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Navn:	Heidi Larsen og Maria Samuelsen

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MSc Strategic Marketing Management

BI Norwegian Business School

– Building Green Trust Through Advertising –

How can companies build green trust through advertising in a world of greenwashing chaos? The moderating role of green involvement and green skepticism.

By Heidi Larsen & Maria Samuelsen

GRA1974 – Master Thesis

Supervisor:
Peter Jarnebrant

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Preface

This master thesis was written in the spring of 2022 as the final part of our MSc in Strategic Marketing Management, at BI Norwegian Business School, campus Oslo. The thesis corresponds to a total of 30 credits, and with this project our master's degree ends.

The topic of our thesis is sustainability, a current subject which we've developed great interest in during our studies at BI. Our interest in the topic started when we were introduced to the commonness of greenwashing, where sustainability therefore became a natural direction as a topic to move forward with for our master's thesis. The painting industry was chosen as the case study since one of the authors is employed at Orkla House Care and operates with the brand Jordan, which is currently working to develop a sustainability communication strategy. This thesis provides relevant background for this strategy. When choosing the research area for this study, it was important for us that the thesis would have a certain practical value, which we believe we achieved.

Achieving green trust through advertising has proven to be a complex topic, where there are several components that can be explored. Although the writing of this master thesis has been challenging, the project has first and foremost been instructive, interesting, and led to a better understanding of both the topic and the process of writing a research paper.

We would like to thank our supervisor, Peter Jarnebrant for instructive and thorough feedback which challenged us to reflect and discuss several aspects of the topic at a deeper level. We would also like to thank colleagues at Orkla House Care who have contributed to developing the research topic and been interested in the thesis throughout the period while providing resourceful input and insight. We would also like to show special gratitude to the respondents who conducted the survey, as we would not have achieved the result without them. Finally, we would like to thank each other for good collaboration throughout the process of writing this master thesis.

Abstract

The trend of companies implementing green marketing to differentiate their brands by turning towards environmental sustainability is increasing (Chen & Chang, 2012). However, not all green marketing claims accurately reflect firms' environmental performance. This type of corporate behavior is called greenwashing and weakens consumer trust towards green advertising (Chen & Chang, 2012). This has led to consumers being more skeptical about environmental marketing (Kisielius & Sternthal, 1984). In marketing, trust is thought to be an important ingredient to a successful relationship between company and consumer towards building brand equity (Chen & Chang, 2012). Thus, the present study aims to investigate how corporations can build green trust through green advertising, and, if individuals' overall green skepticism and green involvement has a moderating effect on green advertisement and green trust. To do so, an A/B experiment was conducted in the form of a survey, to test the effect of different dimensions of ad greenness on green trust and investigate the moderating effects. The empirical results revealed that deep ad greenness positively affects green trust, meaning, the more informative the ad, the higher the trust. However, it was not statistically proven that green skepticism or green involvement fully moderates the effect between ad greenness and green trust. Nevertheless, these findings will assist managers and corporations to acknowledge that green advertising must be concrete and provide objective information to avoid being perceived as untrustworthy.

Keywords: Green trust, Green advertising, Ad greenness, Green involvement, Green skepticism, Greenwashing, Green marketing

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1.0 Introduction

In the last few years, the perceived importance of sustainable consumption among consumers has increased tremendously, leading to increased sales and higher willingness to pay for products that are supposed to be more sustainable (Chen, 2008b). The changes in social expectations have laid the foundation for what many scholars call "it pays to be green" (Kim & Lyon, 2015). Companies worldwide have embraced this newfound responsibility and expanded their offerings to include environmentally friendlier, or "greener" products, ranging from greener attributes in production, to consumption and disposal (Chen, 2010). The decision of adding green product attributes has gone from voluntary to almost mandatory in order to stay attractive among competitors. However, despite companies' increased efforts in responding to new consumer demands, the lack of actual green consumption behavior is evident. Much of extant literature has strived to discover and understand factors that influence the adoption of environmentally friendly consumption behavior, especially considering the apparent fact that environmental concern doesn't necessarily transform into actual behavior (Grandin, Boon-Falleur, & Chevallier, n.d.)

With the increased environmental attention, there's also been an increase in green claims in marketing. Companies are under pressure to demonstrate that they are not a part of what's causing environmental problems, but rather part of the solutions (Matthes, Wonneberger, & Schmuck, 2013). To be perceived as more environmentally conscious than competitors is now recognized as a real competitive advantage, leading to more companies using green claims. However, green marketing is a lightly regulated area, opening up for the possibility of companies engaging in what's come to be called greenwashing; which is adopting overstated and deceptive claims in their appeals (Matthes, Wonneberger, & Schmuck, 2013). Even though the use of notable green claims is less ambiguous now, greenwashing is still a common practice. Gray-Lee, Scammon and Mayer (1994) recognized greenwashing as a key reason for consumer skepticism and confusion towards green advertising.

A study conducted by Orkla in 2019 shows that 7 out of 10 Norwegians find it difficult to know whether a product is environmentally friendly or not (Orkla,

2019). The consequences of consumer confusion and distrust is that the cost of both developing and communicating these benefits are severely decreased, or maybe even wasted. Several researchers also agree that consumer skepticism towards green products reduces the persuasive power of green advertising, and risk negative attitudes toward companies that promote green offerings (Nyilasy et al., 2012; Zinkhan & Carlson, 2013). When adding environmental attitude to the mix, consumers may either refrain from environmental consumption based on certain set beliefs towards greener products, or be at risk of making wrong choices in good faith based on present information and knowledge (Stern et al., 2017; van Dam & Fischer, 2017). Such arguments have led researchers to argue that consumer distrust towards marketing reduces marketplace efficiencies (Mohr et al., 1998). This also threatens companies who have invested in greening their offerings because they face unfair competition by free riders (Mohr et al., 1998). Ultimately, this leads to loss both in consumer trust and the trust in the ecosystem of laborers, which is detrimental to brands in all sectors (BEUC - The European Consumer Organisation, 2021).

There exists an abundance of green behavior studies. Whilst the available research presents a classification for the depth of green appeal in advertisements, it is currently only in its descriptive phase and does not offer any application of the grenness conceptualization (Banerjee & Iyer, 1993). Extant studies either analyze existing ads obtained from ad agencies (Banerjee & Iyer, 1993; Banerjee, Gulas & Iyer, 1995; Leonidou et al., 2010) or the use of functional versus emotional appeals to examine whether such an ad is found more persuasive than a non-green ad (Carlson, Grove & Kangun, 1993; Lefkoff-Hagius & Schuhwerk, 1995). Second, extant research on consumers' own involvement in greener consumption behaviors as a moderator are limited. Some studies have tried to explain consumers' pro-environmental behaviors related to psychological variables such as altruistics, egoistic and traditional values, and their openness to change (Stern et al. 1999; de Groot and Steg 2007; Rogers et al., 2012), while others have examined involvement as a moderator, but in relation to functional versus emotional appeals in an environmental context (Matthes, Wonneberger & Schmuk, 2013). However, studies on environmental involvement as a moderator in the context of informational depth in advertisements is lacking. Third, prior research relies on samples from several countries (Matthes, Schmuck & Wonneberger, 2013) but to the authors' knowledge,

no research on the effect of green advertisement and green trust in Norway has been conducted. Since green consumerism significantly varies by attitudes and behavior, Norwegian population validity is lacking.

Similarly to Chen (2010), this study argues that utilizing green marketing can affect companies' intangible brand equities through green trust and continues the brand equity research into the environmental context. Creating and maintaining a solid brand can provide benefits and less vulnerability in competitive markets, as well as larger margins and substantial brand extension opportunities (Chen, 2010). While Chen (2010) presented four constructs; green brand image, green satisfaction, green brand equity and green trust and examined the interplay between these, this study examines the construct of green trust closer and how companies can best utilize green advertising in a greenwashing world, while also exploring the influencing mechanisms of green consumer involvement and skepticism, leading to the research questions of this study:

How can companies build green trust through advertising in a world of greenwashing chaos?

How does green involvement and green skepticism moderate the relationship between green advertising and green trust?

1.1 Corporation and industry

In the research of this topic, Jordan was used as a case study. Jordan was founded in 1837 and operates in the painting tool industry, being one of Norway's most established brands (Orkla, 2012). This thesis was specified towards this industry to avoid a too wide scope for the thesis. However, the findings can be applied to the entire household chain, as the focus of the thesis is based on consumer behavior, and building green trust through green advertising.

Building green trust through advertising can be challenging for managers in this industry considering that painting is the second most polluting industry after petroleum (Whole Mood, 2022). Through the years, there have been failed attempts of marketing painting products through green advertising (Whole Mood, 2022). For instance, the Sherwin-Williams Company once claimed its "Harmony" painting

line to be zero VOC (Volatile Organic Compounds), which turned out to be false claims, considering that the painting base could not be used without adding colorants with high VOC (Ecopainting Inc., n.d.).

Due to an unethical approach of several companies, many studies have shown a lack of trust and skepticism towards green claims in the painting industry, as the industry is perceived as "brown" (Milovanov, 2015). This has made it difficult for marketers within this "brown" industry (and Jordan) to market themselves as a credible green company without being perceived as greenwashing. The Cone Communication Study (2012) discovered that consumers are more likely to purchase products from corporations that clearly demonstrate the results of the CSR initiatives rather than the one that doesn't. With this in mind, it is important for managers in the painting industry to understand how green trust can be built through green advertising.

2.0 Literature Review and Hypothesis Development

The main purpose of this study is to explore the relationships between green advertisement and green trust and to discuss the moderating effect of green involvement and green skepticism on the relationship between green advertisement and green trust. Thus, the following section will provide relevant literature to the development of hypotheses.

2.1 Defining the green consumer

It's evident that there exists several barriers that detain consumers from green consumption. Hesitation in green purchasing is only one reason as to why it is important to understand the green consumer. The goal of this definition is mainly to profile the green consumer in a manner that will assist in the development of this thesis.

A McKinsey & Company global survey conducted in 2007, showed that 87 percent of participants were concerned about the environmental impacts of their purchases,

but only 33 percent were willing to actually go through with a greener purchase (Bonini & Oppenheim, 2008; Bonini, Hintz & Mendonca, 2008). After further studies, McKinsey & Company found that one of the main barriers from intended purchase behavior to actual purchase behavior is consumers' lack of awareness of how they can act on their intents to purchase greener. Consumers are generally confused about purchasing green products, a result of the many attempts of labeling green products. This again is amplified by the abundance of green claims (Bonini & Oppenheim, 2008). There also exists distrust of the quality and greenness of products, where consumers find it easier to believe green claims made by scientists or government, but not companies and media due to the many revealed cases of greenwashing. In situations where consumers can identify green products, the label of greenness can sometimes be impacted by the products' image and thus, be its own downfall (Ursey et al., 2017). In a study conducted by Ursey et al. (2017), findings revealed that when a company emphasizes any sustainable attributes of a product, consumers believe that the implied message is that the performance of the product is poorer than its less sustainable counterpart (TerraChoice Environmental Marketing, 2007; Ursey et al., 2017).

