MAS5100

Masteroppgave

CSR IN CONTROVERSIAL INDUSTRIES:

Can the Norwegian Oil and Gas Industry Benefit From Communicating their Environmental CSR Efforts?

Høyskolen Kristiania
Våren 2020
Innlevering: 23.06.2020

Høyskolen
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Preface

This thesis is written as the final part of the MSc in Marketing and Management at Kristiania University College (Oslo). I look back at the past two years with gratitude as it has helped me evolve, expand, and strengthen my knowledge across relevant disciplines. While working on this research study proved challenging at times, it has been an exceptionally educational and rewarding process, leaving me proud of the work I am now handing in.

I especially want to thank my supervisor, Delphine Caruelle, for the invaluable assistance in designing and conducting this study. By her qualified competence in quantitative research, her words of motivation, and her guidance throughout the research process, she has provided me with a good foundation for accomplishing this study. Furthermore, I would like to express my appreciation to those who willingly helped me by completing the survey questionnaire. As well as those who offered their feedback on the questionnaire design, giving me insight and offering alternate explanations of relationships between factors.

June 22. 2020
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Abstract

As corporate social responsibility (CSR) initiatives are used more frequently as a marketing tactic, research is lacking on the subject with regard to controversial industries. The aim of this study is to contribute by adding knowledge about the factors that influence attitude in a setting of environmental CSR messages communicated by the oil and gas industry. The ultimate objective is to examine if and how the Norwegian oil and gas actors should communicate their efforts.

To examine this subject, a 2x2 experimental design was implemented, manipulating four advertisements to demonstrate the conditional factors of message source (internal vs. external) and message framing (positive vs. negative). Attitude was then examined as determined by each experimental condition, accounting for the effects of the mediating and moderating variables. The study's findings provide evidence that attitude is influenced by *how* (message framing) and by *who* (message source) the message is communicated. However, these relationships are only significant when mediated and moderated by, respectively, the perceived authenticity of the source and by level of environmental concern.

Overall, in order to reach and affect those with higher levels of environmental concern, it is recommended that environmental CSR messages is framed in such a way that it enhances the possible gain of the initiative (positive framing). The message should also be communicated (or supported) by an external third-party, as this enhanced attitude, relative to the internal corporation source. Furthermore, the authenticity of the source proved to be an important mediator and direct predictor for attitude. Focus should therefor lay on presenting CSR efforts in an accurate, truthful, and transparent way.

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1.0 Introduction

This chapter will introduce the topic of the thesis and its relevance. Continuing, it will present the purpose and the positioning of the problem, supplemented by research questions, before the thesis' outline is presented.

1.1 Introduction and relevance

Never before has the issue of climate change received more attention. The percentage of people concerned about climate change has varied over the years but reached its all-time high in 2019 (Kantar 2020, 8). With 49 percent of the Norwegian population regarding climate change as the most pressing challenge Norway is facing today (Livgard 2019), it becomes evident that the issue is of general concern. Looking closer at differences between age groups, numbers from Kantar indicate that climate engagement is relatively equal across groups, but highest among the younger generation (30 years and younger), with 56 percent ranking climate change as Norway's most pressing issue. Furthermore, the majority of Norwegians agree that the oil and gas industry should go from producing oil and gas to producing more renewable energy, even if this means lower earnings (65%) and fewer jobs in Norway (57%) (Kantar 2020).

With the increased general attention on climate change, companies across industries have taken steps to reduce their carbon footprint through investments in environmentally conscious activities, or by initiating activities aiming to innovate and improve production processes. However, far greater challenges await the leadership of corporations producing fossil energy. Today, 80 percent of the world's total energy consumption comes from fossil fuels, underlining that the need for innovation and investment in environmentally friendly alternatives is pressing and unceasing (Molstad 2020, 42). In an effort to promote their dedication to this change, some companies in the oil and gas industry has in the latest years gone through name changes to represent the move from oil and gas, and to create associations to energy operations as a whole (e.g., Statoil to Equinor). At the same time, new companies with associations to cleaner energy, rather than oil and gas, have taken over for older companies (e.g., Vår Energi took over operations for ExxonMobile). Whether or not such activities spring from an essential corporate desire to help create solutions for a more environmentally friendly future, or if the steps have been taken to address new social expectations and public concerns about the environment, they can be labeled as corporate social responsibility (CSR) activities, initiatives or efforts.

CSR received one of the first definitions in 1953 when Bowen defined social responsibilities as "the obligations of businessmen to peruse those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (1953, in Agudelo, Johannsdottir and Davidsdottir 2019, 4). This definition and the amplified focus on social responsibility raised interest among scholars, and the concept of CSR was approached in various ways in the following decades. CSR has been viewed as the corporate concern about compliance with laws and regulations, as well as activities to secure a healthy working environment, the education, the happiness of employees, and the social welfare of the community (Agudelo et al. 2019, 5). However, in more recent years, the social expectations towards corporations have shifted, where the environment and sustainability have come to dominate both academic literature and corporate activities with regards to CSR efforts (Ghobadian, Money and Hillenbrand 2015, 277; Agudelo et al. 2019, 2).

The reason why corporations engage in CSR activities is not solely to support a good cause. In a study by Yoon, Güran-Canli, and Schwarz, CSR is referred to as activities implemented in order to address consumers' social concerns, create a favorable corporate image, and develop a positive relationship with consumers and other stakeholders (Yoon et al. 2006, 377). Thereby, you could call CSR a form of regulatory risk management, rather than efforts initiated only for a good cause. Furthermore, O'Connor and Gronewold (2012, 71) identify CSR initiatives in the oil and gas industry to be serving a dual function. CSR is used both to enhance corporate advantage relative to corporations within the same industry and also as "protection from activist groups and industry turbulence" (in Miller and Lellis 2015, 213). Thereby, CSR is activities and efforts initiated to address social concerns with the ultimate goal of protecting the corporation from external turbulence and securing public support. It is these views I will be putting forth in the thesis.

The previous head of the Norwegian oil fund, Yngve Slyngstad, stated that the businesses of tomorrow will be evaluated on more than traditional figures (Molstad 2020, 43). By means of accounting non-financial metrics, corporations will be expected to deliver not only on revenue but also on environmental capital values (Ihlen 2007, 44; Molstad 2020, 43). This statement seems to reflect the expectations of the Norwegian public, where 78% of the population expects the business world to take an active part in limiting the emission of greenhouse gases (Livgard 2019). It also reflects a fundamental part of the CSR concept, where corporations in addition to economic and legal responsibilities, need to be held accountable for their ethical, philanthropic,

and environmental actions (Schultz 2013, 363). This means that organizations should not only work to fulfill owners' interests and to increase profits, but also provide for the "commonwealth" in form of societal and environmental contributions.

1.2 Purpose and positioning of the problem

With the oil and gas industry aiming towards the production of cleaner energy and creating environmentally friendly solutions, it would be beneficial for corporations to effectively communicate these efforts in order to improve or maintain consumer attitude towards the firm. Earlier this year, some of Norway's most prominent leaders from business, research, politics, and government, gathered at the Sola meeting (Solamøtet). The Sola meeting is an annual business policy conference, where the goal this year was to show the steps that should be taken in order to help solve the global challenges we're facing today. Present at the meeting was some of the biggest oil and energy actors in Norway (Equinor, Shell, Aibel, Aker Solutions), presenting their solution for a better, more environmentally friendly, future (NHO 2020). Among the 'solutions', Aker Solutions presented a future with floating, offshore wind energy, while Equinor launched an extensive plan to reduce their climate emissions by electrification of the substantial Johan Sverdrup shelf, and presented their aim to achieve an emission-free production, with a 40 percent cut by 2030 (Molstad 2020, 42). However, their pursuit of innovation and the goals these companies are aiming at achieving are not widely broadcasted, at least not to the lay public. Thereby one can wonder why certain companies are reluctant to communicate their CSR initiatives and activities, and I propose the following research problem:

> *Can controversial industry actors, such as the oil and gas industry, benefit from communicating their CSR efforts and how can these efforts be communicated effectively?*

As CSR is an integral part of the external and internal corporate communications (public relations, marketing, advertising, etc.) across industries (Schultz 2013, 363), one would think that communicating CSR could help improve company image. However, this is not necessarily the case as literature on corporate reputation suggests that CSR efforts can be viewed as a form of manipulation and misrepresentation by some (Ihlen 2007, 46). As the oil and energy industry has a controversial image, it can be deemed inevitable that tomorrow's leaders will encounter problems trying to communicate their efforts, and many already have. As BP in 2019 launched

a campaign to promote investments in wind energy, they were faced with accusations of *greenwashing* (presenting environmental claims that are inaccurate). The message was put forth in such a way that the audience could misjudge the size of the actual efforts (Chapman 2019), indicating a lack of knowledge about how to communicate CSR efforts. In another setting, Equinor partnered up with the popular podcast, *Forklart*, a podcast delivered by one of Norway's biggest newspapers. This created controversy, as the podcast by some was deemed as *stealth marketing* (invisible advertising) (Jerijervi 2019).

Gosselt, Rompay and Haske (2019, 422) found that even if CSR motives had been inconsistent, consumers still had a tendency to believe that the corporation had sincere motives when supporting environmental issues, enhancing public attitude towards the effort. However, there is a lack of literature studying the effect of CSR activities on consumer attitude with relations to controversial industries. So, in an effort to narrow the focus onto feasible research questions, I propose that the oil and gas industry faces two issues with regards to environmental CSR communication; *who* should communicate the CSR efforts and *how* should they be communicated? Firstly, it would be of interest to examine if the public's attitude towards the CSR message and the actor presenting the environmental initiative would vary based on *who* the source of the message is. In fact, empirical findings suggest that communication through an external third-party can enhance the creation of positive attitudes, relative to using an internal corporate source (Groza et al. 2011; Miller and Lellis 2016). Then there is the question of *how* to best communicate the effort. Just as attitude towards an issue, a corporation, or even a public persona, vary between individuals, the effort it takes to adjust attitude may vary. Research finds that information (e.g. environmental CSR messages) will be perceived differently simply by the way it is expressed and presented (Martin and Marshall 1999, 206). One way to differentiate between ways of conveying messages is through message framing. The theory of message framing states that negatively and positively framed messages may be received differently, even when presenting logically equivalent information (Jones, Sinclair and Courneya 2003, 181). Furthermore, there have to be some factors regulating the effect of *who* and *how* on *attitude*.

So, given the lack of relevant academic literature on this specific subject, it can be difficult to assess if general CSR literature is applicable to controversial industries. Furthermore, as the oil and gas industry has received a lot of critique through the years, it would be interesting to uncover reasons as to why. Consequently, it would be of benefit to both the industry, as well as of literary interest, to examine how and by who CSR efforts should be communicated. While

all of the above will be elaborated on in the theory section, we know that any communication has a certain message source and a way of being framed, and we know from prior research that both have the potential to affect attitude formation. Therefore, I propose the following research questions:

RQ1: *To what extent can the message source and message framing of a CSR campaign for the oil and gas industry estimate consumer attitude towards the advertisement and the organization running the ad?*

RQ2: *What mediates and moderates these effects?*

1.3 Outline

This thesis is structured five parts; the introduction, the framework, the methodology, and research design, the analysis and results, and discussion and implication. In part one I have introduced the subject of interest and presented the purpose and positioning of the study. The next part will present the framework of the thesis, outlining the theory, empirical research, and perspective on which this thesis is based. By means of theory and empirical findings hypotheses are formed and summarized in the hypothesized model. Following, part three will present the applied methodology and research design. This will give the reader insight into the process of forming and implementing the experimental study design. Part four will present the analysis and results of the study, where the first section of the chapter presents the preparation of data material and initial analyzes of data appropriateness. Moving on, the proposed hypotheses are tested by means of relevant analyzes, creating a picture of how the implemented factors relate to each other. Concluding with discussion and implications, part five presents the main findings, theoretical contributions, and practical implications of the study, while also presenting its limitations and possible avenues for further research.

2.0   Framework

Building on theories and research that are relevant for the positioning and the problem of the thesis, this chapter will present the theory that forms the conceptual framework. Starting off, the chapter will present the relevancy of two specific theories; The Persuasion Knowledge Model (PKM) and Attribution Theory. These theories have been used in previous research and proven helpful in understanding attitude formation in a setting of CSR messages and efforts. Furthermore, the chapter presents variables plausible to affect attitude, accompanied by possible moderators and mediators. From these variables, reasonable hypotheses have been formed and then summarized in the hypothesized model.

2.1   Relevant Theories

The concept of corporate social responsibility (CSR) has grown to receive a lot of attention, which has cumulated in several studies aiming to understand the effect CSR efforts have on audiences' responses and attitudes (e.g. Gosselt et al. 2019). When corporations take the step to communicate their CSR efforts, it will in most cases be a persuasive attempt to produce favorable consumer perceptions. This ultimately involves communicating their actions in an effort to improve the corporate image and create positive attitudes. (Groza, Pronschinske and Walker 2011, 640). So, what is attitude? When using the term attitude, I point to the general evaluation an individual makes about other people, objects, issues (Merriam WebsterA s.v.), or in this case, about a CSR message or a corporation. Prior research states that attitudes can be altered or conditioned via media exposure (Caroll 2013, 125), however, available literature presents varying results in regard to attitude formation in a setting of CSR messages and green advertising.

In a study looking closer at how green advertisements were perceived, results indicated that corporations that actively invested in green solutions were better off not promoting them. That is, a no-advertising strategy resulted in a more positive brand attitude, compared to when the efforts were advertised (Nyilasy, Gangadharbatka and Paladino 2014, 700). In a different study, Gosselt et al. (2019) report that CSR labeling on product packaging indirectly influence attitude, where positive external third-party labels resulted in more positive brand attitudes. With regard to attitude formation, the attributed motives consumers assigned the CSR effort served as a mediator between label/source and attitude (Gosselt et al. 2019, 422). Furthermore, different

studies have found that consumers identified a distinction between self-centered motives (strategic and egoistic motives) and other-centered motives (values-driven or stakeholder-driven). Whatever motives the consumer identified and attributed to the CSR initiative, it had an effect on attitude (Ellen et al. 2006, 154; Miller and Lellis 2015; 75).

However, none of the above-mentioned studies looked into attitude with regards to controversial industries, rather the focus was aimed at companies selling products which actually were, or was claimed to be, more environmentally friendly. As available literature presents varying results in regard to attitude formation in a setting of CSR messages and green advertising, it is important to put forth relevant theories that have been proven useful in explaining previous results. Common to several studies is that scholars have applied the Persuasion Knowledge Model (PKM) and Attribution Theory in an effort to explain their results. These two theories will therefore be utilized in this thesis.

2.1.1   The Persuasion Knowledge Model

A prerequisite to study the formation of attitude towards communication is the underlying assumption that people will, in fact, evaluate persuasion attempts (Friestad and Wright 1994, 16). A number of prior studies have applied the Persuasion Knowledge Model (PKM) in an effort to explain how consumer perceptions of corporate intentions and authenticity affect audience response and attitude (Artz and Tybout 1999; Groza et al. 2011; Gaither and Sinclair 2018). The PKM was first presented in 1994 by Friestad and Wright and is a model aimed at explaining how people's persuasion knowledge is used to interpret, evaluate and respond to persuasion attempts from advertisers, salespeople, or in this case a corporation (Friestad and Wright 1994, 1).

The model assumes that individuals will access existing knowledge about persuasion, fully or partially, whenever they try to comprehend a message (Friestad and Wright 1994, 2). In doing so they do not only evaluate the message claims, they also use their persuasion knowledge to judge the agent's (message source) motives and evaluate if the agent is trustworthy and transparent (Friestad and Wright 1994, 3). That is, consumers will elaborate on messages and the source of the message in an effort to develop valid and accurate assumptions about them, and based on these assumptions, consumer attitudes will form (Artz and Tybout 1999, 59).

The concept of *accurate* or *valid* attitudes is central in the works of Friestad and Wright. The model suggests that when individuals are exposed to persuasion attempts (advertisements and corporate communication), they will learn over time what constitutes a persuasion attempt. This experience with and knowledge about the marketplace is stored in the mind of the consumer and can be used as a tool to cope or process future persuasive messages (Evans and Park 2015, 157). By using knowledge cumulated over time through repeated exposures, the consumer has adequate information to form attitudes that are justified and true for them, also referred to as valid and accurate attitudes.

