Gaining trust through greenness

How green advertising messages translate into green trust for varying degrees of social distance.

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Master thesis

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Chapter 1: Introduction

Global warming is here.

The term can no longer be used to refer to an environmental development of the future. Sixteen of the seventeen warmest years on record have occurred between 2001 and the present. The current global surface temperature is 1°C higher than average (NASA, n.d.). This rise in temperature is largely due to the emission of gases that trap heat in the atmosphere. Of these so-called "greenhouse gases," CO_2, CH_4 and N_2O are the main contributors. The release of CO2 into the atmosphere as a result of industrial processes and the burning of fossil fuels accounts for 65% of global greenhouse emissions (EPA, n.d.). Pre-industrial CO2 levels have never surpassed 280 ppm. Today, CO2 emissions are at an all-time high of 403.3 ppm with an average increase of 2.21 ppm per year (WMO, 2017). The issue of global warming has received attention on the international stage with the birth of the Paris climate agreement as a result. The treaty deals with greenhouse gas emissions and is an agreement between parties of the United Nations Framework Convention on Climate Change (UNFCCC). The seriousness of the problem is globally acknowledged as 195 UNFCCC members have currently signed the agreement (UN, 2018). The agreement aims to keep this century's global temperature rise below 2 degrees Celsius and to ideally limit the increase to 1.5 degrees Celsius (UN, n.d.). It requires affiliated parties to present their efforts through "nationally determined contributions" (UN, n.d.).

Another critical climate problem is the "plastic soup." The plastic soup refers to the accumulation of plastic waste in the world's seas caused by human littering. Oceanic currents carry the plastics along and form highly concentrated and polluted gyres of waste (PSF, n.d.-b). The waste in these gyres disturbs the aquatic ecosystem and is frequently mistaken for food by different marine species (Seltenrich, 2015). The process of plastics entering the food chain also has severe health implications for humankind (PSF, n.d.-a). The urgent need to address this problem is evident. A continuation of our current plastic habits will result in the oceans containing more plastic than fish by 2050 (Ellen MacArthur Foundation, 2016). Although the plastic problem is relatively unknown compared to global warming, several initiatives have already been invoked to tackle it. Prime examples are the founding of "The Ocean Cleanup" project by Boyan Slat and the ban on free provision or sale of plastic bags by governments around the world (The Ocean Cleanup, n.d.; Xanthos & Walker, 2017).

Part of the solution to these pressing issues is to provide consumers with sustainable products. Sustainable products are those products that "offer satisfying solutions to customer needs and significant improvements in social and environmental performance along the whole product life cycle in comparison to conventional or competing offers" (Peattie & Belz, 2010, p. 12). However, the solution is not limited to the mere production of sustainable products. In order for mankind to be able to reduce its ecological footprint, adoption of sustainable products is a necessary condition as well. Consumers will only adopt such products if they are perceived as equivalent or superior to less sustainable alternatives. Making sustainability claims can help to shape such perceptions and subsequent purchase intentions (Cho, 2015).

The business world has picked up on the trend towards sustainability and views corporate environmental ethics as a way to achieve competitive advantage (Chang, 2011). Since organizations can benefit from an environmental competitive advantage, sustainability claims carry the risk of being perceived as untruthful. Consumers are increasingly skeptic toward organizations that take opportunistic advantage of the green trend (Du, Bhattacharya, & Sen, 2010; Pomering & Johnson, 2009). Therefore, claims about green product and process attributes can be observed as ambiguous, deceptive or "greenwashed." Greenwashing is defined as the act of deceiving consumers regarding environmental practices of a company or the environmental benefits of a product or service (Parguel, Benoît-Moreau, & Larceneux, 2011). Without confidence in the sustainability claims of organizations, consumers are unable to select and purchase green products. Hence, greenwashing could damage the green marketing of virtuous organizations and the green industry as a whole (Chen & Chang, 2013).

Combining the societal perspective with the business perspective shows the importance of consumers' ability to distinguish between greenwashing and virtuous green marketing. Global warming and plastic pollution can be limited by adoption of sustainable products, which can be encouraged by using green advertising claims to promote a trustworthy green brand image. This paper argues that such trustworthiness can be achieved by devising advertisements that are high in ad greenness. A working definition of ad greenness is employed in which ad greenness refers to the degree to which environmental claims in an advertisement are specific, informative and useful. Ad greenness is likely to generate green trust in a brand as it can be expected to enhance the perceived green value of its offering. In order to subsequently stimulate green purchasing behavior, the perceived risk of the purchase decision and consumers' level of confusion as a result of

exposure to a sustainability claim should be minimized (Chen & Chang, 2012, 2013). Confusion can be minimized by limiting the similarity, complexity, ambiguity, and amount of information (Mitchell & Papavassiliou, 1999; Turnbull, Leek & Ying, 2000). Minimizing risk perception, on the other hand, is more comprehensive as it consists of a psychological, physical, financial, social, and performance dimension (Jacoby & Kaplan, 1972).

Environmental risks, however, seem to form a particular category of their own. They often feature high levels of uncertainty and have temporally and geographically distant consequences that are relevant to others. This leads to "judgmental discounting" of environmental risks, which holds that "such risks are taken less seriously than risks with negative outcomes that occur for sure, now, here, and to us" (Gattig & Hendrickx, 2007, p. 22). Especially the dimension of discounting based on social distance invites further research as Jackson (2005) indicates that environmentally significant behavior, such as a sustainable purchase decision, is socially embedded. Individual preference is, to a large degree, subject to social and interpersonal factors. For green advertising specifically, a degree of social distance can be observed between the source of the ad (sender of the message) and the consumer (receiver of the message). The more dissimilar or elevated in power the source is compared to oneself, the more it is perceived as socially distant (Trope, Liberman, & Wakslak, 2007). A higher degree of perceived social distance can therefore be expected to elicit judgmental discounting of environmental information and influence a consumer's green trust in a brand.

Despite the realization that the concept of trust might play a central role in promoting green consumerism, empirical research on that relationship is scarce (McEachern, 2008). Likewise, the linkage between the source of a sustainability claim and trust has only been studied limitedly (Atkinson & Rosenthal, 2014). The present research bridges this gap by investigating how sustainability claims translate into green trust in a brand and subsequent purchase intentions of the advertised product for varying levels of social distance between source and consumer. The accompanying research question is:

How does ad greenness translate into green trust?

Relevant sub questions are:

What is the role of social distance in the relationship between ad greenness and green trust?

How does green trust affect a consumer's purchase intentions for a green product?

This study will contribute to the existing literature on green consumerism by coupling a specific form of judgmental discounting with the concept of green trust. It discusses how ad greenness translates into green trust and subsequent purchase intentions. Special attention is given to the potential moderating role of social distance, which is conceptualized as the degree of psychological closeness that people feel towards the source of the ad. During the research, consumers are viewed as social beings whose individual preference is shaped by social and interpersonal factors (Jackson, 2005). This approach deviates from the empirically dominant individualistic approach to human behavior, in which consumers are studied in isolation. In addition to the academic contribution, the present research will add to managers' understanding of how sustainability claims translate into green trust. More specifically, the possible differential effect as a result of source distance will provide a unique insight into how managers of green brands could employ environmental advertising strategies. The results can assist managers to shape sustainability claims in a way that minimizes the perceived social distance between consumer and source, and maximizes yield of their virtuous green efforts.

The thesis will attempt to answer the research question and related sub questions by reviewing existing literature, designing the research and examining its results. The findings will be explained in the discussion, after which the theoretical and managerial implications will be commented on. Finally, the conclusion will provide a short summary of the full study, discuss its limitations, and end with suggestions for future research.