The relationship between consumers' environmental concern and their consumption behavior has been examined numerous times in literature, where academic researchers have striven to define and understand this relation (Peattie & Charter, 2003). Existing research has proposed several factors as influencers of consumer behavior, such as demography, knowledge of environmental problems and alternative products, individual values and personal relevance (Peattie & Charter, 2003). The most frequently used variables are socio-demographic criteria, like gender, age and income, but findings across studies have been contradictory and inconclusive (Wagner, 1997). Others have studied environmental attitudes, consciousness and level of education, which again, has resulted inconclusively (Diamantopoulus et al., 2003). The cause of this can be many, but the major reason might be that authors have found it hard to constitute what "green" consumers act like and how viable they are as a market segment (Peattie & Charter, 2003; Ghazali et al., 2019; Stern, 1999). However, due to the use of this definition, the authors adopt the general definition of Milovanov (2015), which describes the green consumer segment as "*consumers who, while purchasing, are primarily driven by environmental factors, choose green products and support socially responsible*

business practices" (Milovanov, 2015). Milovanov also claims that the young demographic segment tends to be more open-minded and trend-following, giving them a stronger chance of being shaped according to social consumption lifestyles, while conducting both direct and indirect social changes (Milovanovl, 2015).

To identify other underlying factors as to why consumers engage in green consumption behavior (or not), the theory of reasoned action (TRA) is applied (see figure 2.1). According to this theory, green consumer behavior is determined by the behavioral intention of two factors (Hale et al., 2002; Paul et al., 2016). First, the attitudinal factor, which is a person's attitude towards a specific behavior. This is proposed to be a function of important behavioral beliefs about the perceived consequences of performing a particular behavior, in addition to the person's own evaluation of the consequences (Hale et al., 2002; Ajzen & Fishbein, 1977). Van Birgelen et al. (2009) found that environmentally conscious consumers preferred sustainable beverage packaging, which was confirmed by Barber et al. (2019) in the context of wine tourism. Extant studies have reported that purchase intention is positively influenced by attitude, determining that attitude-intention rationale prevails in green consumption settings (Hale et al., 2002). The second factor is normative, consisting of a person's perception of what important specific individuals or groups think he/she should do. The importance of each factor is expected to vary according to behavior, situation and individual differences of the consumer consequences (Hale et al., 2002; Ajzen & Fishbein, 1977). Literature have documented subjective norms as an important determinant of intention, including participation intention, technology use intention, organic food purchase intention and environmental conscious consumption (Shaharudin et al., 2010; Coleman et al., 2011; Becker & Gibson, 1998; Teo & van Schaik, 2012). These studies discovered a positive link between subjective norm and intention. Applied to this context; when consumers are aware that people around them participate in green purchase behavior, it is more likely that they are more prone to adopt this behavior themselves, due to cultural factors.

Figure 2.1 Theory of Reasoned Action (Ajzen & Fishbein, 1975)
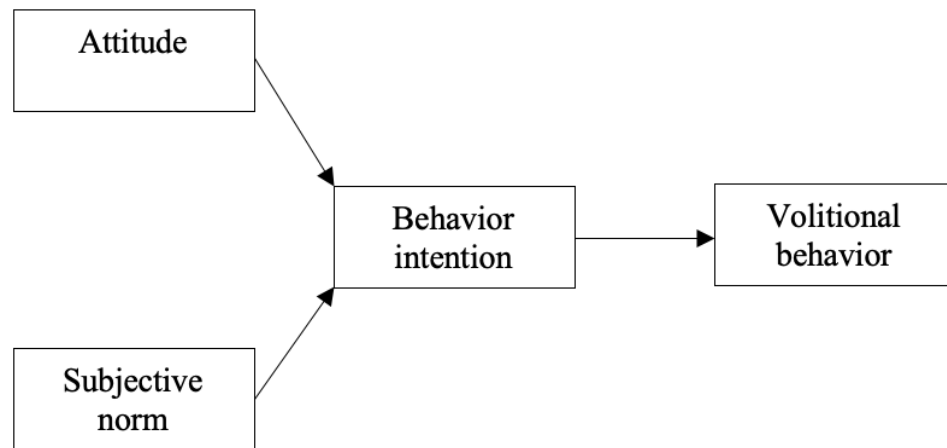
2.2 Green marketing

Consumer activities are influenced by the increased focus on environmental issues, where companies modify their own behavior and activities in attempt to address these concerns and stay competitive. Contrary to popular belief, green marketing does not refer solely to the promotion of products with environmental characteristics (Kilbourne, 1998). The concept is much broader and consists of all the activities dedicated to generating exchanges to satisfy consumer needs or wants, similar to the traditional components of marketing (Polonsky, 1994; Peattie & Crane, 2005). The main difference is that green marketing is, or should be, used when a company wants to try to protect its surroundings through minimizing the harmful impact the customer-company exchange has on the environment (Polonsky, 1994). Kilbourne (1998) defined green marketing as "*the greening of different aspects of traditional marketing, involving the production of green products for sale to green consumers*".

However, such strategies are often managerial in nature, and used to increase sales where being green is often a less important attribute. In this framework, the authors base the concept of "green marketing" at Dobson's (1990) differentiating strategy (Dobson, 2007). Here, green marketing considers the bigger picture of sustainability and focuses on sustainability rather than economic efficiency, while also recognizing the inherent value of nature (Kilbourne, 1998).

According to Chen (2012), there are five reasons for companies to develop green marketing: *(1) compliance with environmental pressures; (2) obtaining competitive advantage; (3) improving corporate images; (4) seeking new markets or opportunities;* and *(5) enhancing product value* (Chen, 2010). The generation of consumers today is able to determine the destiny of a company, meaning green marketing provides a proactive opportunity for companies to satisfy the markets' needs by communicating environmentally friendly products, to reduce the damaging impact on the environment, as an additional product attribute (Goshal, 2011). Companies choose to "green" their offerings due to economic and non-economic pressure from consumers, competitors, government and other relevant stakeholders (Welford, 1998). In addition, many companies have been exposed by consumers while committing "greenwashing". Green marketing and green claims can be used to rebuild consumer trust through transparent communication of the true environmental impact and attempts to reduce that impact, as well as acknowledging any previous concerns about their operations (Charter & Polonsky, 1992).

Smith, Roy & Potter's study from 1996 of the commercial impact of green product development, shows that companies adopt a gradual "green design" approach of mainly one or two environmental issues to include environmental factors in their product development (Smith et al., 1996). These are often in particular concern to the company and consist most often of material choices and the environmental impacts of their production. The study concludes that developing green products can be a valuable activity, but the question as to whether greenness in communication or product design really makes a difference to the company and why or why not, remains unresolved.

2.2.1 Greenwashing

Because of the increased societal environmental consciousness, companies are forced to change their conduct to comply with the changes, in order to not be labeled as indifferent, or even an environmental offender (Kantamneni, 2014). Simultaneously, many corporations communicate ambiguous and vague claims of their products or brand (Chen & Chang, 2012). The action of corporations hiding poor environmental performance, or misleading consumers of it, is called greenwashing. In cases where companies don't have a basis for genuine green

marketing, it is a common practice to rather remain silent of the environmental position or try to represent poor environmental presentations in a positive way (Delmas & Burbano, 2011).

There are two factors that take place simultaneously when greenwashing is present for a corporation; poor environmental performance and positive communication about the firm's poor environmental behavior (Delmas & Burbano, 2011). Greenwashing confuses consumers by making them unsure of green purchases. Such false claims can cause people to stop buying green products, which in turn leads to greenwashing damaging market demand (Chen & Chang, 2012). Studies suggest that consumers' perception of green marketing is that it's often only part of the market strategy for profit, leading to distrust in brands' green claims (Chen & Chang, 2012).

Chen and Chang (2012) studied the negative relationship between greenwashing and green trust. Their result shows that green consumer confusion and green perceived risk mediate the negative relationship between greenwash and green trust. This works as a barrier for companies to implement green marketing strategies because of the fear of increasing consumers' skepticism towards their initiatives due to the struggle to differentiate between true and deceptive claims (Chen & Chang, 2012; Zaidi et al., 2019). While it is difficult to measure the direct effects of greenwashing, it is expected to have hidden effects on the potential findings in this study of building green trust.

2.3 Green trust

In marketing, trust is thought to be a strategic action and an important ingredient to a successful relationship between company and customer (Chuah et al., 2020). It can be defined as "an individual's belief that a company will withstand deliberately harming consumers, while also delivering what they promise" (Chen, 2009). The definition of green trust is similar but based on other prerequisites; Chen defined green trust as "a willingness to depend on a product, service or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance" (Chen, 2010).

According to Chang & Chen (2012), green trust is built on two concepts; green perceived value, which is "a consumer's overall appraisal of the net benefit of a product or service between what is received and what is given based on the consumer's environmental desires, sustainable expectations and green needs; and green perceived risk,"*the expectation of negative environmental consequences associated with purchase behavior*" (Chang & Chen, 2012). Chaudhuri (1997) conceptualized the latter by stating that "*consumption emotion and perceived risk are related because emotion is knowledge and knowledge affects risk*" (Chaudhuri, 1997). Extant research has found a positive relationship between perceived value of consumers and their trust. When companies exaggerate the true environmental value of their offerings, trust towards these will decrease. Therefore, consumers' green trust toward companies with green offerings will be examined through green advertising, with the influencing effects on individual green involvement and green skepticism.

2.4 The effect of green advertising on green trust

Green advertising is one of the marketing tools a company can utilize to communicate environmental sensitivity; a critical component as consumers express they are more willing to purchase from companies they trust to perform well on societal issues (Liu & Liu, 2020). It therefore plays an important role in facilitating the company's green marketing and promotion of the desire to act environmentally friendly, which is often implemented through using environmental claims. Scammon and Mayer (1995) defined this as "*statements by a seller regarding the impact of one or more of its brand attributes on the natural environment*" and often consist of descriptions like "green", "sustainable" and "environmentally friendly*". Banerjee et al. (1995) defines green advertising as any ad that meets one or more of the following criteria; (1) *explicitly or implicitly addresses the relationship between a product/service and the biophysical environment;* (2) *promotes a green lifestyle with or without highlighting a product/service;* and (3) *presents a corporate image of environmental responsibility.*

When examining how ads influences consumer purchase, it's important to understand that consumers do not only buy products, but a bundle of attributes that provide a total perceived value. These attributes together must represent an entire

product that has a high green perceived value for the customer to be an attractive choice under consideration (Snoj, et.al, 2004). As Fishbein and Ajzen´s (1977) attitude theory suggests, consumers are likely to have an attitude towards products they evaluate as more likely to have valued attributes (Ajzen & Fishbein, 1977). Extant research in the field of green advertising has confirmed an attitude-behavior gap among potential green consumers (Sheehan & Atkinson, 2012). This is further complicated by the effects of greenwashing and companies continue to be encouraged to be more specific in their messaging on how their offerings can provide consumers with small but meaningful choices.

