della legalità, la pressione di consumatori e di investitori o la semplice concorrenza. Gli incentivi interni possono includere le caratteristiche dell'azienda, l'inerzia organizzativa e driver psicologici a livello individuale.

Gli studi relativi al *greenwashing* possono essere di macro-livello e di micro-livello. Gli studi di macro-livello si focalizzano sulla relazione tra le pratiche di *greenwashing* dell'aziende e la *perfomance* finanziaria complessiva e hanno dimostrato che il *greenwashing* non ha in media alcun effetto positivo sulla *perfomance* finanziaria di un'azienda. Gli studi di micro-livello si concentrano invece sugli effetti che il *greenwashing* potrebbe avere sui consumatori e possono essere divisi in due categorie: gli studi basati su indagini e quelli sperimentali. Alcuni di questi studi suggeriscono che nel breve termine il *greenwashing* potrebbe contribuire ad aiutare la percezione che le persone hanno della *perfomance* ambientale di un'azienda (De Jong, Harkink, Barth 2018; Parguel, Benoit-Moreau, Russell 2015; Schmuch, Matthes and Naderer 2016). Ciò nonostante, la maggior parte degli studi concordano sul fatto che nel lungo termine il *greenwashing* non è una strategia conveniente per le aziende. Varie ricerche dimostrano che, una volta scoperto l'utilizzo del *greenwashing*, i consumatori manifestano forti reazioni di sfiducia, cautela, sorpresa e/o shock (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013; Brouwer 2016). Inoltre, vari risultati rivelano come l'utilizzo di tale strategia possa aumentare la confusione dei consumatori (Aji, Sutikno 2015; Chen, Chang 2013), il loro scetticismo (Aji, Sutikno 2015) e il "passaparola verde" (Chen, Lin, Chang 2014; Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013). Inoltre, l'uso del *greenwashing* può portare a una diminuzione della fiducia dei consumatori verso i prodotti realmente ecologici (Chen, Chang 2013; Aji, Sutikno 2015) e della credibilità dell'azienda (Newell, Goldsmith, Banzhaf 1998). Questi risultati, però, sono validi solo se l'utilizzo del *greenwashing* viene scoperto dai consumatori. Infatti, alcuni studi dimostrano che il consumatore ha difficoltà a identificare la veridicità dell'affermazioni sostenibili delle aziende (Lim, Ting, Bonaventure, Sendiawan, Tanusina 2013). In particolare, alcune delle strategie utilizzate sono insidiose e quinsi più difficili da identificare; *l'executional*

greenwashing è ad esempio più difficile da riconoscere rispetto al claim *greenwashing* (Parguel, Benoit-Moreau, Larceneux 2011; Schmuch, Matthes, Naderer 2016).