2.1.2   Attribution Theory

Other studies also aiming at explaining consumer responses to CSR initiatives have applied Attribution Theory, often as a supplement to PKM (e.g., Ellen, Webb and Mohr 2006; Miller and Lellis 2015). The theory was first developed in general psychology literature, made to investigate the underlying causal explanations people make when confronted with other people's social behavior (Wiener 1972, 203). Or put more simply, individuals will try to understand why people do what they do. Research on consumer behavior has implemented attribution theory, suggesting that consumers will engage in similar attributional processing when evaluating corporate, as opposed to individual, behavior (e.g. Nyilasy et al. 2014, 696; Gosselt et al. 2017, 415).

Given that the behavior is perceived as intentional, the consumer will attribute causes to behavior (Pashler 2013, 84). Thereby, attributional processes can alter attitude formation processes, where consumers that attribute insincere motives to the corporation are less likely to express positive attitudes towards the corporation, vice versa for sincere motives (Nyilasy et al. 2014, 696). In the introduction, there was given examples of oil and energy marketing gone wrong, among these were the case of Equinor's sponsorship of Aftenposten's *Forklart* podcast. If Attribution Theory was to be applied to this situation one could say that the audience perceived the sponsorship to be strategical (they deemed it to be stealth marketing) and thereby attributing insincere motives to Equinor.

Attribution theory is related to PKM and can in this setting be used to understand how consumers attribute motives to an organization as a means of evaluating a message (Miller and Lellis 2015, 67), where the attributes that are given the advertised brand, product or company

is relevant as it affects attitude formation (Friestad and Wright 1994, 16). As CSR efforts easily can be seen as communicative attempts to maintain or improve the public's attitudes or acceptance of an advertisement, corporation or industry, it becomes important to understand the factors affecting attribution formation and perceptions. Therefore, to further examine audience response to CSR efforts it could be beneficial to apply these two theoretical constructs.

2.2   Message Source

The consumer will often use their preconceived image of and beliefs about a corporation as a guide for their response to corporate actions and communications (Bostdorff and Vibbert 1994, 146). Consequently, the sender of a communicative effort might by itself affect attitudes. Accordingly, previous literature has shown that consumer evaluation of environmental claims will vary depending on the source making the claim. According to the PKM, individuals will consciously or unconsciously, seek to identify the "perceived persuasion agent", where the persuasion agent is whoever seems responsible for orchestrating the persuasion attempt (Friestad and Wright 1994, 8). Groza et al. (2011) point to the fact that little research has been done to unveil the effects of information source on attitude formation. In their study, they seek to gain understanding about whether internal firm messages (e.g., annual report or corporate ad) or external third-party messages (e.g., from a news agency) resonate more or less desirable with consumers. The results indicated that individuals did in fact assign attributions to the CSR initiatives differently depending on the message source. Even though the message source did not directly influence attitude formation, the effect was mediated through the motives they attributed to the source (Groza et al. 2011, 645; 648). This indicates that the perceived legitimacy of the organization and the motives assigned to the relevant message might be influenced on the basis of the "source" by which consumers receive the message (Groza et al. 2011, 645). Overall, findings indicated that with proper use of message source, corporations could to some degree manipulate the attribution process, making communications of CSR efforts a viable way of attaining positive corporate associations (Groza et al. 2011, 639).

Similarly, Miller and Lellis (2016) found that the identity used to present energy-focused messages has a significant effect on public perception and response. Results from the study uncovered that the participants assigned attributions to the underlying motivations of the messages based on the source presenting the information. When using the name of the corporation in CSR messages (corporate identity), the public perceived the purpose of the

message to be strategically driven. That is, as a form of crisis management where the corporation's intent is to set the status quo and promote their innovations. Conversely, if the message was presented by the corporation, but by using the identity of trade groups that represent the industry sector (industry identity), the public see the message as a form of political advertising and/or as a tool for public education (Miller and Lellis 2016, 84). The study revealed no result as to which kind of message source that most effectively stimulates positive attitudes but gave insight as to what source that effectively conveys the message based on the issue that is to be communicated. If the goal is to generate support for a specific industry issue (in this case, a pipeline carrying oil from oil sands in the U.S.), it will be favorable to use an industry trade group. On the other side, if the goal is to promote the overall benefits of an industry sector to the society (generation if revenue, creation of jobs), it would give a slight advantage to use a corporate identity (Miller and Lellis 2016, 82).

Furthermore, Gosselt et al. (2019) examined consumer attitudes towards brands, perceived corporate credibility, and perceived motives as dependent on the CSR message and the source of behind the CSR claim. Results suggested that attitude is partially dependent on the source of the claim. If the claim made was communicated through an external third-party source, the message proved more effective in producing positive consumer evaluations than claims made through internal non-expert sources (Gosselt et al. 2019, 414). By means of attribution theory, this indicates that consumers attributed more sincere and credible motives to the external source, whereas the internal CSR claim only proved effective if backed up and verified by an external CSR label (Gosselt et al. 2019, 421). With this view in mind, it can be thought that respondents will react differently to advertisements given the message source. Meaning the message source in the ad can be perceived to be accurate and sincere, or they can perceive the given source to be a puppet for another company.

From these studies, it becomes evident that the attributes consumers assign the message source can influence their perception of the source and the message. This effect can to some extent be explained by Friestad and Wrights Persuasion Knowledge Model (PKM) (Groza et al. 2011, 641). As mentioned earlier, the model maintains that the target (consumer) will work to cope with a persuasion attempt by seeking to form valid (accurate) attitudes towards the agent (corporation behind the message) based on who is responsible for the message (Friestad and Wright 1994, 8). If we apply this knowledge together with attribution theory, we can infer that

in the process of forming valid attitudes towards an advertiser, the consumer will not only form an attitude towards the message but also assign different motives to message source that ultimately will influence the attitude formation. Furthermore, previous research found that the motives an individual attribute to the CSR message is partly dependent on the source of the message (Groza et al. 2011; Miller and Lellis 2016). More specifically, it proved that the use of external third-party source is more effective in generating positive consumer attitudes (Gosselt et al. 2019). Building on this knowledge, I propose the following:

H1:   *External third-party CSR messages has a more positive impact on consumer attitude than internal CSR messages*

2.2.1   Perceived Authenticity

As past research suggests that consumers will attribute motives to CSR messages and the source of the message, it would be beneficial for this study to look at the attributions that Norwegian audiences make. Past research applying the Persuasion Knowledge Model (PKM) to CSR efforts proposes that the public response to CSR messages are predicted, to some extent, by perceptions of source intentions and trustworthiness (Miller and Lellis 2015, 70; Gilbert and Malone 1995, 21). A similar construct to trustworthiness is authenticity, which is "being actually and exactly what is claimed" (Merriam WebsterB s.v.). This definition implies being fully trustworthy and according to facts. Prior research states that organizations that succeed in the creation of an authentic image will in many ways be regarded by the public to be credible, trustworthy, genuine, and honest (Molleda and Jain 2013, 436).

Past research has found that it could advantageous to disclose corporation values, motives, and beliefs in a manner that helps the public assess the identity and integrity of the organization's actions (Molleda and Jain 2013, 437). It can be argued that organizations have the possibility to enhance their image of authenticity by sharing accurate information with their consumers and other stakeholders. Public announcement of organizational values may encourage the audience to evaluate the organization in accordance to how well it upholds the declared values (Bostdorff and Vibbert 1994, 154). Where higher perceived authenticity helps the corporation

gain support for its CSR initiatives and the firm in general (Beckman, Colwell and Cunningham 2009, 203). Consequently, it is plausible that audience evaluation of the source's authenticity (being and doing what is claimed) can mediate attitude formation and change, and that by sharing accurate information, corporations have the opportunity to enhance their image of perceived authenticity (e.g. Molleda and Jain 2013; Nyilasy et al. 2014; Li et al. 2017).

Furthermore, a corporation cannot only rely on sharing accurate information, one also has to ask what kind of CSR efforts that will enhance authenticity. In similar ways as trust and credibility, authenticity is an experience and perception that is co-created by the organization and its stakeholders. It is an ongoing negotiation of meaning and understanding, and therefore in some sense, a function of perceived genuineness that could determine the quality of an organization's public relations (Mollenda and Jain 2013, 437). In a study published by Li, He, Liu, and Su (2017), they measure consumer perceptions of environmental legitimacy, and much like authenticity (being what is claimed), legitimacy is defined as the degree to which one is exactly as presented (Merriam Webster$_c$ s.v.). The purpose of the study was to look closer at how consumers react to organization's environmental actions, be it easy-to-be-observed (symbolic) actions to secure social support or the adaptation of new practices to improve environmental performance (substantive actions). Through their study, they found that substantive, hard to reverse commitments induced significantly higher perceptions of environmental legitimacy than symbolic actions (Li et al. 2017, 598).

However, another study found that substantive action may be less visible for consumers, thereby making them rely more on symbolic action for information about the corporation (Schons and Steinmeier 2016, 360). The study advocate that with consumers' limited opportunity to distinguish between symbolic and substantive CSR actions, corporate transparency is essential (Schons and Steinmeier 2016, 366). As the oil and gas industry undoubtedly require a green shift, both for the sake of the environment and because of public demand (Kantar 2020), I propose that symbolic actions alone are insufficient to increase authenticity and influence attitude. When initiating CSR efforts without a true commitment to improving corporate operations, it can lead consumers to perceive initiatives as inauthentic (Beckman et al. 2009, 204), therefore symbolic CSR actions need to be supported by substantive ones (Schons and Steinmeier 2016, 361). This finding can be explained by the importance of "doing as you say" (Nyilasy et al. 2014, 706). By taking substantive action, a

corporation will be able to communicate their efforts in a way that substantiates their stated values and proving them in their deeds, and thus coming across as more authentic (Molleda and Jain 2013, 436).

As substantive CSR efforts are shown to induce higher perceptions of authenticity (Li et al. 2014) and because there is a high demand for substantial change in the oil and gas industry (Ihlen 2007; Molstad 2020; Kantar 2020), I will for the sake of this study focus the communication to present substantive CSR efforts. Furthermore, building on the fact that high perceived authenticity has proven important in obtaining beneficial corporate outcomes (Molleda and Jain 2013; Miller and Lellis 2015; Gilbert and Malone 1995), I suggest that the attributes consumers assign the message source will mediate the effect CSR communication has on attitude. Thereby I propose the following:

H2:   *The effect of external CSR messages on consumer attitude is mediated by the perceived authenticity of the source*

2.3   Message Framing

People hold attitudes for many different reasons, causing a great variation in what kind of information is needed to affect and potentially alter these attitudes (Petty and Cacioppo 1986, 127). Literature suggests that in order to effectively influence attitudes, corporate CSR messages should make sure to inform the public about the activities the company engages in (Bostdorff and Vibbert 1994, 146; Schultz 2013, 363; Molstad 2020). In some ways, the corporate activities function as a reflection of the corporate values, thereby shaping public perceptions. Some companies convey their CSR activities in a way that brings forth their organizational values and goals, while others use a more fact-based approach to inform the public of their specific efforts to make a difference. Both directions are aimed at forming and affecting the image of the organization, and ultimately the publics' attitude towards the organization. Whatever information the corporation chooses to convey, the message can be framed in different ways.

Message framing can be conceptualized as truly equivalent information perceived differently by consumers based upon how it is presented (Martin and Marshall 1999, 206), and can thereby be defined as the way in which a corporation expresses or outlines their message. A framework frequently used to explain message framing is prospect theory. Drawing upon the work of Kahneman and Tversky (1977), prospect theory holds that individuals will respond differently to messages depending on how the message is framed (Jones, Sinclair and Courneya 2003, 181). This implies that messages can be framed either to stress the benefits or potential gain of an initiative (positive/gain message framing), or it can emphasize how the initiative prevents a possible consequence or loss (negative/loss message framing) (Schiffman, Kanuk and Hansen 2012, 281; Jones et al. 2003, 181). With regards to CSR messages, a positive message frame might highlight how an initiative has a beneficial impact on the environment, whereas a negatively framed message might focus on how the corporation's action will lead to the removal or reduction of something that is a destruction of the environment.

Prospect theory suggests that when considering messages, people opt to favor the negatively framed message that emphasizes the avoidance of a possible *loss*, rather than the positive frame emphasizing a *gain* (Chang 2007, 145). A possible reason for this is that people rarely weigh gains and losses uniformly, even if the two are logically equal. Consequently, people will respond differently to factually equivalent messages because of how the message is worded. Furthermore, people typically are more sensitive to losses than to the counterpart gains, thereby having a general preference of avoiding losses rather than creating gains (O'Keefe 2012, 5). Thus, message framing is anticipated to have a significant influence on how people will perceive a message and the way in which alternatives will be evaluated (Davis 1995, 286). Based upon research that suggest that people will avoid loss, rather than achieve a possible gain (Jones et al. 2003; Chang 2007; O'Keefe 2012) I propose the following hypothesis:

H3:   *Negatively framed CSR messages have a more positive impact on consumer attitude than positively framed CSR messages*

2.3.1 Level of Environmental Concern

Even though negative framing seems to be the preferred, other research has shown that the appropriate framing of a message is not only dependent on the issue that is to be communicated but also target characteristics and attitudes (Schiffman et al. 2012, 281). General research on framing has shown that negative framing tends to be more effective in persuading consumers, than positive framing, when the goal of the message is to influence attitudes and when consumer issue involvement is high (Olsen, Slotegraaf and Chandukala 2014, 123). Individuals that feel highly involved in the issue of the message are more likely to processes the issue-relevant message in detail, thereby being easier to persuade. In such situations, studies have shown negatively framed messages (what is prevented) to be more effective than positively framed messages (what they have achieved) (Grau and Folse 2007, 26). One the other hand, if the individual is less involved with the CSR effort that is being communicated, the message will be communicated more effectively by the use of positive message framing (Grau and Folse 2007, 29). Specifically, a study by Shiv, Britton and Payne (2004,207) found that high issue involvement induces motivation of elaboration. With the motivation to elaborate and understand a message, the negatively framed messages were proven more effective.

It is therefore likely that people highly involved with the specific issue of a message to elaborate on the informational details in the message (Grau and Folse 2007, 26). The reason for this can stem from the fact that involvement, together with perceived personal relevance or responsibility, function as a drive for motivation, making people motivated to understand, learn or evaluate a message (Van Riel and Fombrun 2007, 53; Petty and Cacioppo 1986, 185; Friestad and Wright 1994, 17). Furthermore, the persuasion knowledge model suggests that attitude could be partly related to the inclination people have to interpret persuasion episodes on the basis of personal attitudes towards the topic of the message or the message sender (Friestad and Wright 1994, 23). Additionally, having knowledge about the issues advocated in a message will drive the ability to comprehend the arguments of the message and at the same time providing the individual information to critically evaluate the arguments (Fennis and Stroebe 2016, 194). Personal relevance, motivation, and knowledge are therefore ever evolving. In relation to CSR efforts and the content of the message (environmental actions), one factor that might affect individuals' motivation to seek accurate agent attitudes is how relevant or salient the agent is in the mind of the individual (Friestad and Wright 1994, 9). With regard to environmentally conscious people, it is plausible to believe that oil and gas corporations appear more prominent

in the mind of the individual and that messages from such controversial corporations' sparks interest. Thereby, it can be assumed that people with high levels of environmental concern will have higher motivation and interest for assessing both the message and the source of the message in order to form attitudes about the ad and the source of the ad.

Bailey, Mishra, and Tiamiyu (2016) attempted to develop and validate a scale to measure consumer receptivity to green messages. They found that the level of receptivity to green ads functioned as a moderator for attitudes, where highly receptive consumers had different attitudes and intentions toward a company and its green initiative than low green receptives. Furthermore, people receptive to green messaged proved to also be concerned about the environment (Bailey et al. 2016, 339), making a connection between attitude towards campaign and corporation, and the level of environmental concern. One study has found that people highly receptive to green advertising might find companies more trustworthy and respond more favorably to green claims, than low receptives (Bailey et al. 2016, 339). Even so, other research suggests the more environmentally concerned an individual is, the more skepticism they will assert towards green claims (Do Paco, Finisterra and Reis 2012, 153).