Banerjee et al. (1995) analyzed different statement dimensions in green ads, and conducted a content analysis designed to uncover the underlying structure of green advertising. Their study was based on three concept dimensions of ad greenness with different degrees of dimensions. The study categorizes green ads as either shallow, moderate, or deep (Banerjee, et al., 1995). Advertisements with deep ad greenness are supported by specific, factual information, while advertisements with shallow ad greenness contain vague claims, and lack factual supportive evidence (Davis, 1993). Furthermore, Davids (1993) indicated that shallow advertisements, where the environmentally friendly information is not tangible, is easier to be interpreted as greenwashing. In 1991, Kangun, Carlson & Grove differentiated between three categories of greenwashing in advertising; *(1) those employing false claims; (2) those omitting important information that could help to evaluate environmental claim sincerity;* and *(3) those employing vague or ambiguous term, which could be summed up as lying, lying by omission or lying through lack of clarity*. These findings link this thesis to examining how the degree of ad greenness contributes to influencing consumer trust in a brand, where a company must advertise objective and factual information in order to avoid being perceived as untrustworthy (Davids, 1993).

The theoretical framework of this study will describe ad greenness as the level of environmental information in the ad. Banerjee et.al's (1995) framework is adopted with scaling the level of "greenness" on two distinct dimensions; shallow greenness, which will be supported by the third operationalized greenwashing concept described by Kangun et al. (1991) and deep greenness (Banerjee, et.al, 1995). This scaling will be dependent on the factual support and the elaboration of the environmental information, and how it affects green trust.

The amount of existing literature on the effectiveness of green advertisement is limited. Banerjee et.al (1995) proposed further research on the effectiveness of green appeals in communicating the environmental benefits of a product or service, and the extent of consumer skepticism of green advertising. It is evident that green advertising is a source of consumer confusion in regards to both vague and tangible messaging where credibility is often considered to be low. This can be due to consumer's lack of scientific and technical knowledge to fully understand the presented information. If the advertisement is perceived as too manipulative or technical, it may also affect the consumer's effort to understand the message (Finisterra do Paço & Reis, 2013). In line with empirical findings, this study proposes that deep ad greenness will positively affect the green trust of a product or brand. Hence, the first hypothesis read as follows:

H1. *Deep (vs. shallow) ad greenness positively affects green trust.*

2.5 The moderating effect of green skepticism

Even though the number of green offerings has increased as a result of the rise in environmental awareness, there are still concerns that companies are communicating inaccurate environmental information about their products to improve their reputation and financial results (Raska & Shaw, 2012). Prior studies have shown that green marketing initiatives like advertising and product development are susceptible to consumer skepticism (Obermiller & Spangenberg, 1998; Raska & Shaw, 2012; Matthes & Wonneberger, 2013). Examining restraints of green product purchase can therefore be of use to companies in the development of incentives and strategies to effectively address consumer behaviors (Carrete et al., Atkinson & Kim). It has been suggested that skepticism towards products claiming to be green, roots in mislabeling, misinterpretation and misrepresentation of products, causing consumers to retain from these (Yiridoe et al., 2005). This is referred to as green skepticism, where consumers have disbelief or doubt towards environmental claims made by companies (Yiridoe et al., 2005). That way, green skepticism affects simple consumption choices through the lack of effects of communication campaigns, resulting in reduced financial and environmental returns on investment for companies.

Extant literature shows limited agreement between researchers on the use of green skepticism. Some researchers see skepticism as a personality trait, while others have implemented it as a consumer state that is influenced by situational factors independent of personal characteristics; rather than mistrust towards green products in general, it considers skepticism as doubt towards corporate claims (Obermiller & Spangenberg, 1998; Skarmeas and Leonidou, 2013; Goh & Balaji, 2016). The present study adopts the latter concept, where it is argued that skeptical consumers can vary in their distrust and skepticism, and are able to change their mind when presented with proof perceived as sufficient (Goh & Balaji, 2016).

Advertisements have often been prone to more skepticism than other sources of information, like consumer reports, word-of-mouth and official reports (Aji & Sutikno, 2015). Skeptical consumers have been found to both be less positive and persuaded towards green advertisements (Obermiller & Spangenberg, 2000; Goh & Balaji, 2016). It is not given that skeptical and less skeptical consumers behave a certain way, however, it is reasonable to expect that skeptical consumers are more likely to mistrust green advertising and lesser skeptical consumers are more likely to accept it. Some theories suggest that it is not attitude alone that influences behavior, but other factors that affect the strength of the attitude-behavior relationship; like the combination of awareness of greenwashing, corporate environmental irresponsible behavior and the difficulties of assessing a green product both prior and after purchase (Goh & Balaji, 2016; Leonidou & Skarmeas, 2017; Zarei & Maleki, 2017; Atkinsom & Kim, 2014). This illustrates that skepticism is important in explaining consumer reluctance toward green advertising messages. Other situational factors are also shown to influence persuasion even when extreme skepticism is present, like claim substantiation, source characteristics and message variables (Carrete et al., 2012). These play a role in determining acceptance of claims in specific advertisements. The literature refers to a wide range of research on green skepticism towards companies, customers, and society, but the representation of topics of skepticism towards green products is limited (Obermiller, 1999).

Mohr et al. (1998) presents two dominant approaches when examining skepticism in marketing. One is by focusing on general measures of consumers' response to marketing, while the other is to assess how different types of advertising claims

affect skepticism toward the ads. The present study is an extension of Mohr et al's., (1998) research of skepticism towards environmental claims, where consumers' responses to the presented advertisement can vary as a result of skepticism and other influencing factors (e.g., quantification of claim or technical language).

Kisielius and Sternthal (1984) suggest that skeptical consumers will most likely argue on claims in advertisements and be less positive towards purchase. Goh & Balaji (2016) investigated the relationship between green skepticism and green purchase intention, where it was shown that green skepticism had a negative impact on green purchase intention. There has been limited previous research on whether green skepticism affects green trust. However, based on Goh & Balaji's (2016) research, it is conceivable that green skepticism also negatively affects green trust, as trust is shown in previous studies to translate into purchase intention. What the present study wants to examine further is how green skepticism affects the relationship between ad greenness and green trust. It is therefore interesting to examine green skepticism as a moderator rather than a direct effect. The following hypothesis will therefore be examined:

> **H₂**: *Green skepticism negatively moderates the effect of ad greenness on green trust, such that, under low skepticism (vs. high), the effect of a deep (vs. shallow) ad greenness is higher on green trust.*

2.6 The moderating effect of green involvement

Involvement in consumer behavior is a term of many previous constructs, but one constant definition is that it is the perceived importance of a stimulus (Mittal, 1995). Zaichkowsky (1985) defined involvement as "a person's perceived relevance of the object based on inherent needs, values and interests", while other authors have even substituted it for the concept of "perceived importance" (Bloch & Richins, 1983).

While studying the measurement of advertising involvement, Krugman (1967) found that involvement tended to be more varied and less predictable when including products of low involvement, like household goods which is the thesis' research scope. On the other hand, stimuli with high involvement products, like cars, had a tendency to overall share the same amount of involvement (Krugman,

1967). Thus, if a purchase decision is perceived as unimportant, the involvement towards the ad is low and vice versa (Mittal, 1995). As an abundant amount of research suggests, consumers vary in how they respond to appeals. An important variable to explain this is consumers' level of involvement. In a study of green advertisement for a green laundry detergent, Schuhwerk & Lefkoff-Hagius (1999) found that high environmental involvement leads to a cognitive information processing of the issues of interest, while low environmental involvement results in information processing through simple cues. Thus, the effort of information processing increases with consumers' involvement and can influence the effect of the ad through a moderation effect of ad appeal on different psychological variables.

Literature offers different operationalizations to measure involvement as a variable. The concept is not only understood by considering the level of involvement present, but also distinguishing between different types of involvement (Park & Mittal, 1985). The operationalization of involvement applied in this study is retrieved from H.Park, K.Park & O.Jeon, (2015), where the authors proposed two types of involvement levels based on the relevance and importance of personal attitudes; high and low involvement (Park, Park, & Jeon, 2015). Extant research also suggests three relevant conceptualizations in the context of green, environmental advertising; *(1) environmental concern; (2) attitude toward green products;* and *(3) green purchase behavior* (Matthes et al., 2014). These concepts are associated but will still measure environmental involvement differently and give dissimilar outcomes. Similarly to previous conducted research, the study of environmental involvement as a moderating effect on the greenness of advertising should consider all three concepts.

Prior research has found that a positive relationship between environmental knowledge and green consumer behavior exists, but is inconclusive as to the importance of knowledge, meaning that an increase in environmental knowledge doesn't automatically result in an environmental friendlier behavior (Zao, et al., 2014).

2.6.1 The elaboration likelihood model

As consumers' responses to green advertisement differ, it can be considered that consumers who react favorably to green advertising also have the same reaction

towards the environment, giving a high environmental involvement. As involvement refers to an individual's perceived relevance of an object based on their needs and interests, it is an attitude object and can be seen in the light of the elaboration likelihood model (see figure 2.2). This theory refers to the amount of effort the message receiver uses to process and evaluate the message they're exposed to (Petty & Caciooppo, 1984). The model has determined that when the recipient is exposed to a message, they react by using either one or both channels which reflect the effort they put into their consideration (Kitchen et al., 2014). The consumer will experience either high or low elaboration. This will determine whether the recipient will go through a central route for close consideration of the information presented, or peripheral route, where the recipient is persuaded as a result of their own association with positive or negative cues in the stimulus, like credibility, attractiveness of source or the quality of message (Kitchen, et. al, 2014). The likelihood of elaboration will therefore be determined by the recipients ability and motivation to evaluate the message presented (Kitchen et al., 2014). Based on the concept of ELM, different green involvement levels will most likely process information differently, influencing the impact of the green appeal and its persuasiveness (Kong & Zhang, 2011).