Chapter 2: Literature Review

2.1 Green marketing

In its most minimalistic form, green marketing offers a method for communicating organizational legitimacy. Organizational legitimacy refers to companies' desire to "establish congruence between the social values associated with or implied by their activities and the norms of acceptable behavior in the larger social system of which they are part" (Dowling & Pfeffer, 1975, p. 122). Companies that seek to gain or maintain legitimacy have an incentive to use environmental disclosures and adhering communication strategies to influence societal perceptions (Cho & Patten, 2007). From a legitimacy perspective, green marketing aims at stressing the eco-friendly behavior of companies and preserving their social contracts with society (Leonidou, Leonidou, Hadjimarcou, & Lytovchenko, 2014). Green marketing in its current state steers away from environmental communication with the sole purpose of achieving organizational legitimacy. Consumers are increasingly willing to purchase products which are more environmental friendly than traditional products (Krause, 1993). As a result of society's grown interest and concern for the environment, companies have abandoned their initial view of sustainability and related defensive strategies (Sommer, 2012). Instead, they have adopted a perspective that realizes sustainability is an opportunity to gain a competitive edge and create economic value (Esty & Winston, 2009). This shift in perspective ensured the emergence of modern-day green marketing, which refers to "the holistic management process responsible for identifying, anticipating, and satisfying the needs of customers and society, in a profitable and sustainable way" (Peattie & Charter, 2003, p. 727). Green marketing strategies serve the purpose of identifying customers' green needs, launching green products, segmenting the green market, targeting one or multiple segments, formulating green positioning strategies, and implementing a green marketing mix program (Jain & Kaur, 2004).

2.2 The effect of ad greenness on green trust

The essence of relationship marketing is to create, develop, and maintain committed, interactive, and profitable exchanges with customers (Harker, 1999). Building and preserving such a committed and trustworthy relationship is difficult in the field of green marketing. The optimism by which the green trend was characterized in the late 1980s and early 1990s has degraded into

growing skepticism in recent times (do Paço & Reis, 2012; Peattie & Crane, 2005). Early research into green advertising indicated a relatively large degree of consumer cynicism about green products and associated companies as a result of deceptive claims (Kangun, Carlson, & Grove, 1991). Firms have since been wary about launching environmentally-centric campaigns for fear of being accused of greenwashing (Peattie & Crane, 2005). They tread the delicate path between persuading customers of their virtuous green efforts and being perceived as deceptive.

Chen and Chang (2012) identify "green perceived value" and "green perceived risk" as main components of green trust. They state that firms should focus on building green trust by maximizing green perceived value and minimizing green perceived risk if they aim to raise purchase intentions of their green products. Green trust is defined as the "willingness to depend on one object based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental performance" (Chen, 2010, p. 312). Green perceived value refers to a consumer's overall evaluation of the net benefit of a product based on one's environmental desires, expectations, and green needs (Chen & Chang, 2012). Perceived risk describes a consumer's subjective estimation related to possible consequences of wrong decisions (Peter & Ryan, 1976). Prior research suggests that consumers are reluctant to trust if they associate a high degree of risk with a product offering and that reducing perceived risk towards a product can enhance purchase intentions of it (Mitchell, 1999; Wood & Scheer, 1996). Research by Chen (2010) establishes "green brand image" as another antecedent of green trust. Green brand image concerns the collection of consumer perceptions about a brand that is linked to environmental commitments and concerns (Chen, 2010).

It is important to realize that customers do not buy products, but rather buy bundles of attributes which provide value to maximize their utility (Snoj, Pisnik Korda, & Mumel, 2004). Together, these attributes should represent an entire product, of which the possibility of it not offering its expected benefits is minimal (Roselius, 1971). One way to influence these customer perceptions of product value and risk is by communicating the value proposition of a product. The product value proposition describes the expected performance of a product related to customer needs and costs (Ballantyne, Frow, Varey, & Payne, 2011). For green products specifically, crafting and delivering such persuasive value propositions happens through environmental advertising. Persuasion, in this regard, aims to "shape, reinforce, or change behaviors, feelings, or thoughts about an issue, object, or action" (Fogg, 1998, p.225). Within the field of environmental

advertising, the concept of ad greenness, coined by Banerjee, Gulas, and Iyer (1995), refers to the extent of the environmental focus in an advertisement. Throughout this study, the term ad greenness is used to indicate the degree to which environmental claims in an advertisement are specific, informative and useful. Banerjee et al. (1995) use three classifications for the concept based on varying degrees of concreteness. Green advertisements are categorized as either shallow, moderate, or deep. Advertisements with shallow greenness lack factual support and consist of abstract claims. Conversely, advertisements with deep greenness are supported by objective, factual information and consist of concrete claims (Davis, 1993). Additionally, Davis (1993) indicates that the less concrete the environmental claim in an advertisement, the more manipulative, deceptive, and unethical the advertiser is perceived to be. This finding links ad greenness to green trust by indicating that the degree of concreteness of an environmental advertisement influences the trustworthiness of the source. According to Davis (1993), firms need to present objective, concrete, and factual claims to prevent being perceived as untrustworthy.

The aforementioned arguments raise the expectation of a positive effect of ad greenness on green trust. Hence, the first hypothesis reads:

H1. Ad greenness has a positive effect on green trust.

2.3 The moderating effect of social distance

The preferred way of human decision making is based on outcomes that are certain, personally relevant, geographically near, and temporally close. Judgmental discounting occurs when outcomes that do not satisfy one or more of these dimensions are valued less than outcomes that do (Gattig & Hendrickx, 2007). This means that sustainable decision making is dependent on the degree to which environmental consequences are applicable to us, here, now, and for sure. These four dimensions have received uneven empirical attention. Gattig and Hendrickx (2007) indicate that especially the concept of social distance, which underlies the personal relevance of an outcome, has not yet been related to environmental decision making. They show that an individual views the environmental consequences of his or her decision as less important when those are borne by people who he or she feels socially distant from. This raises questions as to whether social distance generates discounting of environmental information in general and persuasive environmental communication in particular. More specifically, might discounting of persuasive environmental

communication occur as a result of the social distance between an individual and the communication source?

Social distance refers to the psychological closeness that people feel towards other people (Bogardus, 1959). Individuals maintain a smaller social distance in interacting with others of perceived similarity. Additionally, they evaluate similar others as members of the in-group as more favorable compared to the dissimilar out-group (Mayhew, McPherson, & Rotolo, 1995; Parrillo, 2003). The existence of social distance and resulting in-group and out-group biases can be explained by "social identity theory." Social identity refers to an individual's self-definition based on a sense of belongingness to a particular social group and distinctiveness from other social groups (Brewer, 1991; Tajfel & Turner, 1979). Tajfel and Turner (1979) define "social categorization" as the process of dividing the world into an in-group and an out-group. Understanding the world as being made up out of in-groups and out-groups has implications for how people process persuasive information. Research by Mackie, Worth, and Asuncion (1990) indicates that strong arguments by a member of the in-group are more persuasive than the same arguments by a member of the out-group. Hence, the persuasive impact of a strong argument is lower when the perceived dissimilarity between an individual and a communication source is higher. This finding provides an indication of the existence of judgmental discounting based on social distance between an individual and a communication source. Arguments for or against a position in the condition of low social distance are valued more than the same arguments for or against a position in the condition of high social distance. This means that minimizing the degree of perceived social distance between a consumer and a communication source might prove most effective to influence the attitude of a consumer, and thus advocate sustainable decision making as it can be expected to limit judgmental discounting of environmental information.

Besides perceived similarity, perceived equality of power can be distinguished as a component of social distance. The more other people are elevated in power compared to oneself, the more they are perceived as socially distant (Trope, Liberman, & Wakslak, 2007). Power, in this sense, refers to "an individual's relative capacity to modify others' states by providing or withholding resources" (Keltner, Gruenfeld, & Anderson, 2003, p. 265). Equality of power is especially relevant in the perceived social distance between consumer and company. Organizational identification describes the "perception of oneness with or belongingness to" an organization in the process of deriving one's self-definition (Ashforth & Mael, 1989, p. 34;

Elsbach, 1999). Organizations can be viewed as a type of social group, which consumers also use for identification purposes (Pratt, 1998). Ashforth and Mael (1989, p. 22) explain that this happens because an organization can be viewed as an embodiment of characteristics perceived to be prototypical of its members. Bhattacharya and Sen (2003) argue that such consumer-company identification is active, selective, and volitional on the part of consumers and that it causes them to engage in either favorable or unfavorable company-related behaviors. As a discrepancy in power exists between a consumer (fewer resources, lower power) and a company (more resources, higher power), a degree of social distance can be expected. Relying on existing literature, the degree of perceived social distance will be higher when companies wield increasingly more power. Put differently, larger multinational companies can be anticipated to be perceived as more socially distant than smaller national companies. Relating this to judgmental discounting of environmental information raises the expectation that discounting will occur when the perceived power differential between consumer and company is higher. Similar to the previously discussed dimension of social distance, minimizing the degree of social distance between a consumer and a communication source might prove most effective to information with persuasive intent.