Even though there is a lack of research on message framing connected to CSR messages, environmental messages and/or corporate statements, it is prevalent that message framing can cause an impact on communication effectiveness. Research on message framing suggests that it is possible to generate positive consumer attitudes by the use of "correct" message framing (e.g. Grau and Folse 2007; Olsen 2014). Linking personal relevance and involvement to message framing, Martin and Marshall (1997, 212) found that for individuals with low involvement, positive message framing resulted in more favorable attitudes. In contrast, negative message framing was more effective in inducing positive attitudes among highly involved consumers. These results indicate that the felt personal relevance moderates the impact of message framing, where the level of involvement with the issue at hand is of importance when assessing framing effects (Martin and Marshall 1997, 213). Furthermore, previous research examining how individual differences affect attitude towards messages suggests that these individual differences can enhance, reduce, and even eliminate framing effects (Chang 2007, 165). Therefore, when forming and framing a CSR message the corporation should think about who they desire to reach.

We already know that Norwegians are concerned about the environment, as well as skeptical towards the oil and gas industry (Kantar 2020; Livgard 2019), it is thereby plausible to believe that their personal relevance and level of environmental concern is higher. Additionally, I suggest that environmentally conscious people would be more inclined to assess the CSR message and the source of the message in order to form attitudes (Grau and Folse 2007, 26). Linking this finding to prior research on message framing, it suggests that negatively framed messages will work more effectively to generate positive attitudes in situations where individuals have high processing motivation (e.g. Martin and Marshall 1997; Shiv et al. 2004; Shiffman, Kanuk and Hansen 2012; Olsen et al. 2014). Thereby causing the level of environmental concern to moderate the relationship between message framing and attitude, and I propose the following:

H4:   *The effect of negatively framed CSR messages on consumer attitude is moderated by individuals' level of environmental concern*

2.4   The hypothesized model

The hypotheses to be tested in the present study were constructed based on the research question presented in the introduction and with theoretical findings from the conceptual framework in mind. Together they form the hypothesized model presented in figure 1. The model consists of two independent variables (message source and message framing), while the dependent variable of the model is attitude. Attitude has been divided into two measurable units; attitude towards the advertisement and attitude towards the source of the message. The model assumes that (H1) the use of an external third-party message source will have a positive effect on consumer attitudes. However, this effect is expected to be (H2) mediated by the perceived authenticity of the source. Furthermore, it proposes that (H3) a negative message frame will have a more positive impact on attitude, than that of a positively framed message. This effect is expected to be (H4) moderated by individual level of environmental concern.

Figure 3.1 *Hypothesized Model*
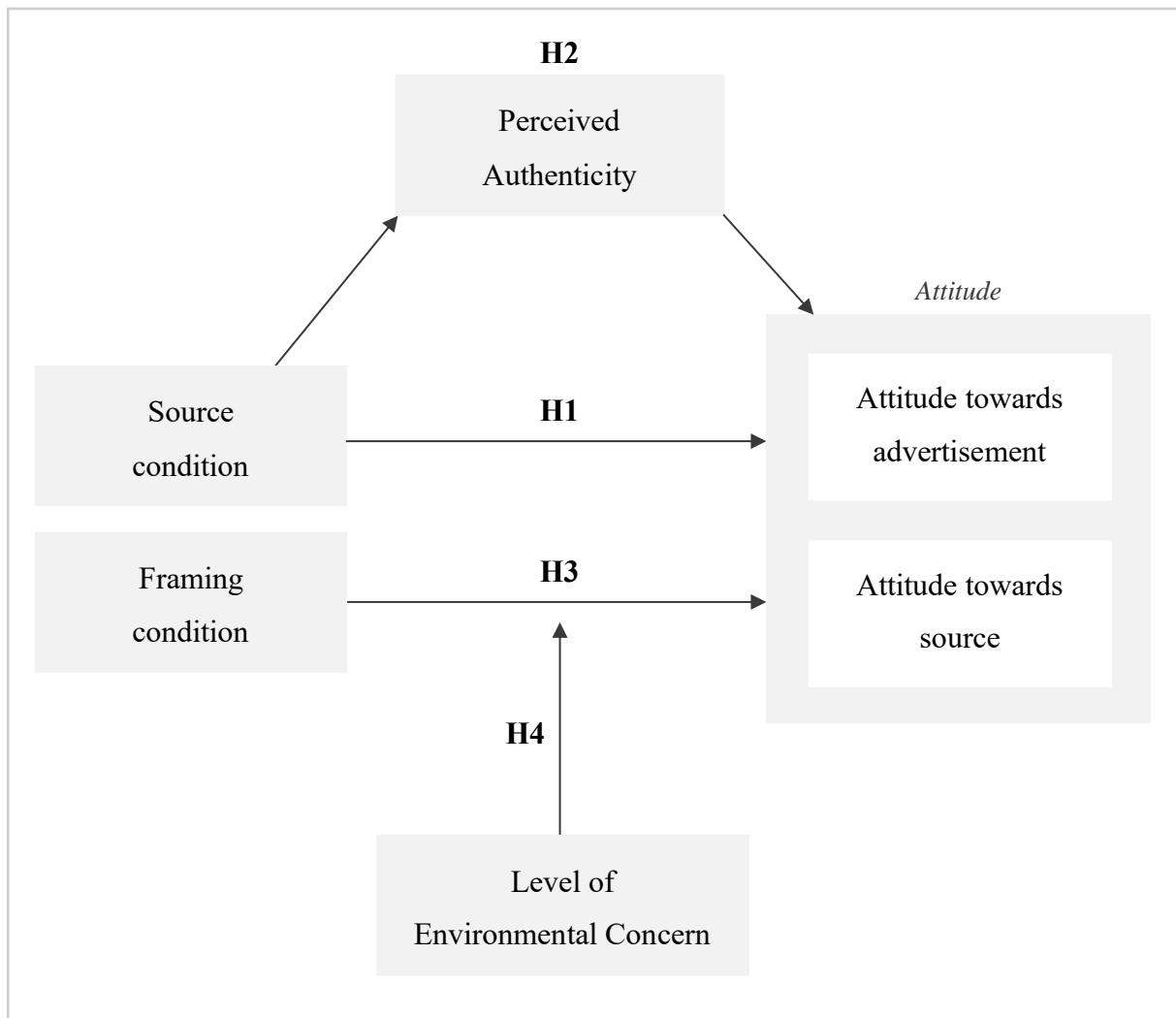
3.0   Methodology and research design

This chapter will describe and defend the methodical approach of the study. Firstly, the choice of method and research design is described, before the preliminary study is presented. The preliminary study emphasizes the choice of stimuli and construction of test materials, the distribution of materials, and presents the outcome of the manipulation check. Furthermore, this chapter will provide insight into the design of the main experimental study, where the creation and implementation of the study is presented.

3.1   Research Design

The research questions applied in this study seeks to examine the Norwegian publics' attitude towards CSR campaigns and towards the industry actor disbursing the advertisements. Attitude is to be measured based on source and framing conditions, accompanied by a possible moderator and mediator. The study proposes that negative message framing and the use of an external third-party source will result in more positive consumer attitudes. Furthermore, aiming to understand the factors affecting attitude, hypotheses suggest that these effects will be mediated and moderated, respectively, by the perceived authenticity of the corporation and the individual level of environmental concern.

To allow for measurement of various views and opinions on CSR campaigns in a controversial industry, a quantitative approach is chosen (Malhotra, Birks and Wills 2012, 187). Furthermore, an experimental causal research design is applied to investigate the cause-and-effect relationships within the data (Malhotra et al. 2012, 371). By the use of causal experimental design, the thesis applies manipulation of the independent variables (message source and message framing) in order to answer the relevant hypotheses.

3.2   Preliminary Study - Pretest of Manipulation Fit

To ensure that the CSR messages would appear different in the eyes of respondents, there was conducted a pretest to control for the appropriateness of manipulation stimuli. The respondents were presented with factually equivalent messages, apart from slight changes in wording to reflect message framing manipulations and the use of different company logos to reflect message source. By assessing the effectiveness of manipulation, one allows for greater certainty that manipulations are suitable for further use in the main study (Ejelov and Luke 2019, 7).

3.2.1   Stimuli development

To manipulate both message frame and the source of the message, four separate fictitious advertisements where constructed. Based on previous studies applying framing and source manipulations (examples of message framing in appendix A) different versions were created and presented to an expert source before arriving at the final four advertisements (figure 4.1).

For the manipulation of message framing, advertisements were composed either to stress the beneficial impact of the CSR effort (e.g. more renewable energy) or how the CSR effort leads to avoidance of potential harm to the environment (e.g. less non-renewable energy). It is crucial that the manipulated CSR communication contain evident actions and clear statements of the potential outcome, while the information presented is equal in impact (Davis 1995, 286). When designing environmental CSR communication, the message (either negatively or positively framed) will ultimately present an initiative that is beneficial for then environment. This posed a challenge when wording the messages as most literature applying message framing is directed towards the individual actions of the consumer. Where positive framing stresses the potential gain of taking action and negatively framed massages present the risk one takes if the actions is lacking (e.g. Davis 1995; Chang 2007; Maheswaran and Meyers-Levy 1990). However, in the case of a corporation or industry initiating a CSR effort, the negatively framed message would present how an initiative would lead to a removal of potential harm, as opposed to the consequences of not taking action. Consequently, the designed messages are as presented in table 4.1.

Table 4.1 *Message Framing Design*

Positive Message Framing	Negative Message Framing
More renewable energy in self-operated offshore fields and onshore plants in Norway.	Less non-renewable energy in self-operated offshore fields and onshore plants in Norway.
Through our measures, we will help to increase the proportion of solar and wind power in electricity production.	Through our measures, we will help reduce the proportion of fossil fuels in electricity production.
By 2040, we will increase the use of renewable energy from 20% to 50%.	By 2040, we will reduce the use of non-renewable energy from 50% to 20%.

To manipulate message source there are two options; to use fictitious corporations or to utilize actual industry actors. For this thesis the latter one was chosen, where message source was manipulated through the use of either a corporate logo (Equinor) or that of an external third-party (Olje- og Energiderartementet). This option offers both advantages and limitations. When choosing to apply actual logos, it is evident that biases will follow. However, the oil and gas industry are such an integral part of the Norwegian economic society, and the welfare thereof, using fictional companies were deemed to complicate the study. That is, if the study were to use fictional corporations it would be a challenge to make people understand the distinction between the two. It would demand a thorough explanation on key features of the corporations, explaining how the two differ from each other, and ultimately explaining Olje- og Energidepartementet and Equinor (or any other Norwegian oil and gas producer). Combining the message source and message framing manipulations, the design of experimental survey material is presented in figure 4.1.

Figure 4.1 *Advertisement Design*

	Positive Message Framing	Negative Message Framing
Corporation	MER FORNYBAR ENERGI — I EGENOPERERTE FELT OG LANDANLEGG I NORGE. Gjennom våre tiltak vil vi bidra til å øke den andelen sol- og vindkraft utgjør i elektrisitetsproduksjonen. Innen 2040 vil vi øke bruk av fornybar energi fra 20% til 50%. equinor	MINDRE IKKE-FORNYBAR ENERGI — I EGENOPERERTE FELT OG LANDANLEGG I NORGE. Gjennom våre tiltak vil vi redusere den andelen fossile brennstoff utgjør i elektrisitetsproduksjonen. Innen 2040 vil vi minke bruk av ikke-fornybar energi fra 50% til 20%. equinor
External Third-Party	MER FORNYBAR ENERGI — I EGENOPERERTE FELT OG LANDANLEGG I NORGE. Gjennom våre tiltak vil vi bidra til å øke den andelen sol- og vindkraft utgjør i elektrisitetsproduksjonen. Innen 2040 vil vi øke bruk av fornybar energi fra 20% til 50%. Olje- og energidepartementet	MINDRE IKKE-FORNYBAR ENERGI — I EGENOPERERTE FELT OG LANDANLEGG I NORGE. Gjennom våre tiltak vil vi redusere den andelen fossile brennstoff utgjør i elektrisitetsproduksjonen. Innen 2040 vil vi minke bruk av ikke-fornybar energi fra 50% til 20%. Olje- og energidepartementet

3.2.2 Questionnaire design and recruitment of respondents

To assess that the manipulations satisfied the experimental conditions, respondents were requested to answer three questions for each of the four ads. The first question checked that the correct message source was clearly perceived by all respondents ("Who is the sender?"). The two following questions measured the extent to which the messages presented positively (i.e. ad emphasizes increased use of renewable energy) or negatively (i.e. ad emphasizes the elimination of environmental damage) framed statements. Outcome framing was assessed by two questions measured on seven-point Likert scales with endpoints "Strongly disagree" (1) and "Strongly agree" (7). See table 4.2 for pretest questionnaire.

For pretests' comparable to this one, literature recommends a default sample size of 30 participants (Perneger, Courvoisies, Hudelson and Gayet-Ageron 2014, 151). Because the manipulations are intended to differ significantly from each other, it was found appropriate that each individual respondent could answer for all four advertisements. As a consequence of the Covid-19 situation, all respondents were recruited via social media and accessed the questionnaire through a direct anonymous link. Accordingly, convenience sampling was used to gather responses from 30 people (Malhotra et al. 2012, 502). Every respondent was presented with all four advertisements to measure if the ads were successfully manipulated in terms of the positive-negative message framing and message source.

Table 4.2 *Pretest questionnaire*

Variable	*Question*	*Scale*	*Measure*	*Source*
Message source	How is the sender?	NA	Equinor/Olje- og energidepartementet	NA
Message framing	To what extent do you agree with the following statements? The advertisement emphasizes how their measures will provide more sustainable solutions and increased use of renewable energy. The advertisement emphasizes how their measures will eliminate environmental damage and reduce fossil fuel use.	1-7	Strongly disagree/Strongly agree	Perneger et. al 2014; Chang et. al 2015

3.2.3   Results and discussion

The manipulation of message source was found successful, where 100 percent of respondents reported the message source to be as the manipulation intended (i.e. if the ad was communicated by "Equinor", all respondents reported Equinor to be the sender). As all data relate to the same group of participants and the objective is to test for differences in the means of the pairs, paired samples t-test was used (Malhotra et al. 2012, 647) to assess the manipulation effectiveness of message framing.

Table 4.3 presents the results for the positively framed advertisements. These results indicate that respondents perceived the advertisement in the positive/corporation (M=5.83, SD=1.15) condition to be significantly more positively framed than the negative/corporation (M=3.47, SD=1.74) condition; t (29) = 6.30, p =.000. The same result was found for the third-party source, where the positive/third-party (M=5.67, SD=1.27) condition resulted in significantly higher agreeableness to the statement than the negative/third-party (M=3.70, SD=1.78) condition; t (29) = 5.72, p=.000.

Table 4.3 *Manipulation Results for Positive Frame*

| | | | Paired samples statistics | | | | Paired t-test | |
| | | | Positive | | Negative | | | |
Statement (positive frame)	Pair		M	SD	M	SD	*t* (29)	Sig.
Legger vekt på mer bærekraftige løsninger og økt bruk av fornybar energi.	1	Corporation	5.83	1.147	3.47	1.737	6.295	.000
	2	Third-party	5.67	1.269	3.70	1.784	5.717	.000

Note: N = 30, M = Mean, SD = Standard deviation. Mean score ranges from 1 (strongly disagree) to 7 (strongly agree), score is calculated from answers given in relation to the relevant statement.

As results in table 4.4 indicate, the negatively framed advertisements were successfully manipulated as well. There was a significant difference in the scores for negative/corporation (M=5.00, SD=1.90) and positive/corporation (M=3.17, SD=1.72) conditions; t (29) = 5.25, p=.000. Furthermore, the respondents perceived the advertisements in the negative/third-party (M=5.47, SD=1.55) condition to be significantly more negatively framed than the positive/third-party (M=3.67, SD=1.87) condition, t (29) = 4.32, p =.000. In conclusion, the pretest results suggest that all advertisements were effectively manipulated and could be adopted in the main study.