Figure 2.2 Elaboration Likelihood Model (Petty & Cacioppo, 1980)
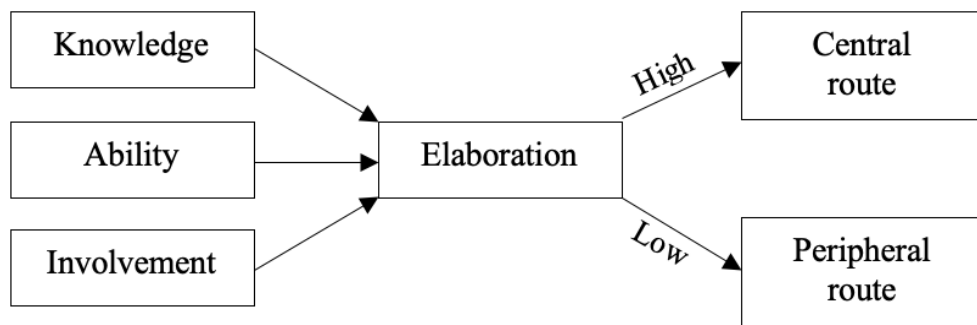
Hartman et al. (2005) describes how a higher involvement of a specific attitude object leads to a higher amount of cognitive elaboration, resulting in a central route to attitude change. This is opposed to consumers with low degree of involvement and cognitive elaboration leading to the peripheral route with less influence to attitude formation where consumers process information based on the information

readily available (Hartmann et al., 2005). In the study of advertisement, consumers with high environmental involvement would be more likely to notice and be affected by communication relevant to a product or company's environmental credentials, as it is important to them. Also, the attitude of these consumers have probably been stable in the direction of high environmental involvement over some time, making it easier to be recalled during consumption, which are factors for predicting future behavior. Highly involved consumers are therefore expected to be more attentive to environmental advertisement connected to their consumption, by evaluating the relevant product and indicating higher purchase intention towards those products with low environmental impact. Contradictorily, lowly involved consumers are less likely to base their purchase intent on environmental information, but rather other types of information, like price or their emotional response to the advertisement message (Hartmann et al. 2005). Instead, these consumers will purchase if their perception of the message is favorable based on these peripheral cues (Hartmann et al., 2005; Grimmer & Woolley, 2011).

Further, it is relevant to take a person's ability to comprehend the message into account. This refers to the complexity of arguments presented which are subjectively evaluated by its receiver (Browning, Gogo, & Kimmel, 2018). In this context, messages are generally classified as either weak or strong by their ability to provide additional information to the receivers through the central route (Browning, Gogo & Kimmel, 2018). This study will classify the message content with either deep or shallow ad greenness. From the advertisers' perspective, green messages provide an extra reason for consumers to purchase a product rather than a similar product without a green attribute. With this background, the following hypothesis is proposed,

> **H3:** *Green involvement moderates the effect of ad greenness on green trust such that, under high involvement (vs. low), the effect of a deep (vs. shallow) ad greenness is higher on green trust.*

2.7 Three way interaction effect between green skepticism, green involvement and ad greenness

The current study examines how the level of green advertising affects green trust, a significantly important factor in maintaining brand equity, and also how environmental involvement or skepticism moderates the effect of this relationship. Individuals with a high level of environmental involvement see environmental protection behavior as important and relevant to them. Consumers with these characteristics have been found to be less skeptical and hold a positive attitude towards green ads (Tee et al., 2021). However, a vast amount of research has found that consumer skepticism in general both decreases the influence of advertising on consumer purchase intention, while also directly negatively affects it (Nguyen et al., 2019). Due to the existence of this relationship, this study replicates the effect further on green advertising with the influential effects on consumer skepticism and environmental involvement. Environmental involvement and green skepticism on green advertising is expected to each have an effect on green trust, and therefore, further examination of the effect of different levels of each moderator is proposed (Cheng, Chang, & Lee, 2020). This study will not formulate an hypothesis for the three-way interaction but rather approach it in an exploratory manner.

2.8 Conceptual model

A conceptual model of green trust was created (see figure 2.3) based on previous research and the developed hypothesis of the literature review. In this model, ad greenness has a positive direct effect towards green trust, which is also strongly supported by previous empirical research in other product categories. Further, people's level of green skepticism and green involvement is proposed to have a moderated effect between ad greenness and green trust, and was therefore measured before the other variables were presented, to avoid a direct effect.

Figure 2.3 Conceptual Model of Green Trust
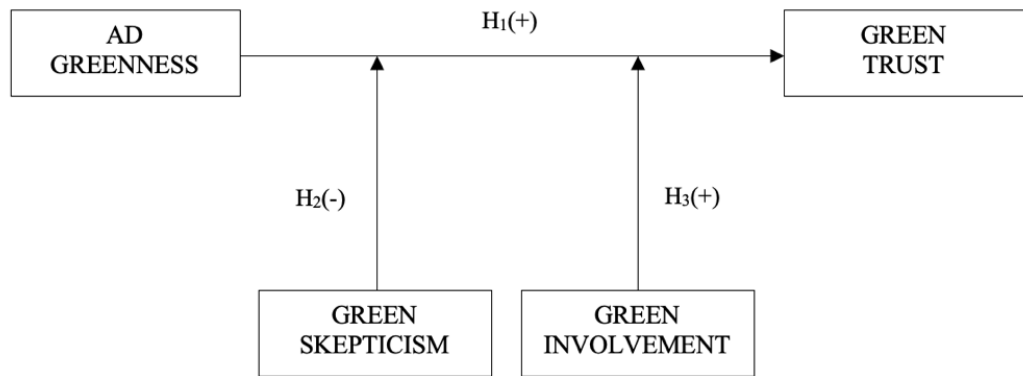
3.0 Methodology

This chapter will outline the methodological approach used in this thesis, and present justifications and assessment for the choices made to answer the hypotheses and the conceptual model. The data collected from the survey are the basis for the analyses and further discussion in the study.

3.1 Research design

The research data in this thesis will answer the research questions and focuses on how ad greenness affects green trust, and also examines the moderating role of green involvement and green skepticism on the relationship between ad greenness and green trust. To answer the hypotheses, a quantitative study was performed, which focuses on numerical data by using computational techniques and generalizing it across groups of people to explain a particular phenomenon (LeTourneau University, 2022). To investigate (1) whether deep ad greenness increases green trust, and (2) the moderating interaction effect between green involvement and green skepticism on ad greenness and green trust, an experimental method was developed in terms of A/B testing. Such experimental design involves manipulating the independent variable and applying it to the dependent variable to measure the effect on the dependent variable (Kuhfeld et al., 1994). The independent variable in this study had two fixed values that were manipulated (deep and shallow ad greenness), where the effect of the factor levels on the dependent variable were examined (Kuhfeld, et.al. 1994). Further, to answer the hypothesis

and to explore the interactions between the moderators and the variables, a multiple regression analysis was performed.

The experiment was conducted through an online questionnaire, where two different groups were assigned randomly to one of two experimental conditions, shallow versus deep ad greenness. The respondents were asked a range of questions regarding their green involvement and green skepticism before they were exposed to the ad in the survey to avoid the parameters having a direct influence on ad greenness and green trust. In addition, the questionnaire contained a range of demographic questions to identify patterns of the respondents.

3.2 Sample and data collection

The sample consisted of two matching target groups with a total of 134 respondents. The group that were exposed to the shallow ad consisted of 71 respondents, and the group that were exposed to the deep ad consisted of 63 respondents. Each respondent was representative of the national population in terms of age and gender, as it was a random selection. The skewed distribution of the respondents in each group occurred due to the clearing of the dataset where several of the respondents had not completed the entire study. Out of 258, there were a total of 124 respondents who did not complete the survey and were therefore excluded from further analyses.

The population in this study was first and foremost all persons in Norway, as Jordan Painting Tools does not target any particular audience based on demographics, but rather anyone who is planning to paint. The demographics of the returned sample did not significantly deviate from age or gender. The respondents were selected using a "random sampling" method. In order to reach as many people as possible in the population, the survey was shared on social media; Facebook, Linkedin and Instagram. This led to a "snowball sampling" where the authors' contacts on social media shared the survey further to their contacts. However, by only sharing the survey on social media, it is down to chance the study could end up with an unrepresentative sample considering not everyone is on social media (Fricker, 2008). This sampling method is called convenience sampling, where respondents are extracted from where they are easiest to obtain. However, using convenience

sampling may cause a loss of the opportunity to statically generalize from sampling to population, where the sampling may not be representative (Fricker, 2008).

3.3 Stimulus materials and survey design

The independent variable, ad greenness were manipulated through differentiations in the same ad. Two simple ads for a Jordan painting brush were created. Both ads contained utility benefits and environmental claims. The utility benefits of the product were presented in the same way in each ad. The utility benefit claims were placed in a secondary position in the advertisement, and were presented as follows: "*Fits most jobs and gives a superb result with optimal coverage and little spillage*".

In addition to the utility beneficial claims, each ad was presented with two distinctive environmental claims for the product. The environmental claims were placed with a primary emphasis placement in the ad. The shallow ad greenness reads: "*Environmental measures are important to us. We have therefore made decisions to ensure that our paintbrushes are environmentally friendly. We want to keep the globe clean and are committed to offering products that you can use with a clear conscience. The paintbrushes we use are therefore safe and environmentally friendly*". The ad containing deep ad greenness claims reads: "*Environmental measures are important to us. We have therefore made specific decisions to ensure that our paintbrushes are environmentally friendly. Our products are made through a carbon-neutral production process where we use 100% recyclable product and packaging material.*". The ads were translated into Norwegian to gain better data accuracy and to improve the respondent experience (Ward, 2022). The two ads (deep and shallow) are shown in figure 3.1 and 3.2.

To accurately measure the effect of the manipulation, other factors were held constant across the two tests. The logo and name of the painting brush were identical, as well as design expressions being similar, with only adjustments of the environmental claims.

The questionnaire started with an introduction explaining the purpose of the study and the ethical aspects of the survey. In order to prevent the respondents from having its focus specifically towards painting tools, it was stated in the introduction that the purpose of the survey was to study sustainability in relation to household

products, where the actual meaning of the survey was not revealed. To strengthen the purpose of the research the questions regarding *environmental involvement* and *environmental skepticism* were at the beginning of the survey to avoid that the respondents would take the ad into consideration when answering the questions. Further, the randomized ads were shown to the respondent and were followed by questions regarding *ad greenness* and *green trust*. The questionnaire finished with a couple of control questions regarding age and gender.

Deep ad greenness:

Figure 3.1

Shallow ad greenness:

Figure 3.2

3.4 Measures and scales

To measure the hypothesis proposed in this study, the questionnaire contained items related to the following variables: *Green involvement, green skepticism, ad greenness* and *green trust*. To increase construct validity, all items in the survey were based on measurements from previous research (Malhotra, 2010).

The respondents' *green involvement* level were assessed via the use of six 7-point semantic differential scales with the following anchors: Important, unimportant; boring, interesting; relevant, irrelevant; means nothing, means a lot to me; worthless, valuable; not needed, needed. Further, the items of the variables *green skepticism, ad greenness* and *green trust* were measured on a seven-point semantic differential scale, ranging from 1=strongly disagree to 7=strongly agree (see table 3.1). Additionally, to gain more insight for Jordan, we also included an open-ended question where we asked: what did you like / dislike about the ad. The "force response" function in Qualtrics was used on each item in the survey to avoid missing values when analyzing the data set.