From a psychological viewpoint, the explanation for why social distance elicits judgmental discounting is presented by "construal-level theory." Construal-level theory posits that "people use increasingly higher levels of construal to represent an object as the psychological distance from the object increases" (Trope & Liberman, 2010, p. 442). Low-level construals are relatively concrete, contextualized mental representations of events. Conversely, high-level construals are relatively abstract, decontextualized mental representations of events (Trope, Liberman, & Wakslak, 2007). To clarify the difference between low-level and high-level construals, consider the following example of a village flooding. A low-level construal of this event includes details such as "the number of houses affected" and "the average height of the water level." In contrast, a high-level construal disregards the specifics of the event and could simply refer to it as "an environmental disaster." In a situation of high psychological distance (i.e. further removed from direct experience), people tend to respond to events by relying more on abstract construals than on concrete, direct experience (Trope & Liberman, 2010). The reliance on abstract construals in such conditions explains why social distance leads to discounting of general environmental information. A high degree of social distance creates a lack of concreteness in the mental representation of an event, which in turn results in a lower personal/social relevance and subsequent discounting of the

information. In the illustration of a village flooding, the degree to which someone perceives the victims to be dissimilar from oneself leads to the creation of a higher-level construal to make sense of the event. The abstract representation of the flooding generates a low perceived personal/social relevance of the event as it is further removed from direct experience. Ultimately, the low relevance can be expected to result in discounting of environmental information.

From a marketing perspective, the theory of "source credibility" is of value in explaining why social distance acts as precursor of judgmental discounting. Source credibility theory contends that the persuasiveness of communication is influenced by the perceived credibility of the source of that communication (Hovland & Weiss, 1951). Credibility, in this regard, refers to the believability of a source and comprises the components of expertise and trustworthiness (Pornpitakpan, 2004). Expertise describes the degree to which a source is perceived to be capable of making correct assertions. Trustworthiness denotes the extent to which an audience perceives those assertions to be considered valid by the source (Hovland, Janis, & Kelly, 1953). An extensive body of research on the subject of source credibility confirms that a highly credible source induces more persuasion toward the advocated position than a source with low credibility (Lirtzman & Shuv-Ami, 1986; Powell, 1965; Schulman & Worrall, 1970). This means that communication stemming from a source with low perceived credibility is discounted at the time of exposure (Hovland & Weiss, 1951). Clark and Maass (1988) indicate that members of the in-group are perceived as more credible than members of the out-group, and that this higher degree of credibility is associated with greater attitude change toward the position advocated by the in-group. In other words, when perceived social distance to the source is higher, credibility of the source is lower, and attitudes are influenced to a lesser degree. This provides an explanation for the finding of Mackie, Worth, and Asuncion (1990) that the persuasive impact of a strong argument is lower when the degree of social distance between an individual and a communication source is higher.

The line of argumentation presented above raises the expectation of a negative moderating effect of social distance on the relationship between ad greenness and green trust. The second hypothesis reads:

H2. Social distance negatively moderates the relationship between ad greenness and green trust.

2.4 The effect of green trust on purchase intentions

The concepts of marketing and sustainability can be observed as paradoxically connected. Marketing, at its core, is about selling more, while sustainability implies consuming less (Bond & Seeley, 2004). Consumerism, the economic desirability of ever-increasing consumption, is one of the major causes of environmental degradation (Jorgensen, 2003). The aim to sell increasingly more acts as a catalyst for such environmental degradation. Hence, marketing could be regarded as being detrimental to the environment in general and to sustainability efforts in particular. However, marketing can also be of value by influencing consumer purchase decisions for pro-environmental products (Pickett-Baker & Ozaki, 2008). From this perspective, marketing can function as a tool to shift consumption toward more environmentally friendly product alternatives. This thesis argues that building green trust is one way to influence purchase intentions for pro-environmental products.

In defining purchase intentions, it is important to realize that intentions are discrepant from attitudes. Attitudes are general evaluations that people hold about themselves, others, objects, and issues (Petty & Cacioppo, 1986). Alternatively, intentions describe the conscious motivation of people to exert effort to carry out particular behavior (Eagly & Chaiken, 1993). More specifically, purchase intentions refer to an individual's conscious motivation to make an effort to purchase a product or brand (Spears & Singh, 2004). The theory of reasoned action offers a framework to understand the relationship between beliefs, attitudes, intentions, and behavior (Fishbein & Ajzen, 2011). It posits that behavior is the product of beliefs, attitudes associated with those beliefs, and intentions to subsequently take action (Hale, Householder, & Greene, 2002).

Given the scale and lasting nature of environmental issues, limiting the negative environmental consequences of humanity's urge to consume requires long-term, pro-environmental behavior. Consumer trust is a fundamental determining factor for long-term consumer behavior (Lee, Park, & Han, 2011). Additionally, research indicates that consumer trust is an important determinant and antecedent of customer purchase intentions (Harris & Goode, 2010; van der Heijden, Verhagen, & Creemers, 2003; Schlosser, White, & Lloyd, 2006). Higher levels of trust are associated with higher levels of purchase intentions. Regarding the environmental context, Chen and Chang (2012) show a positive relationship between green trust and green purchase intentions.

In line with empirical findings, this study proposes that the willingness to depend on a green product positively affects the willingness to purchase that product or brand. The third hypothesis reads:

H3. Green trust has a positive effect on purchase intentions.

The conceptual model explained above and the hypotheses derived from the model are shown in Figure 1.