Table 4.4 *Manipulation Results for Negative Frame*

Statement (negative frame)	Pair		Paired samples statistics				Paired t-test	
			Negative		Positive			
			M	SD	M	SD	*t* (29)	Sig.
Legger vekt på eliminering av miljøskader og redusert bruk av fossile brennstoff.	3	Corporation	5.00	1.894	3.17	1.724	5.248	.000
	4	Third-party	5.47	1.548	3.67	1.868	4.323	.000

Note: N = 30, M = Mean, SD = Standard deviation. Mean score ranges from 1 (strongly disagree) to 7 (strongly agree), score is calculated from answers given in relation to the relevant statement.

3.3 Experimental Study Design

3.3.1 Research design

The purpose of the study is to examine the effect of message source and message framing on attitude towards advertisement and towards the message source. Founded in relevant literature, this thesis suggests that third-party external sources and negatively framed messages will result in a more positive effect on attitude than that of a corporation source and positively framed messages. Furthermore, past literature suggests that this relationship is moderated and mediated by, respectively, level of environmental concern and felt authenticity.

To further examine these relationships, the thesis will introduce a two-factor design; 2 (Message source: Corporation vs. Third-Party) x 2 (Message framing: Positive vs. Negative) between subject design. By use of statistical experimental factorial design, the effects of two independent variables at two different levels are measured, allowing for interactions between variables (Malhotra et al. 2012, 392). Table 4.5 presents the four experimental groups.

Table 4.5 *Experimental Groups*

		Message framing	
		Positive frame	Negative frame
Message source	Corporation	Experiment group 1	Experiment group 2
	Third-party	Experiment group 3	Experiment group 4

3.3.2   Data Collection and Measures

The research questionnaire was created by use of the Qualtrics website (see full questionnaire in appendix B). As mentioned previously the Covid-19 situation posed problems related to recruitment, leading me to recruit respondents by distributing a direct anonyms link via social media. Consequently, responses were gathered through convenience sampling (Malhotra et al. 2012, 502).

As no questionnaire should be distributed and used in experiments without advocate pilot-testing (Malhotra et al. 2012, 477) my thesis advisor, as well as classmates, friends, and family helped identify and eliminate potential problems. To assess the quality of the first questionnaire design, a draft (including demographics) was distributed to my thesis advisor for a review and feedback. After adjustments, a direct link to the questionnaire was sent to a small sample of participants able and willing to point out possible ambiguities and shortcomings for the purpose of improvement. The full questionnaire design can be found in appendix B.

Following the direct-link, respondents were initially presented with the cover story describing the purpose of the questionnaire, including information regarding the expected time duration of questionnaire, and assurance of anonymity. Next, respondents were asked to answer on five 7-point semantic differential scales (bipolar labels) measuring the proposed moderating variable *level of environmental concern.* Together, these scales ultimately measured their involvement and preoccupation in climate and environmental questions and issues. Following, each respondent was randomly presented with one out of the four CSR advertisements and asked to answer questions directly or indirectly related to the advertisement.

To measure attitude towards CSR messages, attitude was operationalized in two ways; as attitude towards the advertisement and attitude towards the source of the message, yielding two dependent variables (DV). For both DVs, respondents were asked to report on their sentiments connected to the presented advertisement. Attitude is influenced by individuals' evaluation of the behavior of others, evaluating the behavior as favorable or unfavorable (Ajzen and Cote 2008, 301). This is highly reflected in the scales used in previous research papers (Muehling and Laczniak 1998, 27; Bickart and Ruth 2012, 66; Ajzen and Cote 2008, 301; Groza et al. 2011, 650), as well as in this thesis. Both attitudes towards the CSR campaign and the sponsoring advertiser were assessed by 7-point semantic differential scales, where all scale

items are a reflection of possible sentiments toward the advertisement and message source. Lastly, the proposed mediator variable of perceived authenticity is measured. To assess the level of which the sender is perceived as authentic individuals were asked to state their agreement to a set of ten questions, answering on 7-point semantic differential scales with endpoints of "highly disagree/highly agree" and "very unlikely/very likely". See table 4.6. for a full overview of the operationalized variables.

Table 4.6 *Operationalized variables*

Variable	*Question*	*Scale*	*Measure*	*Source*
Level of environmental concern (EnvConcern)	Climate and environmental issues are …	7-p. sem. diff. scale	Unimportant/Important Something that doesn't mean much to me / [...] does mean a lot to me Not personally relevant / Personally relevant Of little concern to me / Of great concern to me Something I am not involved in / [...] actively involved in	*Mohr, Eroglu and Ellen 1998, 52; Bickart and Ruth 2012, 66*
Attitude towards ad (AttAd)	My general impression of the ad is ...	7-p. sem. diff. scale	Bad / Good Negative / Positive Unpleasant / Pleasant Not appealing / Appealing Not attractive / Attractive Not impressive / Impressive	*Muehling and Laczniak 1998, 27; Bickart and Ruth 2012, 66.*
Attitude towards source of the ad (AttSoruce)	After seeing this ad, my attitude towards Equinor/Olje- og enegi- departementet is …	7-p. sem. diff. scale	Bad / Good Little advantageous / Advantageous Unfavorable / Favorable Negative / Positive	*Muehling and Laczniak 1998, 27; Bickart and Ruth 2012, 66; Ajzen and Cote 2008, 301; Groza et al. 2011, 650.*
Perceived authenticity (Authenticity)	My general impression is that Equinor/Olje- og energi- departementet ...	7-p. Likert scale	*Strongly disagree/ [...] agree* … feel morally obliged to contribute … have a long-term interest in the society	*Groza 2011, 650; Ellen, Webb and Mohr 2006, 153; Rifon, Choi, Trimble and Li 2004, 35.*

			… have owners and employees who want to preserve climate and environment	35
			… attempts to give back to the community	
			… contributes because they feel like the society expects it	
			… contributes because they feel like their customers expects it	
			… contributes because they feel like their stakeholders expects it	
			… exploit climate and environment related causes to help their own company	
			… exploit climate and environment related causes to keep or gain support from the society	
			… attempts to gain profit by contributing to a sustainable cause	

4.0   Analysis and Results

This chapter will present the analysis of data material and subsequent results of the experiment. The first part of the chapter will introduce the sample characteristics, following, the validity and reliability of the instrument is examined through factor analysis, reliability analysis, and analysis of normality. Finally, hypotheses are tested through several analyzes, results are reported, and relevant additional findings are presented.

4.1   Data cleaning and sample characteristics

Once data collection was completed, the gathered data was exported into the Statistical Package for the Social Sciences (SPSS) where it was edited, coded, and cleaned of missing responses. Around 200 responses were eliminated due to a lack of completion in the last part of the survey questionnaire, while four responses were removed because of natural answers on all questions asked. After removal, the total effort yielded a usable sample size of 341.

The questionnaire uses a set of 10 items to measure perceived authenticity. These items are however worded differently, ultimately presenting a mix of positive and negative perceptions. When a respondent agrees with the first 4 statements (moral sense, societal interest, environmental interest, and giving back) they will express their liking/favorability/positive perception of the source, while agreeing to the last 6 statements will equal a negative perception of the source's intentions. Consequently, the scale was transformed by reverse coding the last 6 statements, resulting in 10 items measuring in the same direction.

As table 5.1 presents, the proportion of respondents between the four groups was relatively similar. Because this research focuses on the attitude of Norwegian's, nationality was included as a control variable, and non-Norwegian respondents were removed. From the total sample of 341, 194 respondents were female and 141 were male. With an age gap ranging from 16 to 73, the study included people with a variety of occupations. The majority were students (40%) and full-time workers (46%), while the remaining either worked part-time, were unemployed or retired. Looking at education levels, the majority of respondents had either completed high school (videregående, 27%) or a bachelor's degree (43%), while some had higher education (five plus years, 22%). A summary of demographic statistics can be found in appendix C.

Table 5.1 *Experiment group statistics*

		Message framing	
		Positive frame	Negative frame
Message source	Corporation	Experiment group 1 N = 85	Experiment group 2 N = 77
	Third-party	Experiment group 3 N = 92	Experiment group 4 N = 87

4.2   Validity and Reliability of Instrument

This thesis includes four operationalized variables; attitude towards the advertisement (AttAd), attitude towards source (AttSource), level of environmental concern (EnvConcern), and perceived authenticity (Authenticity). Even if all scale measures applied is draw from former empirical studies, the instrument applied is not an exact imitation and has yet to be examined for validity and reliability. The validity of a scale points to whether the chosen instrument measures what it is designed to measure, while reliability can be explained as the ability to interpret the instrument consistently throughout different situations (Field 2009, 12). Exploratory factor analysis is used to assess the validity of the scales, while the reliability of the scales will be evaluated by use of the coefficient alpha (Cronbach's), measuring the internal consistency of the scale and supporting results extracted in the factor analysis (Malhotra et al. 2012, 876).

The various methods of factor analysis are differentiated by the approach used to derive the factor score coefficients, as well as the way in which the factor scores are rotated (Malhotra et al. 2012, 782; 784). Methods of factor analysis can be divided into principal components analysis (PCA) and common factor analysis. PCA is an approach that considers the total variance in the data and is often used when the main goal is to simply reduce the set of variables (Malhotra et al. 2012, 782). On the other hand, common factor analysis bases factors only on common variance, a method useful for discovering underlying interrelationships among items (Malhotra et al. 2012, 782). It is reasonable to assume that not all items have been measured perfectly, thereby common factor analysis (in this case, maximum likelihood) is a realistic way of examining common and unique variance amongst latent variables. Furthermore, the researcher has to choose a method for rotating the factors, ultimately determining how each factor should be interpreted. By orthogonal rotation, one obtains uncorrelated factors, while

oblique rotation allows for correlations among factors (Malhotra et al. 2012, 785). The type of rotation to choose is highly dependent on assumptions made about the relationship between underlying factors. Even if theory suggests that scale items are interdependent, the exact composition of scales have not been tested before, thereby offering the possibility that factors may correlate (Field 2009, 644). Consequently, oblique rotation with direct oblimin procedure was selected.

4.2.1   Preliminary testing

To ensure that factor analysis can be considered appropriate, an initial analysis of data was performed. Entering all operationalized variables (table 4.6), Barlett's test of sphericity reached statistical significance (x^2 (300) = 6390.542, p < .05), concluding that correlations among variables is sufficiently high. Further, the Kaiser-Meyer-Olkin score of .875 reinforced appropriateness of factor analysis as a method for data reduction (Malhotra et al. 2012, 776-77). The factor analysis specified five latent variables based on the criterion of Eigenvalues higher than 1 (Malhotra et al. 2012, 638) were the ten variables presumed to measure *perceived authenticity* (Authenticity) where divided and loaded on two different factors. To further examine the cause of this division the internal consistency was examined by Cronbach's Alpha. From table 5.2, we find that forcing all ten variables onto one single factor loading would cause unsatisfactory internal consistency reliability. Furthermore, removing any item would not give any significant increase in Cronbach's Alpha scores, making it clear that not all items can be included in the variable.

From the rotated pattern matrix, it was found Authenticity 1 through 4 loaded onto on factor, and the remaining six (Authenticity 5-10) onto another. As the applied scale measure had been used in previous research the question becomes why it creates two latent variables in this study? As the last six items where revere scaled, an alternate explanation is that respondents have not taken the time to answer the questions "truthfully". That is, after answering the first four questions that present positive statements, respondents may not have taken their time to answer the negative statements in a similar but opposite manner. By means of the reliability analysis (table 5.2), it becomes clear that both latent variables attain satisfactory Cronbach's Alpha values (.81 and .79). The first four items were chosen for further factor analysis for two reasons. Firstly, a higher Alpha value suggests stronger correlations between the items and therefore a more reliant measure. Furthermore, higher numbers of items included in a scale can result in a

larger alpha value (and fewer items in a smaller alpha), causing possible inflation and inaccurate alpha values (Malhotra et al. 2012, 434), thereby reaffirming that the four first authenticity variables stand stronger that the last six.

Table 5.2 *Internal Consistency of Authenticity Scale Measure*

	Initial Cronbach's Alpha		
	.642	.813	.796
Perceived authenticity measures	**Cronbach's Alpha if Item Deleted**		
Authenticity 1: feel morally obliged to contribute	.675	.852	NI
Authenticity 2: have a long-term interest in the society	.619	.718	NI
Authenticity 3: have owners and employees who want to preserve environment	.612	.730	NI
Authenticity 4: attempts to give back to the community	.625	.750	NI
Authenticity 5: they feel like the society expects it	.635	NI	.767
Authenticity 6: they feel like their customers expects it	.615	NI	.743
Authenticity 7: they feel like their stakeholders expects it	.650	NI	.791
Authenticity 8: exploit cause to help their own company	.563	NI	.746
Authenticity 9: exploit cause to keep or gain support from the society	.571	NI	.757
Authenticity 10: gain profit by contributing to a sustainable cause	.587	NI	.771

Note: NI = not included

Worth mentioning is the fact that these four items would gain a higher alpha score with the removal of Authenticity 1, still, I chose to keep the variable on the foundation of the following arguments. First, Cronbach's Alpha scores are not a definite solution. In cases like this, the researcher should assess the importance of the question. Not only does the item measure an important aspect of authenticity, but a potential removal would also not lead to a drastic increase in the alpha score. Second, the corrected item-total correlation for Authenticity 1 is .44, verifying that this item is sufficiently correlated to the other three (minimum value is .2) (Everitt 2002, 196).

4.2.2 Factor Analysis and Reliability Analysis

With the items Authenticity 5 through 10 removed from the dataset, a second exploratory factor analysis was performed. The analysis reached statistical significance (χ (171) = 5439.094, p < .05) and a satisfying Kaiser-Meyer-Olkin score of .897. Table 5.3 presents the achieved pattern matrix and the associated percentage of variance scores, Eigenvalues and Cronbach's Alphas. The first latent variable, *Attitude Towards Source*, contains four items with factor loading ranging from .83 to .94. This factor has a strong Eigenvalue of 7.28 and accounts for nearly 40 percent (38.30%) of the variance in the data. Furthermore, with a high alpha value (α = .97) it is safe to conclude the scale to be consistent and reliable. The second factor, *Level of Environmental Concern*, explains an additional 16 percent of the variance and has an Eigenvalue of 3.01. The factor loadings on the five items range from .68 to .88 and the reliability analysis (α = .87) confirmed internal consistency within the scale measure. The six items measuring *Attitude Towards Advertisement* loaded onto the third factor, with loadings ranging from .66 to .99. This factor accounts for an added 7.22 of the variances, obtained an Eigenvalue of 1.37, and achieved a satisfying Cronbach's Alpha value of .972.

Finally, four items loaded onto the fourth and last factor, *Perceived Authenticity*. As stated earlier, this scale measure was intended to consist of 10 items but was reduced to four as a result of low internal consistency. The new latent variable has factor loadings ranging from .42 to .89 and an Eigenvalue of 1.35. It accounts for a further 7.71 percent of the variance and presents a satisfying alpha value of .81. Combined, the four factors obtained account for 68.5 percent of the variance in data. Based on the results from factor and reliability analysis, the 19 items were recoded into four new variables. *Attitude Towards Advertisement* (AttAd) and *Attitude Towards Source* (AttSource) are the two dependent variables, while *Level of Environmental Concern* (EnvConcern) will function as the moderator and *Perceived Authenticity* (Authenticity) as the mediator.

Table 5.3 *Exploratory Factor Analysis and Reliability Measure*

Pattern Matrix Scala Items	Attitude Towards Source	Level of Environm. Concern	Attitude Towards Ad	Perceived Authenticity
AttAd 1: Bad/Good			.775	
AttAd 2: Negative/Positive			.660	
AttAd 3: Unpleasant/Pleasant			.656	
AttAd 4: Not appealing/Appealing			.952	
AttAd 5: Not attractive/Attractive			.997	
AttAd 6: Not impressive/Impressive			.713	
AttSource 1: Bad/Good	.832			
AttSource 2: Little advantageous/Advantageous	.940			
AttSource 3: Unfavorable/Favorable	.887			
AttSource 4: Negative/Positive	.944			
EnvConcern 1: Unimportant/Important		.684		
EnvConcern 2: Something that doesn't mean much to me / [...] does mean a lot to me		.884		
EnvConcern 3: Not personally relevant / Personally relevant		.854		
EnvConcern 4: Of little concern to me / Of great concern to me		.750		
EnvConcern 5: Something I am not involved in / [...] actively involved in		.736		
Authenticity 1: feel morally obliged to contribute				.415
Authenticity 2: have a long-term interest in the society				.757
Authenticity 3: have owners and employees who want to preserve environment				.891
Authenticity 4: attempts to give back to the community				.807
Percentage of Variance	38.297	15.845	7.222	7.108
Eigenvalue	7.276	3.011	1.372	1.350
Cronbach's Alpha	.970	.886	.972	.814

Note: Factor loadings below .4 is suppressed. Rotation converged in 5 iterations.
Extraction Method: Maximum Likelihood. Rotation Method: Oblimin with Kaiser Normalization.