All items in the survey were translated into Norwegian (see appendix 1) to gain better data accuracy and to improve the respondent experience (Ward, 2022). All items appear in table 3.1

Table 3.1 Variables Items

Variables	Items	Scale	Based on
Ad greenness	"The ad is very vague and unspecific" * "The ad is very informative" "The ad help people make better decisions" "The ad reflects the manufacturer´s genuine desire to help the environment"	*All questions were measured on a seven-point semantic differential scale, ranging from 1=strongly disagree to 7=strongly agree.*	Davis (1993)
Green involvement	To me environmentally friendly products is …: "Important/Unimportant" * "Boring/Interesting" "Relevant/Irrelevant" * "Means nothing/Means a lot to me" "Worthless/Valuable" "Not needed/Needed" *Indicate items is reverse scored	*All questions were measured on a seven-point semantic differential scale.*	Zaichkowsky (1994)

Green skepticism	"Most environmental claims made on package labels or in advertising are true" *	*All questions were measured on a seven-point semantic differential scale, ranging from 1=strongly disagree to 7=strongly agree.*	Zarei & Maleki (2017)
	"Because environmental claims are exaggerated, consumers would be better off if such claims on package labels in advertising were eliminated"		
	"Most environmental claims on package labels or in advertising are intended to mislead rather than to inform consumers"		
	"I do not believe in most of the environmental claims made on the package labels or in advertising"		
	*Indicate items is reverse scored		
Green trust	"You feel that this product's environmental reputation is generally reliable."	*All questions were measured on a five-point semantic differential scale, ranging from 1=strongly disagree to 5=strongly agree.*	Chen & Chang (2013)
	"You feel that this product's environmental performance is generally dependable."		
	"You feel that this product's environmental claims are generally trustworthy."		
	"This product's environmental concern meets your expectations."		
	"This product keeps promises and commitments for environmental protection."		

3.5 Justification for measurement variables

Ad greenness was chosen as a variable based on Davis (1993) in order to make certain that, from the consumer's perspective the environmental claims in the ad:

- *"states specific aspect of the product in which the environmental benefit lies"*

- *"provides specific data to permit the consumer to believe that the environmental product benefit is real"*
- *"provides a context for evaluating the promoted environmental benefit"*
- *"provides definitional support for all technical terminology"*
- *"explains why the promoted environmental product attribute will result in an environmental benefit"* (Davis, 1993)

The items are used to assess reactions to the advertisement and the advertiser.

Green involvement was measured to give an indication for the participants' generally green involvement level when purchasing household products, and to gain insight into the "motivational state of involvement" (Zaichkowsky, 1994) for the environment. By measuring the state of involvement it allows to extend the scope of this research, as it is argued that consumers may be influenced by their experiences and background when they receive information (Zaichkowsky, 1994).

Green skepticism was measured to gain insight into how skepticism can influence the perception of green advertisements. Zarei & Maleki (2017) states that people who are more skeptical are more likely to examine producers and advertisement claims and not accept them at face value.

Green trust is lastly measured in order to determine the perceived trustworthiness of the green ad in the context of consumers' green involvement and skepticism. Chen & Chang (2013) states that green trust is crucial for firms in the context of environmental regulations and prevalent customer environmentalism.

3.6 Procedure

To determine which of the two ads that had the strongest effect on green trust, an experiment with two different variations of the ad were tested – also known as A/B testing. The questionnaire was conducted digitally using Qualtrics research software. Respondents were randomly assigned to one of two experimental conditions through the randomization tool in Qualtrics where an equal number of respondents were distributed in each group. The first questions in the survey addressed the respondent's general involvement in sustainability, as well as questions regarding their skepticism when evaluating sustainable claims communicated by companies. Further, the respondents were to answer questions

regarding trustworthiness and greenness of the manipulated ad based on an advertisement they were randomly assigned to (deep or shallow ad) focusing on the sustainability of painting tools. Lastly, the questionnaire included a set of demographic items in relation to gender and age to identify patterns of the respondents. The data obtained from the experiment was then transferred to SPSS and further analyzed.

3.7 Reliability and validity

To ensure that all items in the survey were related to the given variable, a reliability test was conducted. High reliability indicates that repeated measurements with the same measuring instrument give the same result, i.e. measures of true scores. Reliability is a necessary but not sufficient component of the validity of an instrument (DeVon, Moyle-Wright, Ernst, Hayden, Lazzara, Savot & Kostas-Polston, 2007). Cronbach's alpha coefficient was used to show internal consistency and reliability of the data. Cronbach's alpha above 0.7 indicates good internal consistency and reliability for the given variable (DeVon, et.al. 2007). All items scored above the recommended threshold of 0.7, indicating high reliability (see table 3.2).

Table 3.2 Overview of reliability

Construct	Number of items	Cronbach's alpha
Involvement	6	.910
Skepticism	4	.750
Add greenness	4	.856
Green Trust	4	.927

Because the study contains concepts collected from previous research, a confirmatory factor analysis was conducted to confirm the already constructed model to the data specifically collected from the survey.

The test for convergent validity examined whether the items chosen actually represent the concept used as a measure for the independent variables. The analysis examined each concept individually where the results showed one factor for each

concepts' items with loadings >.50, indicating highly significant correlations (see table 3.3). To examine to what extent the items for each factor differ from each other, the analysis also tested for discriminant validity. The results indicate no empirically overlapping as each concepts' items load on its own factor with high significance (>.50). The goodness of fit test confirms that the variables significantly (p=.000) fits well together.

To further examine the variance of the concepts, the analysis of the eigenvalues for each of the four factors are > 1, confirming the findings above. These results satisfy the conditions for good validity among the concepts, hence, moving forward with the current measures.

Table 3.3. Factor analysis

Variable	Initial Eigenvalues	Items	Factor 1	Factor 2	Factor 3	Factor 4
Green involvement	4.160	Q1		.702		
		Q2		.779		
		Q3		-.679		
		Q4		.790		
		Q5		.874		
		Q6		.819		
Green skepticism	1.101	Q7				.616
		Q8				.516
		Q9				.694
		Q10				.704
Ad greenness	1.705	Q11			-.833	
		Q12			-.878	
		Q13			-.699	
		Q14			-.688	
Green trust	7.742	Q15	.919			
		Q16	.902			
		Q17	.847			
		Q18	.829			
		Q19	.868			

3.8 Pre-test

Collins (2001) emphasizes that in order to obtain results to be reliable, valid, sensitive, unbiased and complete, it is important that the questions in the survey measure the concepts or behavior that is desired to be measured, and that the data produced represent true values for the measurements. It is therefore necessary that the questions do not contain much random variation and are sensitive enough to measure important real differences, and covers all the dimensions of the topic being investigated (Collins, 2003).

To identify measurement errors, a pretest was performed before the survey was published. The pre-test ensured that questions were understandable and that every possibility was available in the answers. When the questionnaire was created, 5 people (one by one) in the target group were asked to complete the survey online while thinking out loud. Once all testers had completed the survey the authors reviewed the notes from each tester to identify potential issues. Once the pre-test was analyzed, the authors became aware of one issue. The respondents had problems understanding which product category the survey applied until halfway into the survey, as it did not appear until they were exposed to the ad. To clarify this issue without ruining the study, it was presented in the intro that the purpose of this study was to research sustainability in the household industry.

3.9 Research ethics

The research ethics of this study is based on Smith´s (2003) recommendations to stay clear of ethical quandaries. The purpose, procedure and expected duration of the study was clearly stated in the introduction of the survey (see appendix 1) as well as in the invitation to the survey on each channel where it was posted. The introduction also stated the participants' right to decline to participate and withdraw from the experiment after it had started. In terms of privacy, all the responses were guaranteed anonymity and treated confidentially, where they were only asked a couple of demographic questions limited to age and gender. Additionally, the authors' contact information were included for the respondents if they had any further questions regarding the survey.

4.0 Results

There were a total of 258 respondents who participated in the survey. The dataset was checked for missing values and thereby cleaned. Because the survey had forced responses to each question, random missing values were avoided. However, this resulted in 124 respondents partly finishing the survey. These cases were therefore excluded from further analysis.

4.1 Manipulation check

To check whether the manipulation of *ad greenness* had the desired effect, a one-way ANOVA and an independent sample t-test was performed. From the ANOVA (see appendix 2) it appeared that a significant difference ($F = 5.456$, $p = < .001$) was proven between the mean of the group that was exposed to the deep ad ($M = 4.254$, $SE = .165$), contrary to the mean of the group exposed to the shallow ad ($M = 3.370$, $SE = .143$). It emerged that the respondents who were exposed to the deep ad had a higher mean of ad greenness than those who were exposed to shallow ad, which were desirable for the manipulation.

Further, the p-value of Levene's test for the independent variable, ad greenness, read $p = .833$, meaning the null of Levene's test is kept and it can be concluded that the variances in the responses of shallow ad are not significantly different from the responses of the deep ad (see appendix 2). Thus, the result is read from the "equal variances assumed" row for the t-test. The output showed significance of ad greenness ($p = <.001$) between the groups who were exposed to shallow vs. deep ad. The output also showed that the variables the respondents were exposed to, green skepticism and green involvement, before the ad manipulation were non-significant ($p = .648$, $p = .865$), confirming the effect of the ad manipulation. This indicated that the respondents who were exposed to the environmental claims of deep ad greenness condition perceive the ad as more informative and specific in relation to the respondents who were exposed to the environmental claims for shallow ad greenness condition. Hence, the desired effect for the manipulation of ad greenness was achieved.

4.2 Descriptive statistics

The data was collected from a total of 134 valid respondents that took part in the experiment. *Table 4.1* shows an overview of the respondents demographic distribution. Since there was a random sample on social media, the authors had no influence on the participants in the survey, indicating a skewed distribution between gender. Further it appears that there were more people in the younger term who participated in the survey. This may be due to the fact that young consumers are more present on the social media channels that were used to obtain respondents.

Table 4.1. Demographic overview

		Frequency	Percent
Gender	Male	37	27.6
	Female	95	70.9
Age	18-24	39	29.1
	25-34	37	27.6
	35-44	12	9.0
	45-54	16	11.9
	55-64	27	20.1
	65+	3	2.2
Total		134	100

To gain an overall understanding of the data, categorical groups were calculated to see how many of the respondents belonged to the different groups (low vs. high involvement / low vs. high skepticism). The continuous variables were calculated into categorical variables with only two values (low vs. high) where low included the values 3,9 and below, and high included the values 4 and above. A median split could be done when grouping the variables into two categories, however since this analysis was conducted to gain insight into how many respondents were in the lower term vs. the higher term, the groups were distributed based on the average of the seven-point scale.