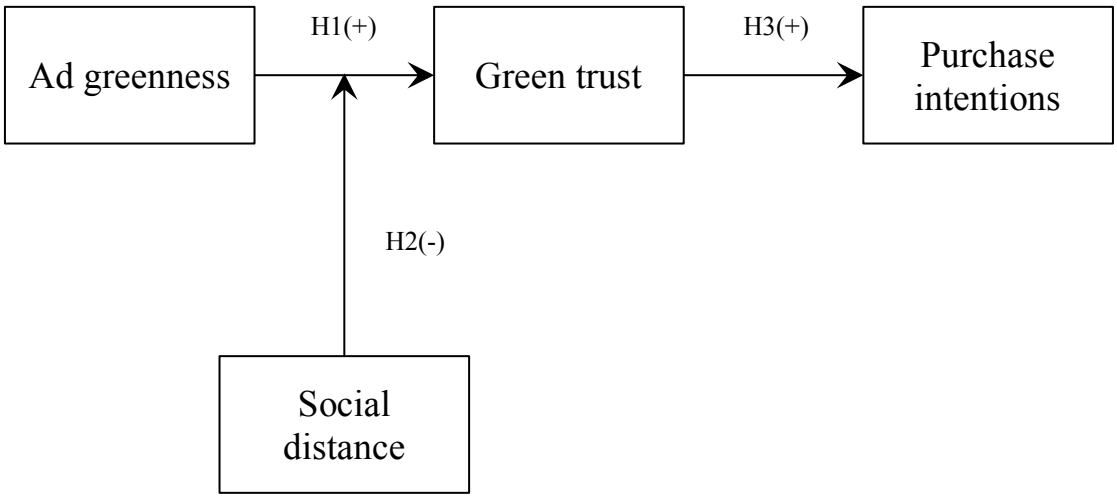

Figure 1: Conceptual model

Chapter 3: Methodology

3.1 Research design

The present research focuses on how ad greenness translates into green trust and subsequent purchase intentions. It also examines the role of social distance in the relationship between ad greenness and green trust. To test the hypothesized relationships between these variables, a quantitative study has been performed. Quantitative studies use numerical information to acquire scientific insights (Field, 2013, pp. 2-3). More specifically, an experiment was conducted to evaluate the conceptual model (Figure 1). As stated in the introduction, the main research question was: "how does ad greenness translate into green trust?" To study this question, experimental research was favored since "how" questions generally focus on explaining a phenomenon and aim at understanding (Bonoma, 1985; Yin, 1994). Moreover, the concepts and problem can easily be studied outside their natural context, justifying an experimental design (Bonoma, 1985). An experiment is a quantitative research method where one or more independent variables are manipulated to assess their effect on one or more dependent variables ('t Hart, Boeije, & Hox, 2009, p. 170). The experiment has been organized online to increase the uniformity of the procedure across participants, increase the overall accessibility of the research, and increase generalizability of the results (Reips, 2000, 2002). A 2 (low vs. high social distance) × 2 (shallow vs. deep ad greenness) between-subjects design of data collection was applied (see Table 1), in which different groups were assigned randomly to one of four experimental conditions (Field, 2013, pp. 15-16). Participants were presented with sets of questions after exposure to the experimental treatment. Prime objectives of the questions were to measure the dependent variables and control variables as well as to check whether the manipulations worked as intended. Subsequently, answers to those questions could be used to describe, predict and explain phenomena ('t Hart, Boeije, & Hox, 2009, p. 215).

Table 1: Experimental design

	Social distance to source	
Ad greenness	**Low**	**High**
Shallow	Condition 1	Condition 2
Deep	Condition 3	Condition 4

3.2 Data collection and sample

An initial, diverse sample of 30 subjects was selected to participate in the study. Subsequently, these participants were asked to invite three others from their social networks to participate. With an expected referral response rate of 67%, a total of 90 participants would have been reached. This purposive sampling strategy thus consisted of maximum variation sampling followed by snowball sampling with the ultimate goal of increasing representativeness (Teddlie & Yu, 2007). Providing participants with a digital link to the experiment enabled quick and effortless sharing within and across social networks. Given that this study had a 2 × 2 between-subjects design, a minimum sample size of 80 participants was required as the amount of observations should equal the number of cells (or conditions) times 20 (Hair, Black, Babin, & Anderson, 2014). However, a larger sample is more likely to accurately reflect the population and is associated with a smaller sampling error (Field, 2013; Hair et al., 2014). Therefore, it was desirable to collect more observations per cell and to aim for 100 to 120 participants in total. Depending on the response gathered from the primary sampling process, additional sampling was employed to reach the desired amount of participants.

3.3 Manipulating the independent variables

3.3.1 Ad greenness

Ad greenness was manipulated through variations of the same advertisement. Two images were designed that advertised bottled water for the fictional brand "Aqua." A water bottle was chosen as stimulus object because it is generally considered a low-involvement product. Product involvement, in this sense, refers to the degree of arousal, interest or drive evoked by a product (Dholakia, 2001). It is essential to account for product involvement as it is positively associated with purchase intentions (Lin & Chen, 2006). Products that vary in degree of involvement for different participants are therefore unfit for manipulation. Bottled water was suitable for

manipulation because the level of involvement is similar for all participants. Another reason for using bottled water in the advertisement is that it is a product about which realistic environmental claims can be made. In fact, green marketing strategies are employed by legitimate water bottle brands, such as "Dasani" (Dasani, n.d.). A fictitious brand name was devised to eliminate the possible influence of associations with existing brands. This was necessary on account of prior research by Chen (2010) that identifies green brand image as an antecedent of green trust. Using an imaginary brand name with which participants did not have pre-existing associations controlled for green brand image. In addition, the brand name did not carry inherent green value, but was merely a synonym of the word "water." Limiting the green perceived value in the brand name was paramount since Chen and Chang (2012) indicate that green perceived value is a precursor of both green trust and purchase intentions. Next to the product and brand name, the appearance of the manipulation for ad greenness has been carefully considered. Kärnä, Juslin, Ahonen, and Hansen (2001) state that advertisements can make use of both graphic and textual elements to communicate the environmental focus of a product. Based on this realization, the manipulation did not include the color green, images of nature and eco-labels such that perceived ad greenness was purely attributed to textual elements.

General environmental claims with low value in terms of informativeness and usefulness were used in the manipulation for shallow ad greenness (Figure 2). The claims "earth-friendly" and "green production" were derived from research by Banerjee et al. (1995). The term "natural" was taken from empirical work by Kärnä et al. (2001). In contrast, the manipulation for deep ad greenness portrayed specific environmental claims with high value in terms of informativeness and usefulness (Figure 3). To develop such specific environmental phrases, the following six guidelines have been followed: (1) "ensure that the promoted benefit has a real impact," (2) "identify the product's specific benefit," (3) "provide specific data," (4) "provide a context," (5) "define technical terms," & (6) "explain the benefit" (Davis, 1993). The possibility that the claims were perceived as confusing was limited in both variations of the manipulation by using precise and unambiguous wording. As a result, the manipulations only differed in terms of how specific, informative and useful their claims were. The manipulation was pre-tested by showing the two versions to a small group of 9 people and asking them to compare both in terms of specificity, informativeness and usefulness. The items used in the pre-test were based on research by Davis

(1993) and included dimensions of overall information specificity, information value and information usefulness (Appendix A.4).

Figure 2: Shallow ad greenness

Figure 3: Deep ad greenness

3.3.2 Social distance

To manipulate perceived social distance to the advertiser, participants were presented with a situation of either low social distance or high social distance. As indicated before, the two main components of social distance are perceived similarity and perceived equality of power (Trope et al., 2007). A contextual introduction to the study described an organization that was either socially similar and equal in power or socially dissimilar and unequal in power. The component of perceived similarity was manipulated by stating that the advertisement originated from a "local organization" or a "global organization." A crucial discrepancy here is that the word "local" relates to a particular area, whereas the word "global" involves the entire world. The word "local" suggests a sense of regional relevance and lower social distance (higher psychological closeness) compared to the word "global." To manipulate the component of perceived equality in power, the advertiser was mentioned to possess either "few economic and human resources" or "many economic and human resources." A resource-based view of power was adopted to express power as a function of available resources. The power of an organization is greater as the scope of controlled resources increases (Scott, 1994). In general, an exchange relationship is considered balanced when the actors have equal power (Emerson, 1972). Since consumers only have a limited resource base, the exchange relationship between consumers and organizations is increasingly unbalanced when organization have a larger resource base. In other words, the degree of social distance as a result of perceived power inequality is larger when organizations have more resources. More general terms were used instead of business jargon to ensure that all participants would be able to understand,

thus minimizing the chance of confusion. Ultimately, the two components were combined into two conditions of either low or high social distance to the source of the ad (see Table 2). The manipulation was pre-tested to examine whether it evoked the desired effect. A small group of 13 people was exposed to both variations of the manipulation and asked to indicate their perceived sense of social distance for each. Following research by Trope et al. (2007), the items used to measure perceived social distance were formulated along its dimensions of similarity and power equality (Appendix A.5).

Table 2: Social distance manipulation

Low social distance	High social distance
Consider the *local* organization "Aqua" that sells bottled water which it produces in *your home county*. Aqua is launching a new advertising campaign for which it has *few economic and human resources*. This means that it has a *low budget* and a *small number of employees* to support the campaign.	Consider the *global* organization "Aqua" that sells bottled water which it produces in *a foreign country*. Aqua is launching a new advertising campaign for which it has *many economic and human resources*. This means that it has a *high budget* and a *large number of employees* to support the campaign.

3.4 Measuring the dependent variables

3.4.1 Green trust

The main dependent variable in this study was green trust. Green trust describes a respondent's willingness to depend on a brand based on the belief or expectation that results from its credibility, benevolence, and ability regarding environmental performance (Chen, 2010, p. 312). The variable was measured through a validated 3-item scale that was established in prior research (Chen, 2010; Chen, 2013; Chen & Chang, 2012; Chen & Chang, 2013). Answers to the items could range from strongly disagree to strongly agree on a 5-point Likert scale. Appendix A.2 provides an overview of the items used.