4.2.3   Parametric Test Assumptions

A variety of assumption are required to be fulfilled before conducting parametric test, common for all is the assumption of normality (Field 2009, 132). Hypotheses testing is reliant on normally distributed data, where a lack of normality can cause flawed testing (Field 2009, 133), normality is therefore a relevant topic to investigate before further analyzes. One way in which normality can be assessed is by the shape of the distribution, examined by skewness and kurtosis statistics (Malhotra et al. 2012, 624). From table 5.3 and the measure of skewness, we find that all variables have a negative skew, indicating that one tale of the distribution is heavier than the other (Malhotra et al. 2012, 624). More specifically, a pile-up on the right-hand signifying that a majority of respondents' answers were higher on the 1-7 scale (Field 2009, 138). For the Kurtosis measure, a perfectly normal distribution will have a Kurtosis statistic equal to zero. The variables measured deviate slightly from zero without giving unsatisfying results (i.e. non-normal distribution) (Malhotra et al. 2012, 624). *EnvConcern, AttAd,* and *Authenticity* present negative values, meaning that the distribution is flatter than normal, while *AttSource* has a positive Kurtosis score, telling us that the distribution is peaking in certain places. A possible explanation for this occurrence is that respondents have strong and/or distinctive emotions and attitudes connected to the different message sources (AttSource), something that will be examined further through hypotheses testing.

Table 5.4 *Normal distribution*

Variable	Mean	Std. Deviation	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
EnvConcern	4.81	1.259	-.469	.132	-.021	.263
AttAd	4.66	1.343	-.361	.132	-.243	.263
AttSource	4.79	1.269	-.218	.132	.231	.263
Authenticity	4.74	1.130	-.154	.132	-.024	.263

Skewness evaluates the symmetry of the data based on the mean, while Kurtosis measures the relative peakedness of the curve defined by the frequency distribution (Malhotra et al. 2012, 624) ultimately creating a picture of the data distribution. However, parametric tests such as t-test require a different kind of normality, where the assumption is that the distribution of sample statistics (rather than the sample data) are normally distributed (Field 2009, 134). For large

samples ($n>30$), the Central Limit Theorem tells us that the sample distribution can be approximated by the sample data (Field 2009, 134). Consequently, we can conclude normality in the distribution of sample statistics, deeming data appropriate for parametric tests.

Furthermore, as both *t*-tests and ANOVA analysis require the assumption of homogeneity of variance to be fulfilled, a Levene's test for equality of variances will be extracted for relevant analyzes. Levene's test examines the null hypothesis that the population variances are equal, where a failure to reject the null indicates that the assumption of homogeneity is met. As the test will be extracted frequently, it is found unproductive to comment upon every test. As a result, test results will be presented in the table, but comments will only be made if the assumption is not met.

4.3   Hypotheses Testing

4.3.1   Hypothesis 1

H1.   *External third-party CSR messages has a more positive impact on consumer attitude than internal CSR messages.*

To test H1, independent samples t-tests were conducted for each dependent variable; one for attitude towards advertisement (AttAd) and one for attitude towards the source of the message (AttSource). By use of independent samples t-test, the researcher can examine the effect of manipulations through differences in overall means between the two experimental groups (Field 2009, 334). The experimental condition relevant for this hypothesis is message source (external third-party vs. corporation).

Testing the first dependent variable, there was no significant difference in attitude towards advertisement scores for messages communicated in the external third-party (M=4.65, SD=1.4) and corporation (M=4.68, SD=1.3) condition; t (339) = -.122, p > .05 (Table 5.5). As there is no statistically significant difference between Third-Party and Corporation conditions, the differences in mean value between conditions are likely due to chance, rather than the manipulation.

Table 5.5 *Independent Samples t-test Testing Hypothesis 1 (AttAd)*

Variable	Source Condition	N	Mean	Std. Deviation	*t*-value & p-value
AttAd Attitude towards advertisement	Third-party	179	4.650	1.404	-.122 ns (.903)
	Corporation	162	4.668	1.278	

Note: Levene's Test = .106 - equal variances assumed

Examining the effect of message source condition on attitude towards the source of the message, we find similar results. From table 5.6, we see that attitude towards source is not statistically different between external third-party (M=4.72, SD=1.3) and corporation (M=4.86, SD=1.2) conditions; t (339) = -.1.072, p > .05. As both t-tests yielded non-significant results, the message source condition is found to have no significant effect on attitude (towards ad or source) and H1 is not supported.

Table 5.6 *Independent Samples t-test Testing Hypothesis 1 (AttSource)*

Variable	Source Condition	N	Mean	Std. Deviation	*t*-value & p-value
AttSource Attitude towards source	Third-party	179	4.715	1.315	-1.072 ns (.284)
	Corporation	162	4.863	1.216	

Note: Levene's Test = .701 - equal variances assumed

4.3.1.1   Additional Testing

For an additional measure, analyzes were replicated using demographic control variables (age, gender, and education level). By means of univariate analysis of variance (ANOVA), the test of between-subject effects concluded that no control variable changed the results, with one exception (see appendix D). For attitude towards the advertisement, gender was found to have a significant effect (F (2.327) = 3.79, p = .024), meaning attitude was different between male and female. However, as this finding does not influence the outcome of H1, thereby considered irrelevant for further analysis.

4.3.2   Hypothesis 2

H2.   *The effect of external CSR messages on consumer attitude is mediated by the perceived authenticity of the source*

Hypothesis 2 proposes that the perceived authenticity of the source will mediate the effect of message source on attitude. However, as message source was not found to have any significant effect on attitude (as reported in section 5.3.1) literature suggests that the mediating role of authenticity cannot be tested. In one of the most cited papers on this topic, Baron and Kenny (1986, 1177) suggest that a central condition for establishing mediation is that the independent variable (X) must significantly affect the dependent variable (Y). From testing H1, we know that this is not the case. The logic of Baron and Kenny builds upon the principle that an effect that does not exist cannot be mediated (Hayes 2013, 169). However, more recent research has challenged this theory, stating that mediation in fact can exist in the absence of a significant total effect between the dependent and independent variables (e.g. Cerin 2008; Hayes 2009, 2013; Zhao, Lynch and Chen 2012). In a book published by Andrew Hayes (2013, 169), he states that there is a growing consensus in quantitative research, where confirming a significant

total effect (X → Y) should not be a requirement for searching evidence of indirect mediating effects (X → M → Y). Actually, the criterion set by Baron and Kenny is said to possibly hinder the detection of substantive mechanisms of influence (Cerin and MacKinnon 2008, 1185). To conclude, a significant total effect does not necessarily indicate mediation, just as a nonsignificant total effect does not imply a lack of mediation (Zhao et al. 2012, 200), it may therefore be possible to find an indirect effect even when lacking a total effect. Taking this logic and implementing it in this research, ultimately recognizes that *message source* may not be a good predictor of *attitude* when investigating the topic of CSR messages in controversial industries, or that the effect of *message source* on *attitude* is dependent on *perceived authenticity*.

To test for a possible indirect effect, where authenticity mediates the relationship between source and attitude, a mediation analysis was conducted using Model 4 in PROCESS. Table 5.7 presents results from the mediation analysis with *source condition* as the independent variable, *attitude towards advertisement* as the dependent variable, and *perceived authenticity* as the mediator. Results point to a *no-effect nonmediation*, where neither a direct ($c' = .13$, $p > .05$) nor indirect ($ab = -.11$, BCa CI [-.24, .003], $p>.05$) effect exists (Zhao et al. 2012, 200), thereby, H2 is not supported for *attitude towards advertisement* as dependent variable.

Table 5.7 *Results from Mediation Analysis, Testing Hypothesis 2 (AttAd)*

		Consequent						
		M (Perceived Authenticity)				*Y* (Attitude towards advertisement)		
Antecedent		Coeff.	SE	*p*		Coeff.	SE	*p*
X (Source Condition)	*a*	-.2393	.1220	.0507	*c'*	.1292	.1353	.3405
M (Perceived Authenticity)		-	-	-	*b*	.4654	.0599	.0000
Constant	i_1	5.0913	.1900	.0000	i_2	2.2624	.3700	.0000
		$R_2 = .0112$				$R_2 = .1516$		
		F (1.339) = 3.845, p = .0507				F(2.338) = 30.2059, p = .0000		
		β		95% CI				p
Indirect effect of X on Y	*ab*	-.1114		-.2396	.0027			> .05

Note: Total Effect (c) is not reported as it equals results from H1 analysis (see section 5.3.1)

To test for mediating effect with *attitude towards source* as dependent variable, the Model 4 PROCESS procedure was replicated, substituting attitude towards advertisement with attitude towards source. This second analysis yielded different results were an indirect, or mediated, effect (*ab*) does exist. From table 5.8 we find that the there is an indirect significant effect of the independent variable (source) on the dependent variable (attitude) trough *perceived authenticity* (*ab* = -.14, BCa CI [-.23, -.01], p<.05), and H2 is partially supported. The negative score (-.14) indicates that those presented with a CSR message conditioned to the corporation source (X=2) are estimated to have a more negative attitude towards the source, relative to those presented with a message from the external third-party (X=1). Consequently, H2 is supported when attitude is measured as *attitude towards source,* but not when it is measured as *attitude towards advertisement*.

Table 5.8 *Results from Mediation Analysis, Testing Hypothesis 2 (AttSource)*

		Consequent						
		M (Perceived Authenticity)				*Y* (Attitude towards source)		
Antecedent		Coeff.	SE	p		Coeff.	SE	*p*
X (Source Condition)	*a*	-.2393	.1220	.0507	*c'*	.2864	.1188	.0165
M (Perceived Authenticity)		-	-	-	*b*	.5802	.0526	.0000
Constant	*i₁*	5.0913	.1900	.0000	*i₂*	2.2624	.3700	.0000
		R^2 = .0112				R^2 = .2672		
		F (1.339) = 3.845, p = .0507				F (2.338) = 61.629, p =.000		
		β		95% CI				p
Indirect effect of X on Y	*ab*	-.1388		-.2326	-.0019			< .05

Note: Total Effect (c) is not reported as it equals results from H1 analysis (see section 5.3.1)

4.3.2.1   Additional Findings

Deviating from the hypothesis testing, it is worth mentioning the fact that *source condition* has a marginally significant effect on *perceived authenticity* (table 5.7, 5.8: *a* = -.24, p = .0507), unrelated to attitude towards advertisement or towards the source. The negative value of .24 indicates that participants presented with an ad in the *corporate* condition (X = 1) will report a lower score of perceived authenticity than in the *third-party* condition (X = 2). An independent samples *t*-test was conducted to test this result, signifying that findings are accurate (see appendix E for *t*-test results).

Furthermore, perceived authenticity was found to have a significant positive effect on *attitude towards advertisement* (table 5.7: *b* = .47, p < .001) and *attitude towards source* (table 5.8: *b* = .58, p < .001). The regression coefficient for path *b* explains the relationship between M and Y, while also controlling for X. When two people who are assigned to the same experimental condition (i.e. equal on X) differ by one unit in perceived authenticity (M), the regression coefficient (β) estimates the difference in attitude (Y) between the two (Hayes 2013, 96). For both dependent variables, the regression coefficient is positive, specifying that between two participants (in the same experimental condition, with different authenticity levels), the one participant with a higher reported level of perceived authenticity is estimated to have a better attitude towards the ad and the source. Or put simply, the more authentic one perceives the source, the more favorable the attitude. These results are fully supported by findings from two simple linear regression analyses (see appendix F for results).

Also noteworthy is the significant direct effect of *source condition* on *attitude towards source*, when introducing *authenticity* as a control measure (path *c'* in table 5.8). This direct effect is measured by taking one case from the *corporate* condition (X = 1) and one from the *third-party* condition (X = 2) that are equal on *perceived authenticity* (M) and looking at how they differ from each other on *attitude towards source* (Y) (Hayes 2013, 97). Results show that the direct effect of X on Y is positive and significant (*c'* = .29, p < .01). This essentially means that when M is held constant, participants assigned to the third-party condition (X = 2) are estimated to be .29 units higher on average in attitude towards the source (Y), than those assigned to the corporation condition (X = 1).

4.3.3   Hypothesis 3

H3.   *Negatively framed CSR messages have a more positive impact on consumer attitude than positively framed CSR messages*

Correspondingly to H1 testing, H3 is tested by the use of independent samples t-test for each of the dependent variables (attitude towards advertisement and attitude towards source), but with massage framing (positive vs. negative) as experimental condition. For *attitude towards advertisement,* no significant difference was found between scores in the *positive* (M=4.70, SD=1.37) and *negative* (M=4.61, SD=1.32) condition; t (339) = .602, p>.05. (table 5.9)

Table 5.9 *Independent Samples t-test Testing Hypothesis 3 (AttAd)*

Variable	Framing Condition	N	Mean	Std. Deviation	*t*-value & p-value
AttAd Attitude towards advertisement	Positive	177	4.701	1.368	.602 ns (.547)
	Negative	164	4.613	1.320	

Note: Levene's Test = .842 - equal variances assumed

Results are similar when examining *attitude towards source.* From table 5.10, it is found to be no significant difference in attitude towards source scores between the *positive* (M=4.77, SD=1.29) and *negative* (M=4.80, SD=1.25) condition; t (339) = -.254, p>.05. As neither of the independent samples t-tests yielded significant results, there is no evidence of message framing influencing attitude (towards ad and/or source) and H3 is not supported.

Table 5.10 *Independent Samples t-test Testing Hypothesis 3 (AttSource)*

Variable	Framing Condition	N	Mean	Std. Deviation	*t*-value & p-value
AttSourcce Attitude towards source	Positive	177	4.768	1.288	-.254 ns (.800)
	Negative	164	4.803	1.252	

Note: Levene's Test = .957 - equal variances assumed

4.3.3.1   Additional Testing

In the same manner as H1 testing, analyzes were replicated to include demographic control variables (age, gender and education level) for an additional measure of H3. The univariate analysis of variance (ANOVA) concluded there to be no difference in attitude when including control variables, with the exception of gender on attitude towards advertisement (see appendix G). Similar to H1 testing, gender was found to have a significant effect on attitude ($F_{(2.327)}$ = 3.74, p = .025), meaning there was a significant mean difference in attitude between male and female. Again, this result does not change the outcome of the hypothesis testing, further analysis is therefore redundant.

We now know that despite findings in previous research (e.g. Chang 2007; Groza et al. 2011; O'Keefe 2012; Miller and Lellis 2016) neither the source nor framing condition applied in this study had a significant effect on attitude. One could speculate that the reason message framing has no significant effect on attitude (towards ad or source) is that it depends on the message source, vice versa. To test the possibility of a crossover interaction, an additional univariate analysis of variance is conducted to check for interaction effects (message framing x message source). Results from this test are presented in appendix H, concluding no significant interaction effects on neither attitude towards advertisement nor attitude towards source. By this, it can be concluded that there is no overall effect of message framing or message source on attitude, and no crossover interaction effect.

4.3.4   Hypothesis 4

H4.   *The effect of negatively framed CSR messages on consumer attitude is moderated by individuals' level of environmental concern*

Hypothesis 4 suggests that attitude towards advertisement and source is moderated by the degree of environmental concern. Generally, it is relevant to use moderation variables in cases where there is an unexpectedly weak relationship between independent and dependent variables (Baron and Kenny 1986, 1178). Thereby, *level of environmental concern* will function as a third variable that will affect the direction and/or strength of the relation between the framing condition and attitude (Baron and Kenny 1986, 1174). To test the hypothesis, two factorial ANOVAs were conducted, testing the main effects of framing condition and level of environmental concern (EnvConcern) and the interaction effect between the two on attitude towards advertisement and message source.