From *table 4.2* it appeared that only seven out of 134 respondents were grouped in the lower term of green involvement, where the remaining 127 respondents consider themselves to be highly involved when it comes to being green.

Furthermore, the results showed that a larger number of respondents (87) were highly skeptical of environmental claims rather than those who were categorized in the group with low green skepticism (52). However, it was relatively evenly distributed. Last, as mentioned in the methodology chapter, there were 71 respondents who were exposed to the ad with the shallow ad greenness, and 63 respondents who were exposed to the ad with the deep ad greenness. *The categorical variables were only used in this analysis to gain insight, but further in the regression analysis the continuous variables were applied.*

Table 4.2. Amount of people in each category

Variable	Group	Frequency	Percent
Involvement	Low	7	14.9
	High	114	85.1
Skepticism	Low	78	58.2
	High	56	41.8
Ad greenness	Shallow	65	58.2
	Deep	69	51.5
Total		134	100

4.2.1 Test for normality

Normal distribution is central in statistics due to its role in statistical generalization. In order to conduct a regression analysis, the data set has to be normally distributed. The data material lacks a normal distribution if the question formulation has not been clear, the sample has been too small or the sample cannot provide varied answers to the question, that is, wrong sample for the problem (Sørebø, 2017).

A test for normality was therefore performed on all the questions that were used further in the analyses. The data material was calculated on the basis of skewness and kurtosis. For normally distributed observations, the skewness and kurtosis measurements have a value close to 0 if there is symmetry. From the statistics table (see appendix 3) it appears that all the questions achieve the requirement of normal distribution (skewness >2, kurtosis >4).

4.3 Correlation

From the bivariate correlation analysis, the correlation table (see appendix 4) showed that *ad greenness* and *green skepticism* statistically correlate (p<.001) in which when the value of *ad greenness* increases, the value of *green skepticism* decreases (pearson correlation=-.302), that is, the higher (deeper) the ad greenness, the lower the skepticism. Further, a negative correlation between *green skepticism* and *green trust* was proven, where the relationship was significant at the .001 level (p<.001, pearson correlation=-.331). In other words, the higher the green skepticism of the respondent, the lower the green trust is. Lastly, there was not found a statistical correlation between *green involvement* and the other variables*, ad greenness, green skepticism* or *green trust*.

4.4 Hypothesis testing - Multivariate Linear regression

To see how the model's independent variable, *ad greenness,* predicted the dependent variable, *green trust*, a linear regression analysis was performed. The analysis was also performed to investigate if *green involvement* and/or *green skepticism* moderated the relationship between the independent variable *ad greenness* and the dependent variable, *green trust*. This interaction effect was calculated by computing the relationship between the independent and moderator variables. The regression model equation reads as follow:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 X_2 + \beta_5 X_1 X_3 + \beta_6 X_1 X_2 X_3 + \varepsilon$$

The equation consists of seven linear components, and one error term, in addition to the dependent variable, Y. The first component, β_0 is the intercept. Further, β_1, β_2, β_3, β_4, β_5 and β_6 are the slope coefficients for each non-dependent variable. Further, X_1 is the independent variable, ad greenness, X_2 is the moderator, green skepticism, and lastly, X_3 is the moderator, green involvement. The components $\beta_4 X_1 X_2$ and $\beta_5 X_1 X_3$ are the interaction terms between the independent variable ad greenness and the moderators green skepticism and green involvement, where the last component $\beta_5 X_1 X_2 X_3$ is the three-way interaction term between all variables.

The model summary from the regression analysis (see appendix 5) illustrated that the independent variable, *ad greenness* and the moderators, *green skepticism* and *green involvement*, explained 74.7 percent (R2= 0.747) of the variation in the

dependent variable, *green trust*. This value was constant when the direct effects of the moderator variables were excluded from the analysis to confirm the models' explanation power. Further, the Anova table revealed that the means of the group were statistically significant from one another (p< .001). However, since the purpose of the study is to assess an interaction rather than only main effects neither the significance of the main effects nor the overall R2 is specially relevant (Bedeian & Mossholder, 1994).

4.4.1 Direct effects:

H₁: *Deep (vs. shallow) ad greenness has a positive effect on green trust.*

First, when interpreting the regression model, looking at the IV *ad greenness*, it appeared that it was evidence of statistical significance (p= >.001) where *green trust* was positively related to *ad greenness*. Hence, a change in the value of *ad greenness* by 1 unit gives a change in *green trust* of .809, holding all other variables constant. In other words, the deeper the ad greenness is, people's green trust is predicted to be higher by .809 points. The null hypothesis was therefore rejected, where the coefficient was significantly different from 0.

Further looking at the interaction between *green involvement* and *green trust*, it appeared from the regression that there was no statistically significant relationship between *green involvement* and g*reen trust* (p= .559), where the coefficient was equal to 0. Since green involvement is a moderator rather than a main effect, these findings was not directly relevant conceptually to testing the moderating hypothesis (Bedeian & Mossholder, 1994).

Looking at the effect of *green skepticism*, the analysis showed that *green skepticism* was negatively related to *green trust*. On average, *green trust* decreases (B= -.127) when the respondents' skepticism increases. In other words, there was a statistically significant relationship between green skepticism and the respondents *green trust* (p= .027). However, as stated above, *green skepticism* is also a moderator, meaning that these findings were not relevant conceptually to testing the moderating hypothesis. The moderator hypothesis will be supported if the interaction is significant.

4.4.2 Moderating effects:

> **H₂**: *Green Skepticism moderates the effect of ad greenness on green trust, such that, under low skepticism (vs. high), the effect of a deep (vs. shallow) ad greenness is higher on green trust.*

To assess the interaction between *ad greenness, green skepticism* and *green trust*, a computed variable was calculated (ad greenness x skepticism = AGS). The hypothesis sought to ascertain the moderating effect of *green skepticism* on *ad greenness* and *green trust*. The result indicated that *green skepticism* does not statistically moderate the effect of *ad greenness* and *green trust* (B= -.127, t= -1.805, p=.073). However, it can be argued that a p-value with such low value approaches the borderline of significance. If that was to be argued, then the result indicates that the effect between *ad greenness* and *green trust* is negatively moderated by *green skepticism* (B= -.107). This means that the effect of ad greenness on green trust will be closer to 0, when there is an interaction with green skepticism between ad greenness and green trust, as opposed to no moderating interaction effect.

However, the analysis did not indicate strong evidence against the null hypothesis and the null hypothesis can therefore not be rejected.

> **H₃:** *Green involvement moderates the effect of ad greenness on green trust such that, under high involvement (vs. low), the effect of a deep (vs. shallow) ad greenness is higher on green trust.*

The hypothesis was developed to examine the moderating effect of *green skepticism* on *ad greenness* and *green trust*. Looking at the interaction between the components, a second computed variable was calculated (ad greenness x green involvement = AGI). The results reveal that green involvement does not statistically moderate the effect of ad greenness and green trust (B= -.037, t= -.551, p= .583). The null hypothesis can therefore not be rejected, where the coefficient is equal to 0.

Lastly, a three way interaction effect was explored between all the three variables, *ad greenness, green skepticism, green involvement* on the dependent variable, *green trust*. To do so, a third computed variable was calculated (ad greenness x

skepticism x involvement = AGSI). The regression revealed that there was no interaction between the four variables (B= .078, t= 1.363, p= .175), indicating that ad greenness, green skepticism and green involvement does not together affect green trust.

Table 4.3. Multiple linear regression for the dependent variable green trust

		Predictor	Unstandardized B	Std. Error	Std. B	t	P
Direct effect	H1	Ad greenness	.809	.047	.838	17.280	<.001
		Skepticism	-.127	.057	-.108	-2.235	.027
		Involvement	-.050	.085	-.027	-.586	.559
Moderating effect	H2	Ad greenness * Skepticism	-.107	.059	-.086	-1.805	.073
	H3	Ad Greenness *Involvement	-.037	.067	-.026	-.551	.583
Three-way interaction effect		Ad greenness *Skepticism *Involvement	.078	.057	.065	1.363	.175

4.5 Correlation between moderators and demographic traits

To gain a deeper understanding of the respondents personality traits a correlation analysis was performed between green skepticism, green involvement, gender and age, to explore if there were significant differences between the demographic features of the respondents and the moderators which is based on the respondents' general attitudes towards green marketing. The findings revealed that there were no significant differences between the respondents age and gender against green involvement or green skepticism (p> .05) (see appendix 6). This indicates that both age and gender are irrelevant according to how skeptical or involved consumers are of green marketing in this study.

5.0 Discussion

Green advertising has become an effective marketing approach to accomplish differentiation. However, it has grown into a mainstream way for businesses to achieve competitiveness, making it difficult for consumers to distinguish between true claims and exaggerations (Chen & Chang, 2012). Convincing consumers to purchase products without them having access to sufficient information is difficult. Therefore, companies need to reveal further information about the environmental performance of their products in advertising to obtain the trust of consumers, as we live in an educated society with high green skepticism (Chen & Chang, 2012). Several factors affect how well consumers receive green claims, making it relevant to understand how behavior varies between consumer groups when examining how they perceive green trust in advertising. Therefore, the purpose of this research was to build a conceptual framework that would examine three main objectives: *(1) whether deep ad greenness would have a positive effect on green trust; (2) if individuals' green skepticism had an interaction effect between ad greenness and green trust;* and *(3) whether individuals' green involvement had a moderating effect between ad greenness and green trust. Lastly, an exploratory manner was proposed to investigate a three-way interaction effect between all predictors.*

The first hypothesis suggested that deep ad greenness had a positive effect on green trust. Findings revealed strong evidence for this proposition, indicating that ad greenness had a positive effect on green trust, meaning the deeper ad, the deeper the trust. There was no doubt that respondents who were exposed to the deep ad had higher perceived green trust than the respondents who were presented to the shallow ad. This result is also supported by previous research conducted by Davids (1993) which stated that a company must present the advertisement as specific, objective, and factual to avoid being perceived as untrustworthy. This was expected as previous studies have also emphasized such results on other product categories, however, this study confirms that it also applies within the household category. The present study builds on David's (1993) research and specify the importance of elaborating green claims with solid facts in green advertising.

The second hypothesis stated that green skepticism moderated the effect of ad greenness on green trust, such that, under low skepticism, the effect of deep ad greenness is higher on green trust. The result hinted at rejection of the hypothesis as it did not provide statistically evidence that green skepticism moderated the effect of ad greenness and green trust. However, the result of the interaction was not far from significant, meaning that it cannot be concluded that respondents' skepticism affects the reception of deep or shallow green advertising. It is possible that the results were affected by the sample size and that the outcome would've been different with a higher number of respondents, considering the significance level. Further, it was found that green skepticism alone did have a statistically negative effect on the perceived green trust. This finding is consistent with the research of Goh & Balaji (2016) who investigated the relationship between green skepticism and green purchase intention, where it was shown that green skepticism had a negative impact on green purchase intention. As green trust is important for consumers in their intent to purchase from certain products or companies, it can be applied to this study.