3.4.2 Purchase intentions

The subsequent dependent variable in this research was purchase intention. Purchase intention refers to the respondent's conscious motivation to make an effort to purchase a product or brand (Spears & Singh, 2004). It was measured using a validated 3-item scale that was developed based

on earlier research by Dodds, Monroe, and Grewal (1991). Answers to the items could range from strongly disagree to strongly agree on a 5-point Likert scale. Appendix A.3 displays the included items.

3.5 Control variables

3.5.1 Environmental claim skepticism

As indicated before, consumers are increasingly skeptic toward organizations that take opportunistic advantage of the green trend (Du et al., 2010; Pomering & Johnson, 2009). Due to that increased critical attitude towards green opportunism, consumers may regard persuasive efforts concerning the environmental-friendliness of a product as untruthful or even deceptive. Therefore, in order to properly assess the influence of ad greenness on green trust, environmental claim skepticism needs to be controlled. The items used to measure the concept were extracted from research by Mohr Eroğlu, and Ellen (1998), which was specifically conducted with the objective of developing a measurement scale for skepticism toward environmental claims in marketing communications. Answers to the items could range from strongly disagree to strongly agree on a 5-point Likert scale. Appendix A.6 shows the individual measurement items.

3.5.2 Environmental involvement & issue importance

Two other primary control variables that needed to be taken into account were general environmental involvement and specific issue importance. Cho (2015) indicates that environmental involvement, the degree of personal relevance and importance associated with the environment, moderates the effects of sustainability claims. Related research substantiates this by showing that environmental involvement influences pro-environmental behaviors, such as purchase intentions (Cervellon, 2013; Kronrod, Grinstein, & Wathieu, 2012). More specifically, Kronrod et al. (2012) note that perceived environmental issue importance is an important predictor of compliant behavior. General environmental involvement was measured using a modified version of an established consumer involvement scale (Mittal, 1995). The items measuring environmental issue importance were adapted from prior empirical work by Kronrod et al. (2012). Answers to the items could range from strongly disagree to strongly agree on a 5-point Likert scale. Appendices A.7 and A.8 provide an overview of the items used for both variables.

3.5.3 Green product value

Although the manipulation for ad greenness was designed in a way that cancelled out the possible effect of green perceived value of the brand name, it did not take into account the possible distorting influence of green perceived value of the product. Participants were likely to have a certain pre-existing belief of the green value of bottled water in general. Compared to producing regular tap water, production of bottled water is estimated to be 2000 times as costly in terms of energy use (Gleick & Cooley, 2009). Regarding greenhouse gas emissions associated with the production process, bottled water is considerably more polluting as well (Pacific Institute, 2007). Of course, the polluting effect of plastics on the aquatic environment should not be ignored with an estimated amount of more than 5 trillion pieces of plastic floating around the world's oceans (Eriksen et al., 2014). Hence, bottled water is a relatively environmentally-unfriendly product. The extent to which participants perceive bottled water as a product with low green value could affect their green trust and ultimate purchase intentions (Chen & Chang, 2012; Kim, Zhao, & Yang, 2008). Green perceived product value was measured by an adjusted 3-item scale taken from research by Chen and Chang (2012). Answers to the items could range from strongly disagree to strongly agree on a 5-point Likert scale. Appendix A.9 shows the individual items that were employed in this study.

3.5.4 Demographics

Building on established research, some demographic information was collected that needed to be controlled (Appendix A.1). Firstly, gender has consistently been shown to impact green behavior. Women perform more ecologically conscious behavior and are more willing to buy environmentally-friendly products than men (Laroche, Bergeron, & Barbaro-Forleo, 2001; Roberts, 1996). Secondly, regarding age and its impact on green behavior, prior research has found mixed results. Whereas some studies have found that younger people are more likely to exhibit environmentally-friendly behavior, others have found the opposite holds true (Fisher, Bashyal, & Bachman, 2012). Thirdly, considering the level of education, earlier research indicates that a higher level of education is associated with a higher likelihood to perform environmentally-friendly behavior. Highly educated consumers demonstrate a higher level of concern about the environment and are more likely to purchase green products than lower educated people (Chan, 1996; do Paço, Raposo, & Filho, 2009).

3.6 Procedure

The experiment was set up with Qualtrics research software and performed online. Once the participants arrived at the online address for the study, they were shown a welcome screen with practical information (e.g., confidentiality of their responses, duration of the study). On the next page, they were asked for demographic information (Appendix A.1). Thereafter, they were randomly assigned and exposed to one of the four experimental conditions (see Table 1). The manipulation for ad greenness was always preceded by the manipulation for social distance. Following the manipulations, participants were asked to indicate their level of green trust and purchase intention based on the displayed advertisement (Appendix A.2, Appendix A.3). Subsequently, manipulation checks for the independent variables were performed (Appendix A.4, Appendix A.5). After that, information regarding the control variables was collected (Appendix A.6, Appendix A.7, Appendix A.8, Appendix A.9). The study concluded with a page that confirmed submission of the participants' answers and thanked them for their participation.

3.7 Research ethics

The general principles for research ethics have been taken into consideration in this study (Smith, 2003). The purpose, expected duration, procedures and prospective benefits of the research were clearly stated beforehand. Participants were also informed about their right to withdraw from the research at any time. In terms of privacy, responses were treated confidentially and anonymity was guaranteed. The acquired data was used solely for this study and was not shared with others. Participants were not required to present their name and were only asked for a limited amount of demographic information (e.g., age, gender). Additionally, a research integrity form was signed prior to conducting the study (Appendix B). At the end of the study, relevant contact information was provided to enable participants to reach out if they had further questions or if they wanted to receive the results of the study.

Chapter 4: Results

4.1 Pre-tests results

Pre-tests for the manipulations of the independent variables were conducted to ascertain whether they evoked the desired effect. The pre-tests were dispersed among a small amount of respondents to get a general idea about the functionality of the experimental stimuli. Both pre-tests had a within-subjects design in which respondents were asked to compare two manipulated conditions.

4.1.1 Pre-test ad greenness

The manipulation of ad greenness was pre-tested among 9 respondents (Appendix C.1). The respondents were exposed to the conditions of shallow ad greenness (Figure 2) and deep ad greenness (Figure 3). They were then asked to indicate their level of perceived ad greenness for each respective condition by answering a specific set of questions (Appendix A.4). As expected, the advertisement with shallow ad greenness yielded a lower level of perceived ad greenness (M = 2.86, SD = 0.88) than the advertisement with deep ad greenness (M = 4.22, SD = 0.34). This indicates that the manipulation was successful in inducing different levels of ad greenness.

4.1.2 Pre-test social distance

The manipulation of social distance was pre-tested among 13 respondents (Appendix C.2). The respondents were exposed to the conditions of low and high social distance (see Table 2). Subsequently, they were asked to indicate their level of perceived social distance in both conditions by answering three particular questions (Appendix A.5). As predicted, the contextual story describing a condition of low social distance resulted in a lower perceived level of social distance (M = 2.26, SD = 0.60) than the contextual story describing a condition of high social distance (M = 4.10, SD = 0.60). This shows that the manipulation was successful in eliciting different levels of social distance.

4.2 Experiment results

Data was collected from a total of 147 respondents that partook in the experiment. The dataset was cleaned by checking for missing values and outliers prior to running the analyses. Based on missing values, 38 cases were excluded from the sample for having only partially completed the

experiment. Hereafter, the remaining 109 responses were checked for outliers. One was found and deleted, yielding a definitive dataset of 108 responses. Table 3 portrays an overview of the demographic distribution of this dataset. As a next step, negatively worded items were reverse coded such that the value of those items corresponded to the same direction of response on the other items.