Testing with attitude towards advertisement as the dependent variable, results in table 5.11 show no significant interaction effect ((Framing*EnvConcern) ($F_{(1.337)}$ = 1.002, p > .05) and H4 is not supported for attitude towards advertisement.

Table 5.11 *Test of Between-Subject Effects Testing Hypothesis 4 (AttAd)*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14.721	3	4.907	2.762	.042
Intercept	330.540	1	330.540	186.014	.000
Framing	1.134	1	1.134	.638	.425
EnvConcern	13.019	1	13.019	7.326	.007
Framing * EnvConcern	1.780	1	1.780	1.002	.318
Error	598.838	337	1.777		
Total	8013.361	341			
Corrected Total	613.560	340			

R Squared = .024 (Adjusted R Squared = .015)
Dependent Variable: AttAd (Attitude towards the advertisement)
Note: Levene's Test = .942 – equal variances assumed

Table 5.12 presents results for *attitude towards source.* There was found to be a significant moderation effect ((Framing*EnvConcern) ($F (1.337) = 4.446$, $p<.05$)). As hypothesis 4 suggests that level of environmental concern moderates the effect of message framing on attitude, it is of interest to examine the interaction term further.

Table 5.12 *Test of Between-Subject Effects Testing Hypothesis 4 (AttSource)*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.700	3	3.233	2.025	.110
Intercept	421.648	1	421.648	264.116	.000
Framing	7.020	1	7.020	4.397	.037
EnvConcern	3.265	1	3.265	2.045	.154
Framing * EnvConcern	7.097	1	7.097	4.446	.036
Error	538.003	337	1.596		
Total	8355.938	341			
Corrected Total	547.703	340			

R Squared = .024 (Adjusted R Squared = .015)

Dependent Variable: AttSource (Attitude towards the advertisement)

Note: Levene's Test = .699 – equal variances assumed

From the parameter estimates (see appendix I) it is found that the interaction of positive framing and environmental concern has produced a significant positive value ($\beta = .231$, $p<.05$). This indicates that positive framing will result in a more favorable attitude (+.23) than negative framing as level of environmental concern increases (by 1). One way of visualizing this effect is through spotlight analysis. According to Krishna (2012, 3), the data should be visualized by by mean score of the moderating variable (environmental concern) and including the values one standard deviation "up" and one "down" from the mean. The spotlight result can be seen in figure 5.1 where the mean score (M=4.81) of environmental concern is accompanied by values plus/minus one standard deviation (SD = 1.26). This visualization corresponds with findings from the parameter estimates, where increased environmental concern leads to a more advantageous attitude for positive framing than negative framing. Furthermore, it adds information as to what the estimated attitude will be at a lower level of environmental concern. Here we find that negative framing will lead to a more positive attitude towards the source for people reporting lower levels of environmental concern, than will positive framing.

Figure 5.1 *Interaction Plot for Hypothesis 4 (AttSource)*
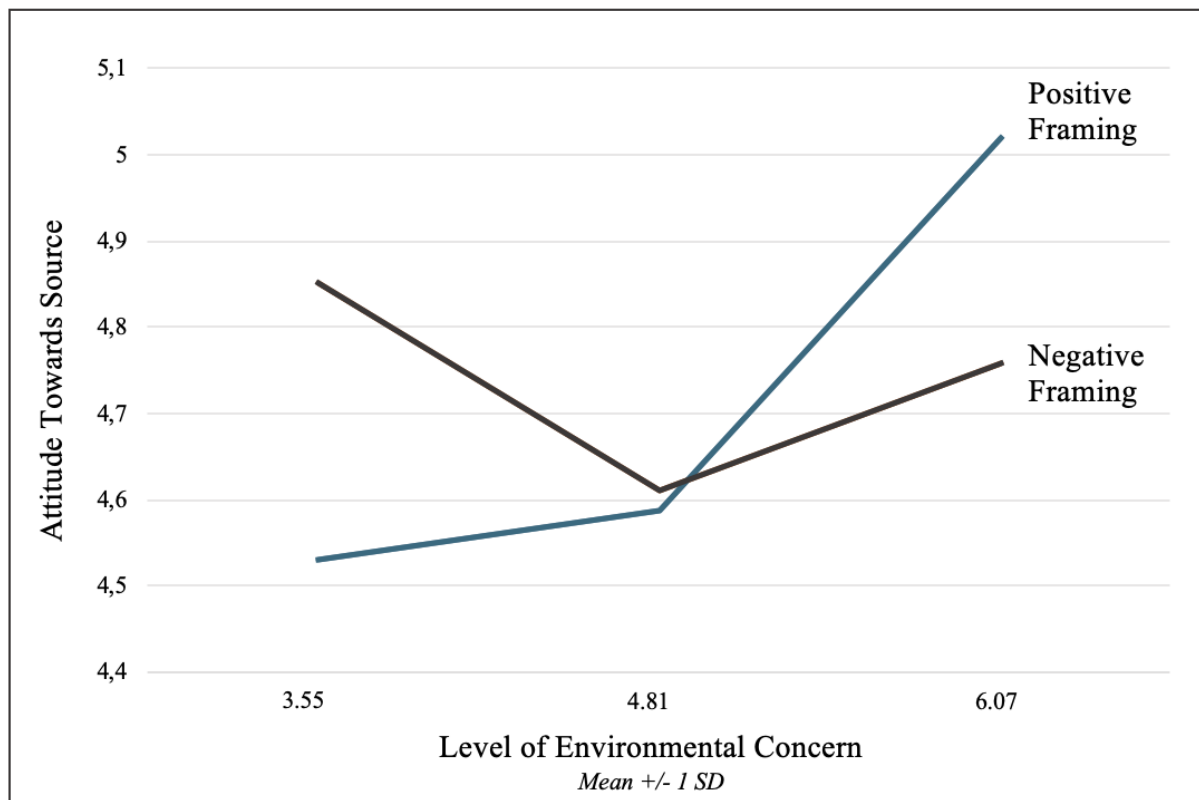
The spotlight analysis does also provides tests of the significance for each of the *environmental concern* levels (i.e. 3.55; 4.81; 6.07), however for a more in-depth examination of significance Johnson-Neyman analysis is recommended (Spiller, Fitzsimons, Lynch and McClelland 2013, 282). Where spotlight analysis gives results for each of the three levels, Johnson-Neyman (JN) explains every value of the moderating variable, illuminating the entire range of *environmental concern* and showing where the interaction effect is significant and not (Spiller et al. 2013, 282). That is, rather than examining the *p*-value for a given value of the moderator, the JN technique derives the values of *environmental concern,* examining at what values of the moderator the interaction effect is significant (Hayes 2013, 239).

To examine at what levels the interaction between framing and environmental concern is significant, a Johnson-Newman analysis was conducted using PROCESS. The JN technique generated a single solution within the range of the measurement of *environmental concern*. This indicates that the conditional effect of *framing* on *attitude* is statistically significant when the value of *environmental concern* equals 2.45 (table 5.13).

Table 5.13 *Moderator value, Johnson-Neyman significance region (AttSource)*

Value (Environmental Concern)	% below	% above
2.452	4.399	95.601

PROCESS did in addition produce a table for the effect of framing on attitude at different values of environmental concern, accounting for effect size and significance levels. This table has been visualized in figure 5.2, signifying the position of JN point of significance (2.45, p=.05). As show in the figure, framing will have a significant effect on attitude for all participants reporting levels of environmental concern below the JN point of significance. This essentially means that the conditional effect of framing on attitude towards the source will be significant for participants reporting environmental concern to be equal to, or lower than 2.45. Furthermore, we know from figure 5.1 that negatively framed messages will better reach and positively affect the attitude of people not too concerned about the environment. However, for participants above the JN point, there will be no significant difference in attitude based on the type of framing used. This could indicate that when environmental concern is higher, no form of framing will be better than the other at affecting attitude towards the source of the message. Furthermore, it is of interest to look at the effect framing has on attitude (Y-axis) based on level environmental concern. From figure 5.2, we find that the JN line goes from having a positive effect on attitude (>0), to a negative effect on attitude (<0) when participants report *environmental concern* to be (about) 5 or higher. This could signify that there is distrust or disliking towards the sources of the messages for participants highly invested in environmental issues.

Figure 5.2 *Conditional effect of Framing on Attitude at Different Moderator Values*
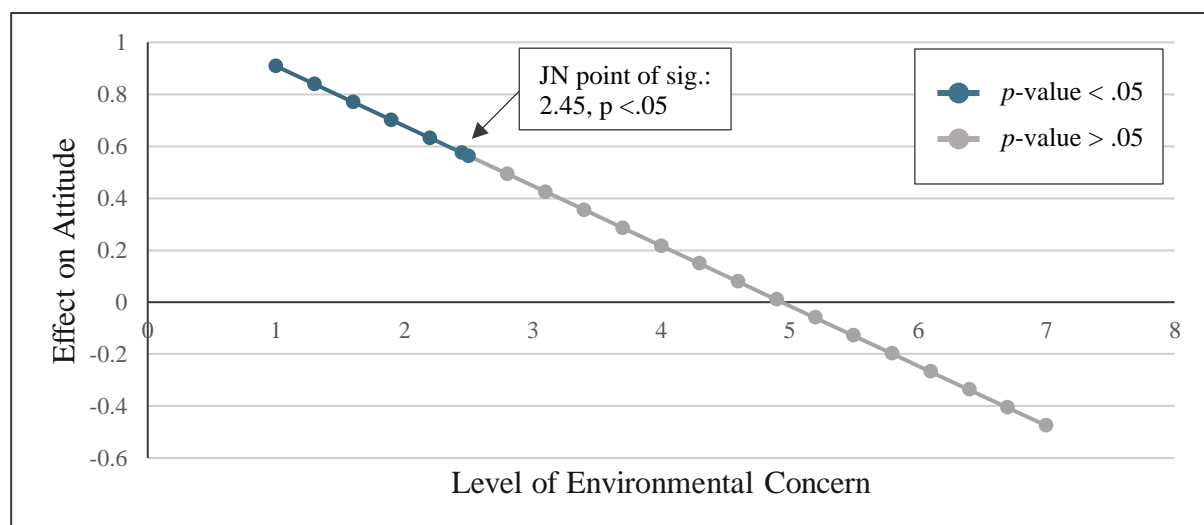
There is a significant difference in attitude towards the source based on message framing when level of environmental concern is introduced as a moderating variable. The overall results find framing to have a significant effect on attitude when level of environmental concern is low, where negatively framed messages have a significant positive effect on attitude towards source. Based on the overall results, it can be concluded that hypothesis 4 is partially supported; supported when attitude is measured as *attitude towards the source,* but not supported when it is measured as *attitude towards the advertisement*.

4.3.4.1 Additional findings

Deviating from the hypothesis, ANOVA results indicated that *level of environmental concern* (EnvConcern) alone, had a statistically significant effect on *attitude towards advertisement* (table 5.11: $F_{(1.337)} = 7.33$, $p < .05$). This effect had a positive coefficient ($\beta = 0.98$), meaning the more environmentally concerned the participant is, the more favorable their attitude towards the advertisement. While not significant (table 5.12: $F_{(1.337)} = 2.045$, $p > .05$), this effect is reversed when examining *attitude towards the source* of the message ($\beta = -.037$). One could speculate that the reason for this is that environmentally concerned participants, in general, would appreciate a CSR message conveying environmentally friendly solutions, while at the same time have reservations towards the sources of these messages.

Furthermore, for the ANOVA analysis on *attitude towards source* (table 5.12), the framing condition generated a significant main effect ($F_{(1.337)} = 4.397$, $p < .05$), while *t*-test results from hypothesis 3 yielded no significant effect of framing on attitude. The reason for this result is that while the t-test simply determines whether there is a significant difference between the means of two groups, the ANOVA analysis controls for other sources of variability in attitude. In this case, the ANOVA analysis generated coefficients that represent the independent contribution of *framing,* controlling for the contribution of environmental concern and the interaction term (framing*environmental concern) (Hayes 2013, 217). Looking at the parameter estimates of the model, it becomes clear that the main effect of positive framing will lead to a less favorable attitude ($\beta = -1.139$, $p<.05$) than negative framing.

5.0   Discussion and Implications

This chapter will present the main findings of the study, discussing the theoretical contribution and practical implications of the finds. The chapter concludes with a discussion of the study's limitations and suggestions for avenues of further research.

5.1   Main Findings

To examine the antecedents of attitude towards environmental CSR messages from controversial industry actors, a questionnaire was distributed to measure participants level of environmental concern, attitude towards the advertisement in itself, their attitude towards the source of the message, and the perceived authenticity of this source. The experimental study included four different advertisements, manipulated by message framing (positive vs. negative framing) and message source (external third-party vs. corporation), where one of the four were presented at random to each participant. There was also conducted a manipulation check to ensure that the advertising stimuli were appropriate for use in the main study, concluding the manipulation design to function as intended.

The first hypothesis of the study assumed that using an external third-party actor for communication of CSR messages would have a more positive impact on consumer attitude that using an internal/corporation source. Analysis results show no significant difference in attitude towards advertisement nor source based on message source, and the hypothesis was not supported. This finding contradicts previous studies implementing message source as an independent variable affecting attitude. As the public often times utilize preconceived images about a message source as a guide for attitude formation (Bostdorff and Vibbert 1994, 146), it suggests that the message source in itself can influence attitude. Moreover, empirical findings suggested attitude to be partially dependent on the source of the message (e.g. Groza et al. 2011; Miller and Lellis 2016), where messages communicated through an external third-party proved more effective in producing favorable consumer attitudes (Gosselt et al. 2019, 414). Inclinations as to why this analysis did not produce the hypothesized result will be further discussed together with results from hypothesis three. However, it should be noted that several of these previous studies in addition implemented attribution theory and consumer perception as a form of explanatory variables, to better understand attitude formation. This was taken into account through the development of hypothesis two.

The second hypothesis builds on the notion that the public will attribute certain motives to the source of a message (Gosselt et al. 2019, 421), where attitude towards the message to some extent can be predicted by public perception of the authenticity of the source (Gilbert and Malone 1995, 21; Molleda and Jain 2013, 436; Miller and Lellis 2015, 70). Consequently, hypothesis two suggested attitude towards CSR advertisement and source to be mediated by the perceived authenticity of the message source. For an overview, results from the analysis of hypothesis 2 is summarized in figure 6.1. The hypothesis was partly supported, where *perceived authenticity* had a mediating effect for *source condition* on *attitude towards the source* but not on *attitude towards the advertisement.* As predicted in the hypothesis, when mediated by perceived authenticity, attitude is estimated to be more favorable towards the source of the message when the source is an external third-party, rather than a corporation. Because the mediation (*ab*) is a product of the independent variable on the mediator (*a*) times the effect of mediator on dependent variable (*b*), one has to examine the direct effects to understand why mediation is significant when examining attitude towards the source, but not towards advertisement.

For both attitude towards advertisement and towards source, the source condition showed to have a marginally significant effect ($p = .051 = 94.9\%$ CI) on perceived authenticity, where the external third-party condition (M=4.85) produced higher perceptions of authenticity than the corporation condition (M=4.61). However, perceived authenticity had a significant positive effect only on attitude towards the source and not on attitude towards advertisement. This finding can suggest that participants did not attribute objectives to the source of the message when evaluating the advertisement in itself. Conversely, perceived authenticity of the source was taken into account when asked to report on attitude towards the source, creating a significant mediation effect. Furthermore, contrary to results from hypothesis one, message source was found to have a significant direct effect on attitude towards source, but not towards advertisement. Again, it is conceivable that people first evaluated the source of the message when asked directly about their attitude towards the source.

Figure 6.1 *Result Summary for Hypothesis 2 (AttAd & AttSource)*

Indirect effect/mediation effect (ab)

AttAd: **-.11** n.s.

AttSoruce: **-.14, BCa CI [-.23, -.01] ***

Perceived authenticity (M)

Direct effect (a)

AttAd: **-.24** n.s.