The third hypothesis suggested that green involvement moderated the effect of ad greenness on green trust such that, under high involvement, the effect of a deep ad greenness is higher on green trust. This hypothesis was not statistically supported, and could therefore not be confirmed. This finding goes along with the study conducted by Wang et.al. (2017) who also found that consumers' degree of green involvement didn't have an impact on the effect of various types of green advertisement appeals. The most central reason for this finding may be conceptualization and measurements of green involvement, where the measurements in this study may not fit the implicit attitude towards real demand (Gawronski et.al. 2006). It is difficult to rely on the findings of this study as there were only seven respondents who were found to be not, or partly involved with the environment when purchasing household goods. A study conducted in 2022 by Orkla House Care revealed that only 17 percent of the respondents (n = 209) thought that an environmentally friendly attribute is important when purchasing painting equipment. Meaning that when consumers are in-store selecting painting tools, focus on environmentally friendly purchase is unimportant to them as opposed to other attributes (appendix 7). This contradicts the result of the present study, where 85,1 percent of the respondents claimed that acting green was

important when purchasing household products. Numerous polls show that many consumers are willing to pay more for "green" products, however, several studies indicate that consumers' green intent does not always translate into actual green purchase behaviors (Sheehan & Atkinson, 2012). This attitude-behavior gap revealed differences between consumers' environmentally friendly, socially desirable orientations and their real-world marketplace choices (Sheehan & Atkinson, 2012). This gap corresponds to the Theory of reasoned action by Ajzen & Fishbein (1980) where the subjective norm influences behavioral intention. The research of Clarke et.al. (1997) indicated that the norm may lead to change in behavior, but specifically change in behavioral intention. Although people want to make green choices, it is often perceived as a positive additional attribute rather than a crucial one, and can explain why green intention is opposed to actual behavior. In Clark et al.'s paper, green intention was measured and could be an explanatory factor for almost all respondents considering themselves to be highly green involved.

Further, a three-way interaction effect was explored between ad greenness, green skepticism and green involvement on the dependent variable green trust. The result revealed that there was no three-way interaction effect, meaning that there is no significant correlation between the three variables against the dependent variable green trust. This finding contradicts the study of Tee et.al. (2022) where it is argued that consumers who are higher environmentally involved are more skeptical about environmental claims made because of the increased amount of greenwashing. The empirical result of the present study, opposed to Tee et al.,'s study, may be explained by the same reason that was discussed above in relation to green involvement. However, the findings indicated that there was no connection between add greenness, green skepticism and green involvement towards green trust.

Lastly, the respondents' demographic traits were examined, to emphasize whether age or gender would have any impact on the respondents level of green skepticism or involvement. The result indicated that there was no pattern between age and gender, and the predictors. This contradicts Milovanov's study which (2015) claimed that the young demographic segment tends to be more open-minded and trend-following, giving them a stronger chance of being shaped according to

social consumption lifestyles, while conducting both direct and indirect social changes. According to Milovanov´s study, respondents should have been easier to convince in line with age.

5.1 Managerial implications

The study's implications are important in brand building and green marketing activities, both in creating and maintaining long-term relationships with customers. From a practical perspective, the results suggest that improving green communication should be an important marketing activity for companies, instead of creating newer and greener offers. The findings imply that marketers should emphasize the factual and concrete aspects of various green attributes, like information display and packaging, and remove any vague or untruthful claims, to enhance consumers' green trust. Removing vague claims means that the ad must not contain terms such as "environmentally-friendly" or "eco-friendly" without giving an exact explanation of what is meant (TerraChoice Environmental Marketing Inc., 2007).

Another important implication uncovered is how companies can reduce green skepticism through transparent communication and be truthful about the actual environmental impact of a company's products, seeing as no product is completely harmless to the environment. To strengthen a company's perceived value, the trustworthiness gained through advertising and the enhanced attempt to minimize consumer green skepticism could also be important measures in building a brand position in the market among other strong competitors. Building the reputation as a credible corporation, being green and combating the climate crisis has proven to be a long-term competitive advantage (TerraChoice Environmental Marketing Inc., 2007). However, it is crucial for managers not to rush green advertising without careful planning and conducting a long-term strategy, as there are great issues that can occur for companies if green claims are communicated incorrect. Even if the green claims are concrete and informative, it is critical that they are true. If any untrue claims are communicated, the company may risk being caught for greenwashing, which could damage its reputation and brand equity. For managers to achieve trustworthiness in advertisements, it is essential that all green claims

must be proven to anyone that asks (TerraChoice Environmental Marketing Inc., 2007).

6.0 Conclusion

The purpose of this study was to examine the direct effect of ad greenness on green trust, as well as the interaction effect of the moderators, green skepticism and green involvement. The methodological design allowed this research to summarize the different findings of previous studies and new interaction effects in the industry of painting tools through a quantitative study. The empirical results revealed that deep ad greenness positively affected green trust. Further, it was not statistically proven that green skepticism or green involvement fully moderated the effect between ad greenness and green trust. However, the results revealed that green skepticism was close to a negatively significant effect of ad greenness and green trust, indicating a partial moderation effect. Lastly, no statistical evidence was found for a three-way interaction effect between the moderators, green skepticism and green involvement, and the independent variable, ad greenness on the dependent variable, green trust. Therefore, this study suggests that in order to build and maintain brand equity in a greener market, it's essential that green marketing is perceived as transparent and credible to build and maintain consumers' green trust and reduce the negative impact of greenwashing. The implications of this study therefore elaborates on how green advertising must be concrete and provide objective and factual information to avoid or minimize the effect of green skepticism as a result of greenwashing.

6.1 Limitations of the study

Sampling is a key feature in every study to provide valuable and generalizable insights into the population. However, if the sample is not adequate, it can lead to implications and misleading results (Bornstein et al., 2013). In this study, a convenience sample was used to collect responses. This approach has several advantages, as it is low-cost, easy, and time-effective when collecting data. However, the technique also comes with disadvantages. The main disadvantage when using a convenience sample is that it has a limited generalization, and can only be kept to the sample itself (Bornstein et al., 2013). To improve the study and

possibly change the significance of the results, the need for new measures with a larger sample and specific new items is necessary.

Furthermore, the sample primarily consisted of women, giving a skewed distribution of 27.6 percent men and 70.9 percent women. It is possible that the findings would have been different if more men were included in the sample. Also, measurements of personality aspects were not included in the survey among consumers. As a result, the data could not provide sufficient insight into the types of consumers who would have had higher or lower perceived green trust. It could also be interesting to investigate whether personality traits would have had an impact on the respondent's green skepticism or green involvement.

There may have been too high correlation between the measurement of the dependent and independent variable, *green trust* and *ad greenness*. If the correlation coefficient between the variables is equal to or greater than >.9 or <-.9, then the variables have a high level of multicollinearity. This can lead to skewed or misleading results in a regression model (Hayes & Scott, 2022). The correlation coefficient between *green trust* and *ad greenness* was .856, which is close to a multicollinearity. What clearly distinguishes the items from each other in the survey is that ad greenness is specified towards the ad that was displayed, as opposed to green trust which focused on the product itself. To avoid such high correlation, an increased scale could be more suitable. That is, make an adjustment from the scale 1-7 to the scale 1-10, or 1% - 100%.

Lastly, as mentioned in the discussion above, the conceptualization and measurements of green involvement in this study may not fit the respondents implicit attitude towards real demand (Gawronski et.al., 2006), and will be discussed in suggestions for further research.

6.2 Suggestions for further research

Based on this study and the limitations that followed, interesting perspectives have arisen for further and closer examination. Previous research has found a difference between intention and behavior based on Ajzen & Fishbein´s (1980) theory of reasoned action. However, limited research has been found on green intention and

green behavior, and based on the literature review, there exists an attitude-behavior gap. This gives an opportunity for further research on the consumer behavior between green involvement, green purchase intention and the actual green purchase behavior. Therefore, a hypothesis has arisen where it is conceivable that if a consumer is in-store and has to make the choice between a green product and a non-green product, price and quality will be of bigger importance than the intention of being green, and may cause the gap. This leads to a theoretical framework consistent with green purchase intention opposed to actual green purchase behavior, including the interaction effects, quality and price. In order to be able to investigate actual purchase behavior, real products are needed for the experiment and can be challenging and demanding for the researchers, which may be the reason for limited research on this topic.

As supported by this study's empirical results, deep ad grenness has a positive effect on green trust, however, another approach for further research would be to look closer at how to create a strategy communicate green claims effectively to enhance green trust. The investigation could focus on which tone of voice best appeals to consumers when marketing sustainability. Such a study could be conducted through a similar A / B testing experiment where the researchers examine the difference between the use of emotional and functional appeals in green marketing.

Finally, further research on green skepticism is proposed, as the results were close to significant. It would be interesting to investigate upon a better sample, and other items whether skepticism actually moderates the effect of green trust. This would provide good insight into the understanding of consumers and their green behavior.

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Appendix

Appendix 1: Questionnaire

Vurder følgende utsagn fra 1-7

	1. Helt uenig	2. Uenig	3. Litt uenig	4. Verken enig eller uenig	5. Litt enig	6. Enig	7. Helt enig
De fleste miljørettede påstander på pakkeetiketter eller i reklamer er sanne.	○	○	○	○	○	○	○
Siden miljøpåstander er overdrevne, ville forbrukere ha det bedre hvis slike påstander på pakkeetiketter og i reklame ble eliminert.	○	○	○	○	○	○	○
De fleste miljøpåstander på pakkeetiketter eller i reklame er ment å villede i stedet for å informere forbrukere.	○	○	○	○	○	○	○
Jeg tror ikke på de fleste miljørettede påstandene på pakkeetiketter eller i reklame.	○	○	○	○	○	○	○

Videre blir du eksponert for en annonse som tar fokus på bærekraft for Jordan malepensler (Dette er en fiktiv annonse, og informasjon kan avvike. Jordan er ikke ansvarlig for innholdet).

Se og les annonsen for Jordan malepenselen, og svar deretter på spørsmålene under.

→

Exposed to either shallow or deep:

Passer de fleste jobber og gir et suverent resultat med optimal dekkevne og lite søl

Miljøtiltak er viktig for oss. Vi har derfor tatt beslutninger for å sikre at våre produkter er miljøvennlige...

Vi ønsker å holde jordkloden ren og er forpliktet til å tilby produkter som du kan bruke med god samvittighet. Malepenslene vi tilbyr er derfor trygge og miljøvennlige.