Table 3: Demographic overview

		Frequency	Percent
Gender	*Male*	67	62
	Female	41	38
Age	*18 - 24 years old*	46	42.6
	25 - 34 years old	6	5.6
	35 - 44 years old	3	2.8
	45 - 54 years old	16	14.8
	55 - 64 years old	32	29.6
	65+ years old	5	4.6
Education level	*Low*	30	27.8
	High	78	72.2

4.2.1 Factor analyses

Multiple factor analyses were performed to assess a priori expectations of which items load on the same factor. Principal component analysis was used as extraction method in all cases because the primary concern was to reduce data by arriving at a minimal number of factors that account for maximum variance. The analyses follow a consistent step-by-step process, first addressing the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity, then assessing the number of extracted factors based on the eigenvalues, and observing the proportion of explained variance, before examining the communalities of the individual items and the factor loadings. The KMO measure of sampling adequacy shows the proportion of the squared correlation between items relative to the squared partial correlation between items (Field, 2013). The statistic varies between a value of 0 and 1, where a higher value indicates more compact patterns of correlations and thus implies an increased appropriateness of using factor analysis. A minimum value of .50 is recommended as the acceptable threshold (Kaiser, 1974). Bartlett's test of sphericity assesses the null-hypothesis that the correlation matrix is an identity matrix (Field, 2013). The test

should be significant ($p < .05$) in order to reject the assumption of the items being uncorrelated. To identify a distinguishable factor, the eigenvalue of that factor is required to be above 1, as such a factor represents a sizeable amount of variance in the dataset (Field, 2013). On the subject of factor loadings in the case of a sample size of around 100, Hair et al. (2014, p. 115) suggest a minimum cut-off point of .55. Regarding communalities, which describe the proportion of an item's variance that it shares with the other items through the common factors, a minimum value of .50 is required (Field, 2013; Hair et al., 2014).

A first factor analysis was performed on the items expected to be making up the concept of green trust (Appendix A.2, Appendix D.1). The KMO statistic was found to have a value of .742 and Bartlett's test of sphericity proved to be significant ($p < .05$), thus indicating appropriateness of using factor analysis. One factor was identified with an eigenvalue greater than 1, which explained 81.99% of the variance. The minimum requirements for factor loadings and communalities were met with values above .55 and .50 respectively. The factor analysis confirmed that the three items could be averaged to constitute the construct of green trust because the factor loadings were roughly equal.

The second factor analysis was conducted on the items assumed to be measuring the concept of purchase intention (Appendix A.3, Appendix D.2). The analysis revealed a KMO measure with a value of .740. Combined with a significant ($p < .05$) Bartlett's test of sphericity, factor analysis was considered appropriate. One factor was recognized with an eigenvalue larger than 1, accounting for 88.03% of the variance. Both the factor loadings and communalities were sufficiently high with comparably large values above .55 and .50 respectively. The factor analysis confirmed that the three items could be combined to form the construct of purchase intention because the factor loadings were approximately equal.

Another factor analysis was performed on the items expected to be making up the concept of ad greenness (Appendix A.4, Appendix D.3). The analysis presented a KMO measure with a value of .724. Next, Bartlett's test of sphericity proved to be significant ($p < .05$). Use of factor analysis was therefore considered appropriate. One factor was identified with an eigenvalue greater than 1, which accounted for 75.81% of the variance. The factor loadings and communalities of the items all met the minimum requirements of .55 and .50 respectively. Based on the roughly equal factor loadings, the factor analysis evinced that the items could be integrated into one and the same construct.

A fourth factor analysis was executed on the items predicted to be capturing the concept of social distance (Appendix A.5, Appendix D.4). The KMO statistic turned out to have a value of .597. Furthermore, Bartlett's test of sphericity yielded a significant ($p < .05$) outcome. Therefore, performing a factor analysis was deemed appropriate. One factor was denoted containing an eigenvalue greater than 1, which explained 60.06% of the variance. All items demonstrated acceptable, but varying, factor loadings larger than .55. However, when inspecting the communalities, "SocialDistanceQ3" showed an unacceptable value of .429. For this reason, the item was omitted from a subsequent factor analysis. The remodeled analysis showed an acceptable KMO value of .50. Bartlett's test of sphericity remained significant ($p < .05$). Therefore, performing a factor analysis was still regarded as appropriate. A single factor was extracted with an eigenvalue above 1, which explained 77.62% of the variance. The two items displayed equal values for factor loadings and communalities well above the respective thresholds of .55 and .50. The factor analysis indicated that the two preserved items could be combined to form the construct of social distance. Regarding this decision, it should be noted that the use of fewer than three items to measure one construct is not ordinarily recommended (Hair et al., 2014, p. 610; Raubenheimer, 2004).

The following factor analysis was conducted on the items predicted to be jointly measuring the concept of environmental claim skepticism (Appendix A.6, Appendix D.5). The KMO statistic was found to have a value of .659 and Bartlett's test of sphericity proved to be significant ($p < .05$). Based on the preceding, using factor analysis was deemed appropriate. A single factor with an eigenvalue of larger than 1, explaining 63.57% of the variance, was extracted. The minimum requirements for factor loadings and communalities were met with values above .55 and .50 respectively. The factor analysis confirmed that the three items could be averaged to constitute the construct of environmental claim skepticism because the factor loadings were roughly equal.

A sixth factor analysis was performed on the items expected to be capturing the concept of environmental involvement (Appendix A.7, Appendix D.6). The KMO statistic turned out to have a value of .881. Furthermore, Bartlett's test of sphericity showed a significant ($p < .05$) outcome. Therefore, conducting a factor analysis was judged appropriate. One factor with an eigenvalue of more than 1 was identified, which explained 76.85% of the variance. All factor loadings and communalities were sufficiently high with values above .55 and .50 respectively. Given the

approximately equal factor loadings, the factor analysis confirmed that the five items in the scale could be combined to form the construct of environmental involvement.

The seventh factor analysis was executed on the items expected to be making up the concept of environmental issue importance (Appendix A.8, Appendix D.7). The analysis showed a KMO measure with a value of .635. Next, Bartlett's test of sphericity proved to be significant ($p < .05$). Use of factor analysis was therefore considered appropriate. One factor was found with an eigenvalue greater than 1, which accounted for 50.51% of the variance. When observing the factor loadings and communalities, "IssueImportanceQ3R" displayed an insufficient loading of .493 and a poor communality of .243. Therefore, the item was eliminated from the scale. Rerunning the factor analysis with the remaining three items resulted in a KMO statistic of .603. Bartlett's test of sphericity remained significant ($p < .05$). Again, conducting a factor analysis was deemed appropriate. A single factor was discerned with an eigenvalue above 1, which accounted for 62.72% of the variance. The analysis displayed acceptable factor loadings with values over .55. Remarkably, in terms of factor loading, one of the items diverged considerably from the other two. Reviewing the communalities signaled an inadequate value of .43 for "IssueImportanceQ4". As a result, that item was also eliminated from the scale. Conducting the analysis with the two remaining items presented a KMO measure with a value of .50. Bartlett's test of sphericity turned out to be significant ($p < .05$). Therefore, appropriateness of using factor analysis was established. One factor was extracted with an eigenvalue above 1, which captured 81.20% of the variance. The factor loadings and communalities were well over the minimum thresholds of .55 and .50 respectively. The third running of the analysis demonstrated that the two preserved items could be combined to form the construct of environmental issue importance. Again, it is noteworthy that the use of fewer than three items to measure one construct is undesirable (Hair et al., 2014, p. 610; Raubenheimer, 2004).

The final factor analysis was performed on the items predicted to be measuring the concept of green product value (Appendix A.9, Appendix D.8). The analysis produced a KMO statistic with a value of .502. Next, Bartlett's test of sphericity turned out to be significant ($p < .05$). Use of factor analysis was therefore considered appropriate. One factor was identified with an eigenvalue greater than 1, which accounted for 59.22% of the variance. Inspection of the factor loadings and communalities revealed poor values for "GreenProductValueQ1". Investigation into the reason why this item would show such low values aroused the suspicion of it not being entirely valid. The

item read: “Bottled water is an environmentally concerned product”. Compared to the other two statements, it did not contain a similar value judgment about the greenness of bottled water. Based on the exceptionally low factor loading and communality value, as well as the questionable validity of the item, it was deleted from the scale. Repeating the factor analysis with the other two items presented an acceptable KMO statistic of .50. Bartlett’s test of sphericity was again found to be significant ($p < .05$). A single factor was extracted with an eigenvalue above 1, which captured 85.73% of the variance. The factor loadings and communalities of the items satisfied the minimum requirements of .55 and .50 respectively. Despite the fact that Raubenheimer (2004) discourages the use of fewer than three items to measure a construct, it was decided to fuse only the last two items into one construct because of validity considerations.