AttSource: **-.24** n.s.

both marginally sig. with

p-value = .0507

Direct effect (b)

AttAd: **.47 ****

AttSource: **.58 ****

Source condition (X)

Attitude towards advertisement/source (Y)

Direct effect (c')

AttAd: **.13** n.s.
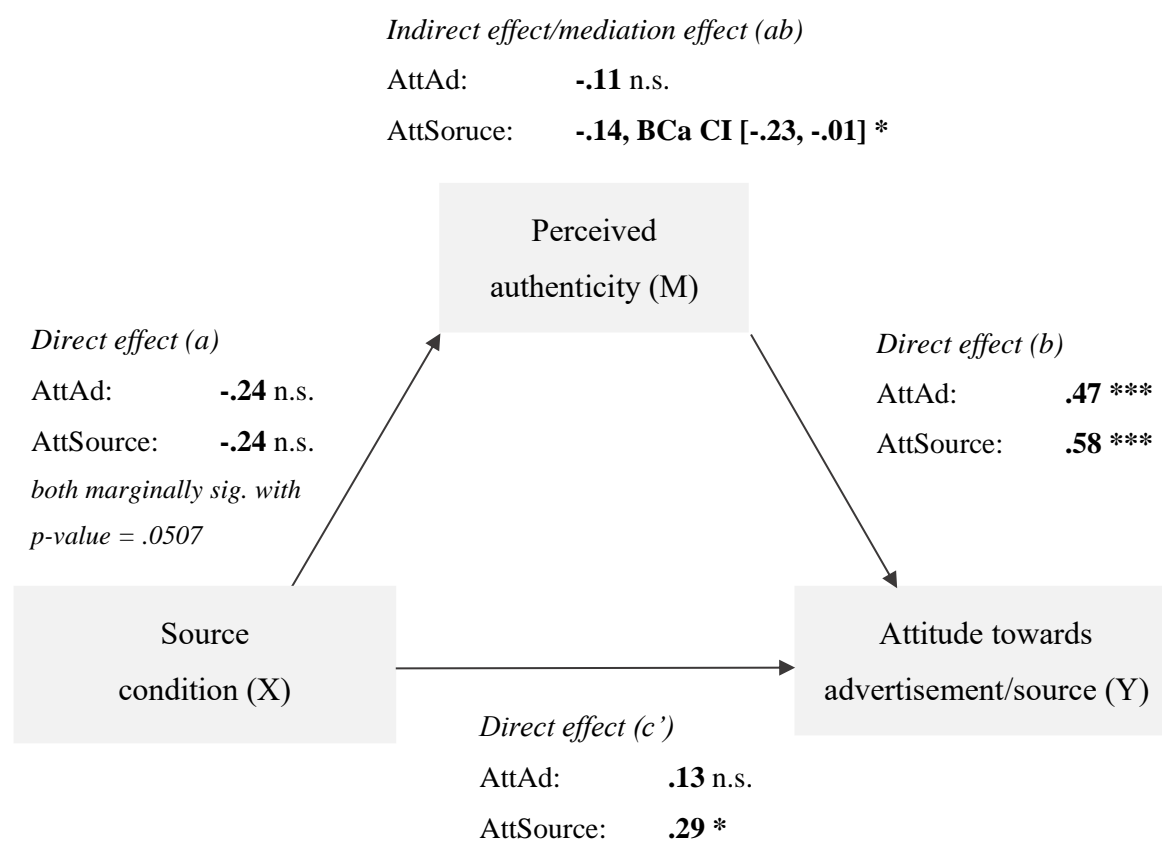
AttSource: **.29 ***

Note: Total Effect (c) is not reported as it equals results from H1 analysis

*For P-value, values less than .05 = *; .01 = **; .001 = ****

DV: AttAd = Attitude towards advertisement; AttSource = Attitude towards source

The third hypothesis proposed that the framing of CSR messages could impact attitude, where negatively framed messages would generate more favorable attitudes than positively framed messages. As there was found to be no significant alteration in attitude (towards advertisement/source) based on message framing, hypothesis 3 was not supported. This finding goes against results from previous research, where people had a tendency to report favorable attitude when presented with a negatively framed message, relative to those presented with a positively framed message (e.g. Chang 2007; O'Keefe 2012). As both message source (H1) and message framing (H3) was not found to affect attitude, additional analyzes were executed to examine possible demographic control variables and test for crossover interactions between source and framing on attitude. Despite the successful preliminary testing of manipulation stimuli, neither of these analyzes found any significant effects that could explain the deviation from empirical findings. However, I would like to include feedback from participants as an explanatory element.

As the questionnaire was distributed, I received e-mails and chat messages from participants eager to share their opinion on the subject of environmental CSR efforts. A reoccurring topic was the inclusion of wind-energy as an energy source within the advertisements. Many expressed likings towards the general advertisement but presented reservations towards wind energy. One person told me that he "[…] might be hypocritical, I strongly agree with the establishment of sustainable energy power plants, but against the wind turbines being set up in my neighborhood". Thereby, some participants may be evaluating the advertisement on a different foundation than others, where their focus have been shifted away from the subject of the thesis. Furthermore, it appears that most have strong feelings connected to Equinor and Olje- og Energidepartementet (as with any other Norwegian oil and gas actor), with one particular participant accusing the survey to be stealth marketing. So, with regards to *attitude towards source*, it may be that no matter how the message is framed, the framing alone cannot shake the preconceived thoughts about the source. As for *attitude towards the advertisement*, one can imagine that participants expressed similar attitudes because any sustainable effort is appreciated, no matter how it is communicated and by who.

The fourth and last hypothesis proposed the effect of negatively framed messages on attitude to be moderated by level of environmental concern, and the hypothesis was partly supported. While there was no significant moderating effect on attitude towards advertisement, the effect of framing on attitude towards source was significantly moderated by level of environmental concern. A summary of findings is visualized in figure 6.2. The interaction effect indicated that when conditioned to positive framing, each increase in level of environmental concern would lead to an increase in attitude towards the source, relative to those conditioned to negative framing. However, by means of the Johnson-Newman technique, it was found that the interaction effect was only significant for those reporting low levels of environmental concern (2.45 or less). While it is true that participants highly concerned about the environment prefer positively framed messages, this effect is not significant. Thus, indicating that message framing is more effective in influencing the attitude on those not too concerned about the environment. Furthermore, the effect framing has on attitude is positive and higher in the low range of environmental concern, while smaller and moving towards negative as level of environmental concern increase. All of the above suggests that people not too concerned about the environment have a more favorable attitude towards oil and gas actors, where a reduction in the use of fossil fuels (negative framing) has an advantageous effect on attitude, relative to increased investment in renewable energy (positive framing).

Furthermore, while not significant, the indication that positive framing had a favorable influence on attitude towards the source for highly environmentally concerned individuals contradicts empirical findings. Previous studies suggest that negatively framed messages are more effective in positively influencing people with high processing motivation (i.e. highly environmentally concerned), relative to positive framing (e.g. Martin and Marshall 1997; Shiv et al. 2004; Shiffman et al. 2012; Olsen et al. 2014). However, as the level of environmental concern increases, there is a tendency indicating that the framing effect will interchange. The positive effect on attitude turn to be a negative effect when level of environmental concern passes the mean value (M=4.8). This corresponds to empirical findings where increased personal involvement led to increased skepticism (Do Paco et al. 2012, 153). Therefore, the explanation may lie in the fact that issue involvement also includes stronger feelings connected to the sources of the messages, and it may not matter what framing is used.

Figure 6.2 *Results Summary for Hypothesis 4 (AttAd & AttSource)*

Main effect (b_1)

AttAd: **-.46** n.s.

AttSource: **-1.14** *

Framing condition (X)

Attitude towards advertisement/source (Y)

Interaction effect (b_3)

AttAd: **.12** n.s.

AttSource: **.23** *

Main effect (b_2)

AttAd: **.098** **

AttSource: **-.04** n.s.

Level of Environmental Concern (M)
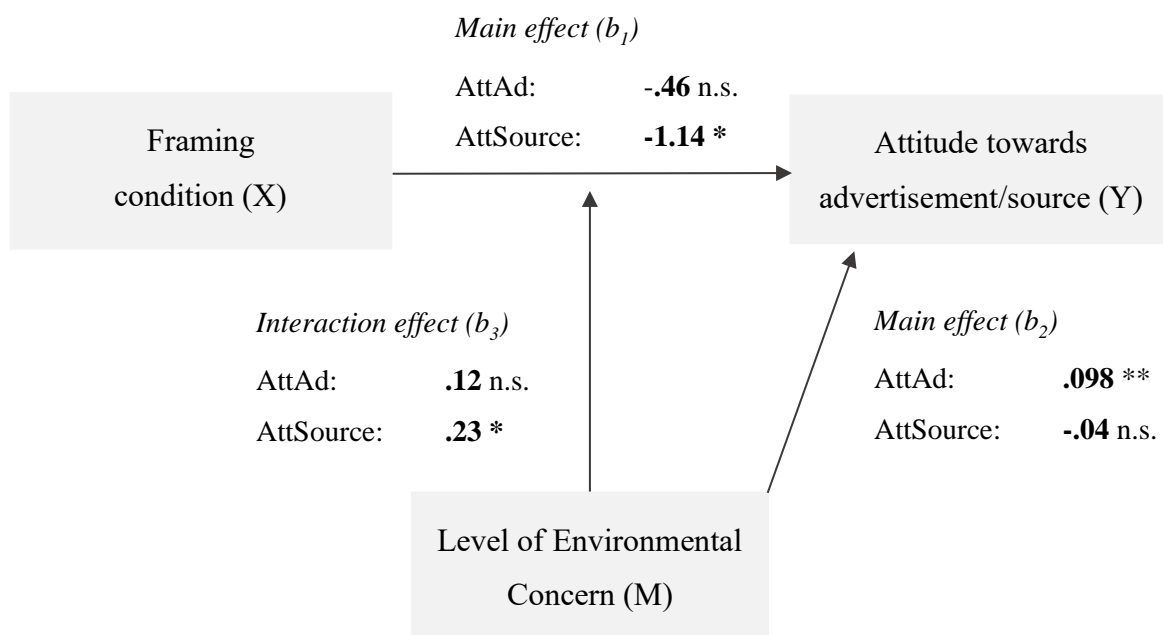
Note: Total Effect (X → Y) is not reported as it equals results from H3 analysis.

For P-value, values less than .05 = *; .01 = **; .001 = ***

DV: AttAd = Attitude towards advertisement; AttSource = Attitude towards source

This thesis presented two research questions in the introduction; firstly (RQ1), to what extent can the message source and message framing of a CSR campaign for the oil and gas industry estimate consumer attitude towards the advertisement and the organization running the ad?; then (RQ2), what mediates and moderates these effects? From analyzes it became clear that the conditions applied in this study had no significant effect on attitude, showing message source and message framing unable to estimate attitudes. However, with the inclusion of perceived authenticity and level of environmental concern as predictors, the effects of condition on outcome were mediated and moderated. This leaves us with the overall research problem, which will be answered and discussed in the next section (5.2).

5.2   Practical Implications

As this thesis shines light on a topic with limited amount of prior research, findings have essential applications as to how and where corporations should allocate communication resources. The research problem stated in the introduction asks; Can controversial industry actors, such as the oil and gas industry, benefit from communicating their CSR efforts and how can these efforts be communicated effectively? To answer the first part of the question – yes, they can. Results indicate that the oil and gas industry may benefit from promoting environmental CSR initiatives under certain circumstances. It is clear that the use of negatively framed messages will improve attitude towards the source of the message given that the individual is not too concerned about the environment. All the while, it appears not that simple to reach and gain support from those highly concerned about the environment. As most Norwegians are involved in and concerned about environmental issues (Kantar 2020), the question becomes how to reach and affect this part of the population. For greater environmentally concerned people, this study found tendencies for positively framed messages to be better than negatively framed ones with regards to attitude towards the source. However, as environmental concern increases, the possibility of damaging effects on attitude does as well. Even if level of environmental concern was not examined in relation to perceived authenticity, I suggest that working to increase perceived authenticity is the best bet for reaching people highly concerned about the environment, and I will explain why.

From testing the mediating effect of authenticity, results estimated that using an internal corporate source to convey CSR messages would negatively affect attitude towards the source, relative to using an external third-party source. Furthermore, there was also found a significant

direct effect of authenticity on attitude. As the perceived authenticity increases, so will the attitude towards the source. This tells us two things. Firstly, it will be of benefit for an oil and gas actor to convey their CSR initiatives through an external third-party. Second, working towards achieving an authentic image should be a priority if the goal is to gain support. So, based on past literature stating that personal relevance and high issue involvement will induce motivation for elaboration (Shiv et al. 2004; Grau and Folse 2007) it is reasonable to accept that people highly concerned about the environment are more inclined to acquire knowledge about the issue at hand. However, the information that is offered ought to be transparent and true in order to positively influence attitude, especially for controversial industries such as the oil and gas sector.

So how can CSR efforts be communicated effectively? Based on the above, it might be that partnering up with the podcast, *Forklart*, was a good solution after all. As mentioned in the introduction, a couple of years ago Equinor partnered up with the popular podcast delivered by one of Norway's biggest newspapers but received backlash as it became considered as stealth marketing. However, findings from this study indicate that a controversial corporation like Equinor can benefit from communicating their initiatives through a third-party source like *Forklart.* However, if they do, authenticity is key. In order to reach and affect the attitude of those highly concerned about the environment, Equinor needs to make sure that their partnerships and intentions are transparent. Furthermore, if environmental CSR information is to be distributed through advertisements (e.g. in newspapers, social media, or on posters) it is better to frame the message in a positive manner, as well as through (or supported by) a third-party source. If the message presents future CSR initiatives, the communication has to be clear and according to facts in order to advance authenticity. However, it is possible that support is more easily gained by presenting initiatives that have already been executed – show, don't tell – as this gives the corporation an opportunity to refer to actual events.

5.3   Theoretical Contributions

As stated in the introduction, there is a lack of research on environmental CSR communication with regard to controversial industries. This thesis contributes by introducing a new construct and explaining how it relates to essential theory applied when examining other industry sectors. It broadens the knowledge about environmental CSR in controversial industries and contributes to a better understanding of its potential value. First, the study represents one of the few efforts

to explain and understand message framing in the context of CSR, as well as identifying factors that moderate and mediate relationships. While framing conditions have been frequently used to examine the effectiveness of messages within healthcare, findings indicate that the theory might be useful to understand message effectiveness in other sectors as well. Even so, framing of environmental CSR needs to be understood in the context of the moderating factor, *level of environmental concern.* The same applies to source conditions. Where previous studies have implemented message source as a dependent variable predicting attitude in relation to sales marketing, this study finds that message source may be a predictor to consider in public awareness campaigns as well. However, in the context of environmental CSR, it is necessary for the effect of message source on attitude to be understood in light of *perceived authenticity*.

5.4   Limitations and Further Research

The results from this study should be acknowledged and considered in light of related limitations, where the inability to support hypotheses 1 and 3 is prominent. Even though the preliminary test of manipulation effectiveness gained significant results, there was found no significant difference in attitude as a result of the applied conditions. Consequently, it can be of benefit to examine the manipulations further. As a result of limited time, the manipulation test was conducted by presenting all four manipulations to every individual participant, asking them questions in such a way that they would have to reflect upon what the message read. It is a possibility that testing in such a manner caused participants to elaborate and better distinguish between the four ads, than the participants in the main study. I would therefore recommend testing the manipulations between subjects, rather than within subjects. However, there are other possible reasons as to why hypotheses 1 and 3 was not supported. With regards to *attitude towards advertisement* as influenced by message framing and message source, no significant results may be due to the general likability of sustainable and environmental efforts, unrelated to how and by who it is presented. While for *attitude towards the source*, it may be predictable that the general participant has strong feelings attached to members of the oil and gas industry, where an advertisement alone is not enough to affect attitude (no matter how it is framed and by who it is presented). So, an alternative explanation is that these relationships alone are not enough to influence and explain the conception of attitude. For when perceived authenticity was introduced as a mediator and level of environmental concern as a moderator, significant relationships were established. Even so, when perceived authenticity and level of environmental concern were taken into consideration, the model only accounts for, respectively, 27 and 24

percent of the variation in attitude towards source (table 5.8; 5.12). This makes room for future research to add factors and create models that can explain more of the variation in *attitude towards source*.