Jordan

→

Passer de fleste jobber og gir et suverent resultat med optimal dekkevne og lite søl

Miljøtiltak er viktig for oss. Vi har derfor tatt konkrete beslutninger for å sikre at våre produkter er miljøvennlige...

Laget gjennom en karbonnøytral produksjonsprosess hvor vi benytter **100%** resirkulerbart produkt- og innpakningsmateriale

---

Vurder følgende utsagn fra 1-7

	1. Helt uenig	2. Uenig	3. Litt uenig	4. Verken enig eller uenig	5. Litt enig	6. Enig	7. Helt enig
Annonsen er veldig vag og uspesifikk.	○	○	○	○	○	○	○
Annonsen er veldig informativ.	○	○	○	○	○	○	○
Annonsen hjelper folk å ta bedre beslutninger.	○	○	○	○	○	○	○
Annonsen gjenspeiler produsentens oppriktige ønske om å hjelpe miljøet.	○	○	○	○	○	○	○

Vurder følgende utsagn fra 1-7

	1. Helt uenig	2. Uenig	3. Litt uenig	4. Verken enig eller uenig	5. Litt enig	6. Enig	7. Helt enig
Du føler at dette produktets miljøomdømme er pålitelig.	○	○	○	○	○	○	○
Du føler at dette produktets miljøytelse er pålitelig.	○	○	○	○	○	○	○
Du føler at dette produktets miljøpåstander er pålitelige.	○	○	○	○	○	○	○
Dette produktets miljøhensyn oppfyller dine forventninger.	○	○	○	○	○	○	○
Dette produktet holder løfter og forpliktelser overfor miljøvern.	○	○	○	○	○	○	○

Hva likte du/ likte ikke med annonsen?

Appendix 2: Manipulation check

ANOVA

Reversert_ad_greenness

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.100	1	26.100	16.491	<.001
Within Groups	208.919	132	1.583		
Total	235.019	133			

Descriptives

Reversert_ad_greenness

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
Shallow	71	3.3697	1.20850	.14342	3.0837	3.6558	1.25	6.50
Deep	63	4.2540	1.31177	.16527	3.9236	4.5843	1.00	7.00
Total	134	3.7854	1.32931	.11483	3.5583	4.0126	1.00	7.00

Independent Samples Test

		Levene's Test for Equality of Variances F	Levene's Test for Equality of Variances Sig.	t-test for Equality of Means t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper
Reversert_ad_greenness	Equal variances assumed	.045	.833	-4.061	132	<.001	<.001	-.88425	.21775	-1.31498	-.45352
	Equal variances not assumed			-4.041	126.834	<.001	<.001	-.88425	.21882	-1.31727	-.45123
Reversert_involvement	Equal variances assumed	2.204	.140	.458	132	.324	.648	.05477	.11952	-.18165	.29119
	Equal variances not assumed			.469	121.762	.320	.640	.05477	.11667	-.17619	.28573
Reversert_skepticism	Equal variances assumed	.342	.560	.171	132	.432	.865	.03242	.18974	-.34290	.40774
	Equal variances not assumed			.172	131.572	.432	.864	.03242	.18902	-.34149	.40632

Appendix 3: Test of normality

Frequencies

Statistics

		Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg er miljøvennlige produkter... – Viktig:Uviktig	Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg er miljøvennlige produkter... – Kjedelig: Interessant	Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg er miljøvennlig e produkter... – Relevan t:Irreleva	Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg e r miljøvennlig e produkter... – Bety r ingenting fo r meg:Bety r mye for m	Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg er miljøvennlige produkter... – Verdiløst: Verdifult	Når du svarer på spørsmålene under ønsker vi at du tenker i sammenheng med handel av husholdningsp rodukter. For meg er miljøvennlige produkter... – Ikke nødvendig: Nødvendig	Vurder følgende utsagn fra 1– 7 – De fleste miljørettede påstander på pakkeetiketter eller i reklamer er sanne.	Vurder følgende utsagn fra 1– 7 – Siden miljøpåstande r er overdrevne, ville forbrukere ha det bedre hvis slike påstander på pakkeetiketter og i reklame ble eliminert.	Vurder følgende utsagn fra 1– 7 – De fleste miljøpåstande r på pakkeetiketter eller i reklame er ment å villede i stedet for å informere forbrukere.	Vurder følgende utsagn fra 1– 7 – Jeg tror ikke på de fleste miljørettede påstandene på pakkeetiketter eller i reklame.	Vurder følgende utsagn fra 1– 7 – Annonsen er veldig vag og uspesifikk.	Vurder følgende utsagn fra 1– 7 – Annonsen er veldig informativ.
N	Valid	134	134	134	134	134	134	134	134	134	134	134	134
	Missing	0	0	0	0	0	0	0	0	0	0	0	0
Skewness		.799	−.685	.823	−.839	−1.312	−1.230	.503	.181	.157	.213	.176	.093
Std. Error of Skewness		.209	.209	.209	.209	.209	.209	.209	.209	.209	.209	.209	.209
Kurtosis		−.016	−.124	−.368	.246	1.506	1.034	−.024	−.941	−1.189	−.970	−1.031	−.984
Std. Error of Kurtosis		.416	.416	.416	.416	.416	.416	.416	.416	.416	.416	.416	.416

Vurder følgende utsagn fra 1– 7 – Jeg tror ikke på de fleste miljørettede påstandene på pakkeetiketter eller i reklame.	Vurder følgende utsagn fra 1– 7 – Annonsen er veldig vag og uspesifikk.	Vurder følgende utsagn fra 1– 7 – Annonsen er veldig informativ.	Vurder følgende utsagn fra 1– 7 – Annonsen hjelper folk å ta bedre beslutninger.	Vurder følgende utsagn fra 1– 7 – Annonsen gjenspeiler produsentens oppriktige ønske om å hjelpe miljøet.	Vurder følgende utsagn fra 1– 7 – Du føler at dette produktets miljøomdømm e er pålitelig.	Vurder følgende utsagn fra 1– 7 – Du føler at dette produktets miljøytelse er pålitelig.	Vurder følgende utsagn fra 1– 7 – Du føler at dette produktets miljøpåstande r er pålitelige.	Vurder følgende utsagn fra 1– 7 – Dette produktets miljøhensyn oppfyller dine forventninger.	Vurder følgende utsagn fra 1– 7 – Dette produktet holder løfter og forpliktelser overfor miljøvern.
134	134	134	134	134	134	134	134	134	133
0	0	0	0	0	0	0	0	0	1
.213	.176	.093	−.206	−.428	−.217	−.230	−.227	−.341	−.225
.209	.209	.209	.209	.209	.209	.209	.209	.209	.210
−.970	−1.031	−.984	−.966	−.648	−.737	−.756	−.899	−.405	−.139
.416	.416	.416	.416	.416	.416	.416	.416	.416	.417

Appendix 4: Correlations of variables

Correlations

		green_trust	Reversert_invo lvement	Reversert_ske pticism	Reversert_ad_ greenness
green_trust	Pearson Correlation	1	−.001	−.331**	.856**
	Sig. (2–tailed)		.995	<.001	<.001
	N	134	134	134	134
Reversert_involvement	Pearson Correlation	−.001	1	−.163	.024
	Sig. (2–tailed)	.995		.060	.782
	N	134	134	134	134
Reversert_skepticism	Pearson Correlation	−.331**	−.163	1	−.302**
	Sig. (2–tailed)	<.001	.060		<.001
	N	134	134	134	134
Reversert_ad_greenness	Pearson Correlation	.856**	.024	−.302**	1
	Sig. (2–tailed)	<.001	.782	<.001	
	N	134	134	134	134

**. Correlation is significant at the 0.01 level (2–tailed).

Appendix 5: Regression analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.866[a]	.751	.739	.65621

a. Predictors: (Constant), AGSI, AGS, Reversert_involvement, Reversert_ad_greenness, AGI, Reversert_skepticism

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	164.609	6	27.435	63.711	<.001[b]
	Residual	54.688	127	.431		
	Total	219.297	133			

a. Dependent Variable: green_trust

b. Predictors: (Constant), AGSI, AGS, Reversert_involvement, Reversert_ad_greenness, AGI, Reversert_skepticism

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.497	.517		2.895	.004
	Reversert_involvement	−.050	.085	−.027	−.586	.559
	Reversert_skepticism	−.127	.057	−.108	−2.235	.027
	Reversert_ad_greenness	.809	.047	.838	17.280	<.001
	AGS	−.107	.059	−.086	−1.805	.073
	AGI	−.037	.067	−.026	−.551	.583
	AGSI	.078	.057	.065	1.363	.175

a. Dependent Variable: green_trust

Appendix 6: Correlations of moderators and demographics

Correlations

		Reversert_skepticism	Kjønn	Reversert_involvement
Reversert_skepticism	Pearson Correlation	1	−.063	−.163
	Sig. (2–tailed)		.469	.060
	N	134	134	134
Kjønn	Pearson Correlation	−.063	1	.068
	Sig. (2–tailed)	.469		.433
	N	134	134	134
Reversert_involvement	Pearson Correlation	−.163	.068	1
	Sig. (2–tailed)	.060	.433	
	N	134	134	134

Correlations

		Reversert_skepticism	Reversert_involvement	Aldersgrupper
Reversert_skepticism	Pearson Correlation	1	−.163	−.095
	Sig. (2−tailed)		.060	.272
	N	134	134	134
Reversert_involvement	Pearson Correlation	−.163	1	.023
	Sig. (2−tailed)	.060		.790
	N	134	134	134
Aldersgrupper	Pearson Correlation	−.095	.023	1
	Sig. (2−tailed)	.272	.790	
	N	134	134	134

Appendix 7: Orkla House Care research

DRIVERS FOR CHOOSING PAINT BRUSHES (UK):
Best end-result and no loose of bristles and fibres are the most important when choosing painting equipment

Think about your purchase of paint brushes and/or rollers the last two years. What was important for you when choosing painting equipment? Asked if painted within the last 2 years (n=290)

It gives the best end-result	44%
It will not lose any bristles or fibres	43%
It is quick and easy to clean the painting tools after use	36%
It picks up and release paint without dripping	26%
It's optimised to guarantee a beautiful and successful result	26%
It's optimised for the job I want to do	24%
It makes for a pleasant painting experience	22%
It picks up more paint, allowing you to complete the painting job fast	22%
It's easy to understand how to use it for a successful result	20%
It enables me to paint longer between each dip in the paint	18%
It's environmentally friendly	17%
It is ergonomically designed to reduce stresses and strains when painting	16%
It's an innovative product	9%
Other reasons	2%
Not relevant, I don't buy the painting tools	9%

Best result

Practical quality

Sustainable

Special tool

Innovative