4.2.2 Reliability analyses

Prior to compiling the constructs, their internal consistency was assessed by running reliability analyses. Reliability of a summated scale describes the extent to which a set of items is consistent in what it is intended to measure (Hair et al., 2014). The most widely used diagnostic tool for assessing the internal consistency of a scale is the reliability coefficient. The reliability coefficient is expressed by Cronbach’s alpha, of which .70 is commonly acknowledged as the lower limit (Hair et al., 2014, p. 123). This study also uses .70 as minimum threshold for Cronbach’s alpha. Table 4 presents an overview of the reliability coefficients for the various constructs. No construct was found to have a Cronbach’s alpha below .70, which implies that all are reliable. Appendices E.1-E.8 provide a more extensive report of the reliability analyses conducted for the summated scales.

Table 4: Reliability analyses overview

Construct	Number of items	Cronbach’s alpha
Green trust	3	.887
Purchase intention	3	.932
Social distance	2	.710
Ad greenness	4	.893
Environmental claim skepticism	3	.710
Environmental involvement	5	.918
Environmental issue importance	2	.714
Green product value	2	.833

4.2.3 Manipulation checks

Two one-way ANOVA's were conducted to determine whether the manipulations for ad greenness and social distance had the desired effect (Appendix F.1, Appendix F.2). Firstly, regarding the manipulation for ad greenness, the analysis offers evidence for a significant difference ($F(1, 106) = 14.274$, $p < .05$) between the mean of the shallow ad greenness condition ($M = 2.63$, $SD = 1.17$) and the mean of the deep ad greenness condition ($M = 3.45$, $SD = 1.09$). This shows that respondents subjected to the claims of the deep ad greenness condition (Figure 3) perceive those as more specific, informative and useful than respondents who are exposed to the claims of the shallow ad greenness condition (Figure 2). Secondly, concerning the manipulation for social distance, no evidence is found for a significant difference ($F(1, 106) = 2.438$, $p = .12$) between the mean of the condition with low social distance ($M = 3.24$, $SD = .93$) and the mean of the condition with high social distance ($M = 3.54$, $SD = 1.05$). This indicates that respondents did not experience a significant difference in terms of psychological distance to the source between the two presented contextual stories. It is worth mentioning that although the indicated difference is not significant, it is in the right direction.

4.2.4 Hypotheses testing

4.2.4.1 Assumptions

Before commencing with the analyses required to assess the hypotheses, three general assumptions with respect to ANOVAs, two assumptions relevant to ANCOVAs, and four assumptions concerning regression analysis had to be met. Regarding ANOVA, independence of observations must first be determined. Secondly, all variables are required to be normally distributed. Thirdly, equality of variances across groups should be ascertained (Hair et al., 2014, pp. 684-686). Independence of observations was established by randomly assigning participants to one of the four experimental conditions. By exclusive exposure to a specific combination of manipulations, responses were collected for each experimental condition independent from the other conditions. Moreover, independence of observations was ensured by conducting the experiment online. This allowed participants to take part individually within their own setting, separate from other participants. With regard to the second assumption, univariate normality was assessed for each variable by evaluating the skewness and kurtosis of the respective distribution. To prove normality of the univariate distributions, the values for skewness and kurtosis must fall within the range of -2 to +2 (George & Mallery, 2003). Normality could be assumed for all eight constructs relevant in

this study as none of them violated the thresholds for skewness and kurtosis (Appendix G). The third assumption was inspected by examining Levene's test for homogeneity. This inferential statistic "tests the null-hypothesis that the variances of the groups are the same" (Field, 2013, p. 442). Since the variances across groups are required to be equal, Levene's test should be non-significant ($p > .05$). Levene's test is reported for the specific analyses of variance in the following subsections.

An ANCOVA requires two additional assumptions before it is allowed to be carried out. Of prime importance in terms of interpretation is the independence of the covariate and the treatment variable. When they are not independent, "the treatment effect is obscured, spurious treatment effects can arise and at the very least the interpretation of the ANCOVA is seriously compromised" (Field, 2013, p. 484). The assumption was checked per analysis by examining the zero-order correlations between the covariates and the independent variable. Another assumption for ANCOVAs is homogeneity of the regression slopes, which was assessed by plotting regression lines for the different treatments in scatter plots.

Concerning the regression analyses required to evaluate the hypothesis, another set of assumptions had to be examined. Hair et al. (2014, pp. 179-181) mention assumptions in four major areas: (1) linearity of the phenomenon measured, (2) constant variance of the error terms, (3) normality of the error term distribution, and (4) independence of the error terms. Linearity was assessed for the individual analyses by visually examining the belonging scatterplots for any curvilinear patterns. If no meaningful pattern was identified, the existence of a linear relationship between the discussed variables was assumed. The assumption of constant variance of the error terms was examined by plotting the residuals against the predicted values. Homoscedasticity was confirmed if the resulting scatterplot showed no violation of the second assumption. Normality of the error term distribution was checked by means of a normal probability plot. Provided that the residual line closely followed the diagonal, indicative of a normal distribution, the assumption was met. The final assumption of independence of the error terms was satisfied as no sequencing variables were included, which effectively guarantees independence.

4.2.4.2 Hypothesis 1

Ad greenness has a positive effect on green trust.

The first hypothesis was evaluated by conducting a one-way ANCOVA and a multiple linear regression analysis. The analysis of covariance was conducted to see whether the different experimental conditions of ad greenness induced different amounts of green trust and included environmental claim skepticism and green product value as theoretically relevant covariates (see Table 5). None of the assumptions were violated, thus allowing an ANCOVA to be conducted (Appendix H). Both covariates were found to be significantly influencing green trust, indicating that a lower degree of environmental claim skepticism and a higher extent of perceived green product value, increased the level of green trust. Especially environmental claim skepticism appeared to have a large and significant effect on green trust. The analysis indicated that, after adjusting the means for the covariates, participants exposed to the condition of deep ad greenness scored higher (M = 3.270, SD = 1.02) in terms of green trust compared to participants exposed to the condition of shallow ad greenness (M = 3.053, SD = .96). Results showed that the observed difference was non-significant, $F(1,104) = 1.940$, $p = .167$. At first glance, the first hypothesis would have to be rejected as the experimental condition of deep ad greenness did not significantly result in a higher level of green trust than the experimental condition of shallow ad greenness when controlling for environmental claim skepticism and green product value.