Per capire meglio i risultati dei vari studi condotti sul *greenwashing* si può fare uso di varie teorie e *bias*. Due teorie importanti che ci possono aiutare a capire meglio gli effetti del *greenwashing* sono la teoria dell'attribuzione e quella della dissonanza cognitiva. La teoria dell'attribuzione cerca di spiegare come i consumatori potrebbero attribuire delle cause ai comportamenti dell'aziende. Per esempio, se un consumatore nota il comportamento ambientale di un'azienda, potrebbe formulare delle spiegazioni sul perché l'azienda faccia tali azioni. Quindi, il consumatore potrebbe credere che un'azienda *greenwashing* si comporti veramente in maniera ecologica senza riconoscere l'utilizzo di questa strategia marketing. Invece la dissonanza cognitiva ci dice che quando ad una persona sono presentate due affermazioni contrastanti, essa cercherà di ridurre la dissonanza che c'è tra queste due affermazioni. Questo può essere fatto in tre modi diversi. La persona può rifiutare l'informazione proveniente da terze parti (siti, organizzazioni, etc.), oppure potrebbero rigettare le affermazioni dell'azienda. Mentre la terza opzione prevede di individuare una posizione intermedia che riconosca le intenzioni ecologiche dell'azienda ma allo stesso tempo rigetti le affermazioni ambientali contestate. I consumatori, quando confrontati con le accuse di *greenwashing* verso un'azienda, potrebbero provare a ridurre la dissonanza fra le informazioni che hanno e quelle appena acquisite. Questo processo accade attraverso l'uso di alcune tecniche di razionalizzazione (Atkinson, Kim 2014). In aggiunta, il processo mentale dei consumatori potrebbe essere alterato dal *bias* di ancoraggio, il *framing effect*, la commutazione di scelte non adattive, e il pregiudizio dell'autorità. Il *bias* di ancoraggio ci induce a fare molto affidamento sulla prima informazione che riceviamo. Quindi, se ad un consumatore viene prima presentato il sito ufficiale di un'azienda, sul quale sono presenti messaggi pubblicitari basati sulla sostenibilità del prodotto o dell' azienda, e successivamente gli viene presentata l'informazione di un terzo nella quale si prospetta il vero livello di sostenibilità dell'azienda in questione, il consumatore non sarà in grado di guardare in modo oggettivo le informazioni del terzo in quanto sarà ancorato alla prima informazione ricevuta, nonché al sito ufficiale dell'azienda. Il *framing effect* invece è un *bias* nel quale le persone cambiano la decisione che prenderebbero in base a come l'informazione gli viene presentata. Quindi, quando un'azienda porta avanti il *greenwashing* userà il *framing effect* per mettere in luce tutte le caratteristiche ambientali del suo prodotto e/o dell'azienda stessa. Questo può essere fatto attraverso l'utilizzo di frame visivi, frame uditivi, frame di valore e frame positivi e negativi. La commutazione di scelte non adattive ci dice che quando una decisione buona porta ad un esito negativo la persona che ha preso questa decisione proverà ad evitare lo stesso risultato un'altra volta. La stessa dinamica accade quando un consumatore acquista un prodotto sostenibile (scelta buona) per poi scoprire che

in verità il prodotto presentava solo una pubblicità di *greenwashing* (esito negativo). Quindi, pur di evitare un nuovo esito negativo, alcuni consumatori potrebbero non comprare più dei prodotti sostenibili. Un concetto di una certa rilevanza nel contesto del *greenwashing* è il così detto pregiudizio dell'autorità. A causa del pregiudizio dell'autorità le persone tendono a fidarsi di più dell'autorità, e ciò è dovuto al fatto che fidarsi di tali figure, di solito, porta a valutazioni relativamente ottimali e decisioni benefiche sia per sé stessi che per la società. Nel caso del *greenwashing*, i consumatori vedono un'azienda come un'autorità e quindi si fideranno più delle sue affermazioni sostenibili che di quelle di un terzo. Per i consumatori utilizzare questo *bias* significa decidere quale prodotto comprare in breve tempo senza dover sacrificare (in teoria) il fattore sostenibilità.

Quando si parla di *greenwahing*, purtroppo, è importante sottolineare che le ricerche su tale argomento sono ancora poche e presentano vari problemi. Infatti, la maggior parte degli studi analizza una quantità ridotta di prodotti e i partecipanti sono abbastanza omogenei – ogni studio si focalizza su un gruppo specifico, il quale potrebbe, per esempio, essere basato sull'etnicità, sull'età o sull'area geografica. In più molti degli studi rappresentano una situazione artificiale che è molto lontano da casi di *greenwashing* nella vita reale. Negli studi, infatti, ai partecipanti potrebbero essere presentate informazioni ben chiare ed esplicite, ad essi potrebbe essere chiesto di leggere tutto in un particolare ordine e sempre con lo stesso livello ottimale di attenzione. Ciò non è, però, un'accurata rappresentazione di quello che succede in casi di *greenwashing* reali, nei quali i consumatori devono confrontarsi con informazioni non chiare e alcune volte anche contrastanti.