Furthermore, this study's findings provide evidence that the source of environmental CSR messages can impact the perceived authenticity of the source, while perceived authenticity also mediates the effect of the message source condition on attitude. This thesis found that presenting CSR through the external source of Olje- og Energidepartementet resulted in higher levels of perceived authenticity, as well as more favorable attitudes towards the source, relative to Equinor (when mediated by authenticity). While the external third-party was found to be perceived as more authentic than the internal corporation source, it would be interesting to examine if results hold when communicated though other third-party sources. Also, it could be of interest to examine if there are any other factors affecting authenticity.

Respondent demographics may also present a limitation in terms of the generalizability of findings. Despite efforts to solicit participants of all ages, participants do not represent a cross-section of the general population as the majority of those participating were under the age of 36 (62 %). Findings in this study may therefore mostly apply to younger Norwegians. Even so, the findings prove useful to the industry and literature, as statistics indicate that climate engagement is highest amongst those younger than 31 (Livgard 2019). In addition, it is found that the same age group have the least confidence in the oil and gas industry to lead the change (Statement: "*The Norwegian oil and gas industry is well suited to lead the transition from fossil fuels to renewable energy*"; Livgaard 2019). Consequently, this age segment might be of interest to target and influence for the oil and gas industry. Further research might also benefit from focusing the study towards younger Norwegians, attaining more in-depth knowledge about this specific segment. Furthermore, with regards to the questionnaire design, it could be of benefit to add a pre-measure of attitude. Thereby one can measure the full effect of the experimental conditions on attitude.

Additionally, while environmental CSR marketing is used in a variety of industry sectors, this study focused exclusively on the oil and gas industry, which may present a possible limitation. However, although environmental CSR in controversial industries is relatively specialized, it becomes an increasingly prevalent subject to study, as more and more attempt to redeem their reputation through CSR. So, like with any other study, caution must be implemented when

drawing conclusions from the findings of a single research. But even with relevant limitations, the findings of this study provide evidence that both message framing and the message source are relevant factors to take into consideration when forming and implementing CSR communication. Especially if the perceived authenticity and level of environmental concern is taken into consideration, which is inevitable in the real world.

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Appendices

Appendix A: Examples of Message Framing

Examples of message framing		
Positive	Negative	Source
Gaining a better environment …What will happen if we change our behaviors to take better care of the environment? The answer is simple. What we now value can be preserved and even improved. With change, a broad range of environmental problems, including garbage and pollution, can be resolved. The result? Quality of life will improve. More open spaces. Improved air and water quality. A quality environment … preserved and improved.	Losing what we now have … What will happen if we don't change our behaviors to take better care of the environment? The answer is simple. What we now value will be lost. Without change, a broad range of environmental problems, including garbage and pollution, will continue to grow. The result? Quality of life will diminish. Fewer open spaces. Reduced air and water quality. Once gone … very difficult to get back	*Davis 1995*
Think about what we can gain this year by making a wise choice. - Save over 48 000 trees	Think about what will be lost this year if we don't make a wise choice. - Loose over 48 000 trees	*Chang, Zhang and Xie 2015*
People who use disclosing gum periodically before brushing are taking advantage of a safe and effective way to detect areas of plaque accumulation With disclosing gum, you can be more confident that your teeth and gums are healthy. You will also enjoy fresh breath.	People who don't use disclosing gum periodically before brushing fail to take advantage of a safe and effective way to detect areas of plaque accumulation Without disclosing gum, you may be less confident that your teeth and gums are healthy. You might also suffer from bad breath.	*Chang 2007*
If you buy organic food products, then […] You will make a contribution to natural resources and ecological protection.	If you don't buy organic food product, then […] You won't make a contribution to natural resources and conservation.	*Chang and Wu 2015*

By taking this diagnostic blood test, you can find out your current cholesterol level.
  By taking this test, you'll acquire important information pertinent to a major risk factor leading to heart attacks.
  Remember that you stand to gain important health benefits if you take the initiative to learn what your current cholesterol count is
	By not taking this diagnostic blood test, you can fail to find out your current cholesterol level.
	  By not taking this test, you'll fail to acquire important information pertinent to a major risk factor leading to heart attacks.
	  Remember that you stand to lose important health benefits if you fail to take the initiative to learn what your current cholesterol count is
		Maheswaran and Meyers-Levy 1990

Many scientists are working on solutions for averting an energy crisis by attempting to find more efficient energy use strategies than currently employed. Since fossil fuel resources are running out, which has led to increasing energy prices, and since many Western countries depend on energy from economically and politically unstable countries, causing large price fluctuations, the use of biofuels offers a potential solution particularly from an environmental viewpoint. In Belgium, 17% of energy is used for transport. Because transport accounts for a large proportion of the total energy consumed, fuel conserving strategies are expected to play a major role. In addition, biofuels pose environmental benefits in the sense that they are expected to reduce greenhouse gas emissions. In 2007, different gas stations in Belgium will blend fossil fuels with a percentage of biodiesel and bio ethanol. In addition to the advantages listed above, these fuels are renewable, they can be produced in Belgium and vehicles can utilize this fuel without engine modifications. So, everyone can contribute to the solution.

An energy crisis will occur in the near future. The depletion of the ozone layer, global warming, acid rain, air pollution. In addition to the environmental impact, other problems exist with fossil fuels. Firstly, fossil fuels are running out and this has led to increasing energy prices and secondly, many Western countries depend on energy from economically and politically unstable countries causing large price fluctuations. In Belgium, 17% of energy is used for transport. Because transport accounts for a large proportion of the total energy consumed, an energy crisis is looming and will affect your transport routines in the near future. The consequences for the environment will be incalculable unless everybody reduces their fuel consumption or switches to biofuels.

Van de Velde, Verbeke, Popp and Huylenbroeck 2010

Appendix B: Questionnaire

Part 1	Level of Environmental Concern

Klima- og miljøsaker er ...
(Bipolar: 1 – 7)

Q1:	Uviktige / Viktige	*Mohr, Eroglu and Ellen 1998, 52; Bickart and Ruth 2012, 66*
Q2:	Noe som ikke betyr så veldig mye for meg / Noe som betyr veldig mye for meg	
Q3:	Ikke personlig relevant / Personlig relevant	
Q4:	Av liten bekymring for meg / Av stor bekymring for meg	
Q5:	Noe jeg ikke er involvert i / Noe jeg er aktivt involvert i	

Respondent is presented with one ad campaign from the 2x2 model

Part 2	Attitude towards CSR-ad and message source

Mitt generelle inntrykk av reklamen er at den er ...
(Bipolar: 1-7)

Q6:	Dårlig / God	*Muehling and Laczniak 1998, 27; Bickart and Ruth 2012, 66.*
Q7:	Negativ / Positiv	
Q8:	Uhyggelig / Hyggelig	
Q9:	Ikke appellerende /Appellerende	
Q10:	Ikke tiltalende / Tiltalende	
Q11:	Ikke imponerende / Imponerende	

Mitt generelle inntrykk av reklamens avsender er ...
(Bipolar: 1-7)

Q12:	Dårlig / God	*Muehling and Laczniak 1998, 27; Bickart and Ruth 2012, 66; Ajzen and Cote 2008, 301; Groza et al. 2011, 650.*
Q13:	Lite fordelaktig / Fordelaktig	
Q14:	Ugunstig / Gunstig	
Q15:	Negativ / Positiv	

Part 3	Perceived Authenticity

Mitt inntrykk er at Equinor/Olje- og energidepartementet ...
(Likert Scale: 1: strongly disagree / 7: strongly agree)

Q16:	Føler seg moralsk forpliktet til å bidra	*Groza 2011, 650; Ellen, Webb and Mohr 2006, 153; Rifon, Choi, Trimble and Li 2004, 35.*
Q17:	Har en langvarig interesse for samfunnet	
Q18:	Har eiere og ansatte som ønsker å bevare klima og miljø	
Q19:	Forsøker å gi noe tilbake til felleskapet	
Q20:	Bidrar fordi de føler at samfunnet forventer det (-)	
Q21:	Bidrar fordi de føler at deres kunder forventer det (-)	
Q22:	Bidrar fordi de føler at deres aksjonærer forventer det (-)	
Q23:	Drar nytte av en klima- og miljørettet sak for å hjelpe sin egen virksomhet (-)	
Q24:	Drar nytte av en klima- og miljørettet sak for å beholde eller få støtte fra samfunnet (-)	
Q25:	Forsøker å øke sin profitt ved å bidra til en bærekraftig sak (-)	

Part 4	Demographics

Q26:   Gender

Q27:   Age

Q28:   Occupation

Q29:   Education

Q30:   Measure to ensure that participants are Norwegian

Appendix C: Sample Demographics

	Frequency	**Percent**
Gender		
Woman	194	57.6
Male	141	41.8
Other	2	0.6
Age		
16-25	127	37.2
26-35	88	25.8
36-45	35	10.3
46-55	56	16.4
56 and older	31	9.1
Missing	*4*	*1.2*
Occupation		
Student	136	39.9
Full-time worker	156	45.7
Part-time worker	19	5.6
Jobseeker	8	2.3
Unemployed	5	1.5
Retired	13	3.8
Missing	*4*	*1.2*
Education		
Secondary School (Ungdomsskole)	12	3.5
High School (Videregående)	92	27.0
University/College equiv. Bachelor	145	42.5
University/College equiv. Master	57	16.7
University/College more than 5 yrs.	17	5.0
Vocational School (fagskole)	14	4.1
Missing	*4*	*1.2*

Appendix D: H1 – additional analyzes with control variables

Levene's Test of Equality of Error Variances -H1

F	df1	df2	Sig.
.981	25	311	.493

Design: Intercept + Source + Kjønn + Utdanning + Alder
Dependent Variable: Attitude towards the advertisement

Tests of Between-Subjects Effects - H1, Attitude Towards Advertisement

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	28.581a	9	3.176	1.786	.070
Intercept	315.979	1	315.979	177.717	.000
Source	.098	1	.098	.055	.814
Kjønn	13.485	2	6.742	3.792	.024
Utdanning	13.382	5	2.676	1.505	.188
Alder	.001	1	.001	.001	.979
Error	581.402	327	1.778		
Total	7927.333	337			
Corrected Total	609.984	336			

R Squared = .047 (Adjusted R Squared = .021)
Dependent Variable: Attitude towards the advertisement

Levene's Test of Equality of Error Variances - H1

F	df1	df2	Sig.
.752	25	311	.801

Design: Intercept + Source + Kjønn + Utdanning + Alder
Dependent Variable: Attitude towards the source

Tests of Between-Subjects Effects - H1, Attitude Towards Source

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.720	9	1.302	.800	.617
Intercept	341.195	1	341.195	209.567	.000
Source	2.335	1	2.335	1.434	.232
Kjønn	2.108	2	1.054	.647	.524
Utdanning	7.054	5	1.411	.867	.504
Alder	3.746E-6	1	3.746E-6	.000	.999
Error	532.388	327	1.628		
Total	8257.313	337			
Corrected Total	544.108	336			

R Squared = .022 (Adjusted R Squared = -.005)
Dependent Variable: Attitude towards the source

Appendix E: H2 – additional analyzes of relationship between IV and mediator

Independent Samples t-test: Effect of Message Source on Perceived Authenticity

Variable	Source Condition	N	Mean	Std. Deviation	t-value & p-value
Authenticity Perceived authenticity	Third-party	179	4.852	1.040	1.961 ns (.051)
	Corporation	162	4.617	4.613	

Note: Levene's Test = .084 - equal variances assumed

Appendix F: H2 – additional analyzes of relationship between mediator and DV

Simple Linear Regression – Attitude towards Ad (F (1.339) = 59.517, p<.000, R^2 = .149)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	2.482	.290		8.556	.000
Perceived Authenticity	.459	.060	.386	7.715	.000

Dependent Variable: AttAd (Attitude towards the advertisement).

Simple Linear Regression – Attitude Towards Source F (1.339) = 115.806, p>.000, R^2 = .255)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	2.100	.257		8.186	.000
Perceived authenticity	.567	.053	.505	10.761	.000

Dependent Variable: AttSource (Attitude towards the source)

Appendix G: H3 – additional analyzes with control variables

Levene's Test of Equality of Error Variances - H3

F	df1	df2	Sig.
1.290	24	312	.168

Design: Intercept + Gender - Education + Framing + Age
Dependent Variable: Attitude towards the advertisement

Tests of Between-Subjects Effects - H3, Attitude Towards Advertisement

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	29.138a	9	3.238	1.823	.063
Intercept	313.330	1	313.330	176.396	.000
Gender	13.271	2	6.636	3.736	.025
Education	13.716	5	2.743	1.544	.176
Framing	.655	1	.655	.368	.544
Age	.002	1	.002	.001	.975
Error	580.846	327	1.776		
Total	7927.333	337			
Corrected Total	609.984	336			

a R Squared = .048 (Adjusted R Squared = .022)
Dependent Variable: Attitude towards the advertisement

Levene's Test of Equality of Error Variances - H3

F	df1	df2	Sig.
.784	24	312	.757

Design: Intercept + Gender - Education + Framing + Age
Dependent Variable: Attitude towards the source

Tests of Between-Subjects Effects - H3, Attitude Towards Source

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.743a	9	1.083	.662	.743
Intercept	341.868	1	341.868	209.203	.000
Gender	1.871	2	.936	.573	.565
Education	7.452	5	1.490	.912	.473
Framing	.357	1	.357	.219	.640
Age	.000	1	.000	.000	.987
Error	534.365	327	1.634		
Total	8257.313	337			
Corrected Total	544.108	336			

R Squared = .018 (Adjusted R Squared = -.009)
Dependent Variable: Attitude towards the source

Appendix H: H1 and H3 – testing for interaction effects between conditions

Levene's Test of Equality of Error Variances a,b

		Levene Statistic	df1	df2	Sig.
Attitude towards the advertisement	Based on Mean	.796	3	337	.497
	Based on Median	.759	3	337	.518
	Based on Median and with adjusted df	.759	3	333.706	.518
	Based on trimmed mean	.777	3	337	.507

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a Dependent variable: Attitude towards the advertisement

*b Design: Intercept + Framing + Source + Framing * Source*

Tests of Between-Subjects Effects - H1 & H3, Attitude Towards Advertisement

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.005a	3	.335	.184	.907
Intercept	7366.508	1	7366.508	4052.718	.000
Framing	.605	1	.605	.333	.564
Source	.032	1	.032	.017	.895
Framing*Source	.325	1	.325	.179	.673
Error	612.555	337	1.818		
Total	8013.361	341			
Corrected Total	613.560	340			

a. R Squared = .002 (Adjusted R Squared = -.007)

Dependent Variable: Attitude towards the advertisement

Levene's Test of Equality of Error Variances a,b

		Levene Statistic	df1	df2	Sig.
Attitude towards the source	Based on Mean	.482	3	337	.695
	Based on Median	.475	3	337	.700
	Based on Median and with adjusted df	.475	3	327.062	.700
	Based on trimmed mean	.524	3	337	.666

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a Dependent variable: Attitude towards the source

*b Design: Intercept + Framing + Source + Framing * Source*

Tests of Between-Subjects Effects - H1 & H3, Attitude Towards Source

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.576a	3	.859	.531	.661
Intercept	7791.973	1	7791.973	4817.033	.000
Framing	.142	1	.142	.088	.767
Source	1.943	1	1.943	1.201	.274
Framing*Source	.610	1	.610	.377	.540
Error	545.127	337	1.618		
Total	8355.938	341			
Corrected Total	547.703	340			

a. R Squared = .005 (Adjusted R Squared = -.004)

Dependent Variable: Attitude towards the source

Appendix I: Parameter Estimates Testing Hypothesis 4 (AttSource)

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower	Upper
Intercept	4.983	.371	13.434	.000	4.253	5.712
[Framing=1.00]	-1.139	.543	-2.097	.037	-2.207	-.071
[Framing=2.00]	0a	.	.	.	.	.
EnvCon	-.037	.074	-.502	.616	-.182	.108
[Framing=1.00] * EnvCon	**.231**	**.109**	**2.108**	**.036**	**.015**	**.446**
[Framing=2.00] * EnvCon	**0a**	**.**	**.**	**.**	**.**	**.**

a This parameter is set to zero because it is redundant.

Dependent Variable: Attitude towards the source

Framing: 1 = positive framing, 2 = negative framing