Table 5: H1 - One-way ANCOVA for the dependent variable green trust

Source	SS	df	MS	F	η^2
Main effect					
Ad greenness treatment	1.238	1	1.238	1.940	.018
Covariates					
Environmental claim skepticism	25.366	1	25.366	39.737**	.276
Green product value	3.902	1	3.902	6.112*	.056
Error	66.389	104	.638	-	-

* $p < .05$; ** $p < .001$

Further investigation of the hypothesis was done by conducting a hierarchical multiple linear regression analysis for the effect of perceived ad greenness on green trust in which environmental claim skepticism and green product value were included as theoretically relevant control variables (see Table 6). Note that the continuous variable of perceived ad greenness used in this analysis is

different from the categorical variable for the experimental conditions of ad greenness used in the previous analysis. Based on inspection of the plotted residuals, none of the regression assumptions were violated (Appendix I). Jointly, the explanatory variables in the model accounted for a significant portion of the variance in green trust, $R^2_{adj} = .435$, $F(3,104) = 28.473$, $p < .05$ (see Table 6). Primarily striking is the relatively large, negative, and significant impact of environmental claim skepticism, $\beta = -.418$, $t(104) = -5.173$, $p < .05$. Compared to the other predictors, environmental claim skepticism appears to have the greatest effect on green trust. This indicates that a lower degree of green trust is elicited when green claims in an advertisement are increasingly perceived as untruthful, exaggerated and intended to mislead. Furthermore, green product value was demonstrated to be of marginally significant explanatory value to green trust, $B = .138$, $t(104) = 1.730$, $p < .10$. Assuming a 10% significance level, this shows that the more a product was perceived as environmentally friendly and beneficial, the higher the degree of green trust. In line with the expectation, perceived ad greenness was shown to significantly predict green trust as well, $B = .261$, $t(104) = 3.838$, $p < .05$. The mean of green trust changed by .261 for one unit of change in perceived ad greenness when controlling for environmental claim skepticism and green product value. The regression analysis provides evidence for a positive relationship between perceived ad greenness and green trust. The more green advertising claims were perceived as specific, informative and useful, the higher the level of green trust. Interestingly, after examining the zero-order correlations among the variables and running additional exploratory analyses, environmental claim skepticism appeared to partially mediate the relationship between perceived ad greenness and green trust. To assess if this was truly the case, the Sobel test was conducted (Preacher & Leonardelli, n.d.). The test showed that there was a significant reduction in the effect of perceived ad greenness after including environmental claim skepticism as a mediator, thus providing evidence for the existence of partial mediation (Appendix J). It seems that the extent to which the claims were perceived as believable had a mediating function in the relationship between perceived ad greenness and green trust. Together, the analyses indicate that green trust was not so much influenced by the degree to which green claims were specific, informative and useful, but rather by the extent to which those claims were perceived to be specific, informative and useful. Interestingly, perception also indirectly influenced green trust through its effect on the believability of the claims. The more the claims were perceived as specific, informative and useful, the less they

were perceived as untruthful, exaggerated and deceptive, which in turn increased the level of green trust.

Table 6: H1 - Hierarchical multiple linear regression for the dependent variable green trust

Model	Predictor	B	SE	β	p	F	R^2_{adj}
1	-	-	-	-	-	31.254*	.361
	Constant	4.649	.369	-	.000	-	-
	Environmental claim skepticism	-.600	.092	-.527	.000	-	-
	Green product value	.200	.083	.195	.017	-	-
2	-	-	-	-	-	28.473*	.435
	Constant	3.585	.444	-	.000	-	-
	Environmental claim skepticism	-.476	.092	-.418	.000	-	-
	Green product value	.138	.080	.134	.087	-	-
	Perceived ad greenness	.261	.068	.312	.000	-	-

* $p < .001$

4.2.4.3 Hypothesis 2

Social distance negatively moderates the relationship between ad greenness and green trust.

The second hypothesis was tested by conducting a two-way ANCOVA. The analysis was designed with the grouping variables of ad greenness and social distance as categorical fixed factors, green product value as covariate, and green trust as dependent variable (see Table 7). Performing an ANCOVA was permitted as investigation of the assumptions indicated no violations (Appendix K). Again, the covariates were found to be significantly affecting green trust. In particular, environmental claim skepticism was shown to be of great and significant influence to green trust, $F(1,102) = 39.553$, $p < .05$. Furthermore, the analysis displayed a non-significant interaction between the effects of the various conditions for ad greenness and social distance on green trust, $F(1, 102) = .504$, $p = .480$. Regarding the main effect of the ad greenness treatment, no statistically significant difference in green trust was found between the experimental conditions ($F(1, 102) = 1.873$, $p = .174$). Similarly, concerning the main effect of the social distance treatment, no statistically significant difference in green trust was found between the experimental conditions ($F(1, 102) = .000$, $p = .986$). The analysis indicates that social distance does not act as a moderator of the relationship between ad greenness and green trust. Based on this outcome, the second hypothesis was rejected. Given that the manipulation check for social distance could not be

conclusively regarded as functional, no subsequent regression analyses were performed as the scores on the variable of perceived social distance were considered invalid.

Table 7: H2 - Two-way ANCOVA for the dependent variable green trust

Source	SS	df	MS	F	η^2
Main effects					
Ad greenness treatment	1.213	1	1.213	1.873	.018
Social distance treatment	.000	1	.000	.000	.000
Interaction effect					
Ad greenness * Social distance	.326	1	.326	.504	.005
Covariates					
Environmental claim skepticism	25.618	1	25.618	39.553**	.279
Green product value	3.529	1	3.529	5.448*	.051
Error	66.063	102	.648	-	-

* $p < .05$; ** $p < .001$

4.2.4.4 Hypothesis 3

Green trust has a positive effect on purchase intentions.

To assess the final hypothesis, a hierarchical multiple linear regression analysis was performed (see Table 8). The analysis was conducted to assess whether green trust directly influences purchase intentions while controlling for several other theoretically relevant variables. The regression model controlled for gender, age, level of education, environmental involvement, environmental issue importance, and green product value. To be able to include the categorical variable age, dichotomous dummy variables were computed for its categories. The group containing 18 to 24 year old participants was used as reference category throughout the analysis. Based on inspection of the plotted residuals, none of the regression assumptions were violated (Appendix L). Collectively, the predictors accounted for a significant portion of the variance in green trust, $R^2_{adj} = .489$, $F(11,96) = 10.294$, $p < .05$. Especially noteworthy is the significant positive effect of green trust on purchase intentions when controlling for the other predictors, $B = .643$, $t(96) = 7.122$, $p < .05$. This result is in accordance with the predetermined hypothesis that green trust positively influences purchase intentions. One unit of change in green trust changes the mean of purchase intentions by .643 when controlling for gender, age, level of education, environmental involvement, environmental issue importance and green product value. When contrasted with the other included explanatory variables, the impact of green trust appeared to be relatively sizeable as

well, $\beta = .540$, $t(96) = 7.122$, $p < .05$. Also interesting is the positive and significant effect of green product value on purchase intentions when controlling for all other predictors, $B = .252$, $t(96) = 2.735$, $p < .05$. This means that the inclination to purchase increased when the product in question was perceived as more environmentally friendly and beneficial. Combined with findings of the previous analyses, the extent to which a product is perceived to be friendly and beneficial to the environment appears to be a meaningful variable when studying both green trust and purchase intentions. A final remarkable outcome of the model is that, compared to the reference category, two specific age groups, were found to be significant negative predictors of purchase intentions. Participants in the age group ranging from 45 to 54 and participants over the age of 65 reported lower intentions to purchase than participants in the age group ranging from 18 to 24, $B = -.639$, $t(96) = -2.420$, $p < .05$; $B = -.935$, $t(96) = -2.121$, $p < .05$. This outlines a general trend of younger people being more receptive to the idea of purchasing green marketed products. All in all, outcomes of the conducted analysis support the suggested hypothesis stating that green trust had a positive effect on purchase intentions. Higher levels of green trust were associated with higher intentions to purchase.

Table 8: H3 - Hierarchical multiple linear regression for the dependent variable purchase intentions

Model	Predictor	B	SE	β	p	F	R^2_{adj}
1	-	-	-	-	-	4.989*	.157
	Constant	2.212	.705	-	.002	-	-
	Gender	.119	.222	.048	.595	-	-
	Level of education	-.106	.240	-.040	.659	-	-
	Environmental involvement	.089	.216	.054	.682	-	-
	Environmental issue importance	-.137	.185	-.095	.461	-	-
	Green product value	.537	.110	.439	.000		
2	-	-	-	-	-	4.133*	.226
	Constant	2.109	.692	-	.003	-	-
	Gender	.258	.221	.105	.246	-	-
	Level of education	-.310	.249	-.117	.216	-	-
	Environmental involvement	.126	.213	.076	.554	-	-
	Environmental issue importance	-.017	.184	-.011	.928	-	-
	Green product value	.477	.107	.390	.000	-	-
	Age 25 - 34	.500	.474	.096	.294	-	-
	Age 35 - 44	-.434	.642	-.060	.501	-	-
	Age 45 - 54	-.856	.322	-.255	.009	-	-
	Age 55 - 64	-.550	.261	-.211	.038	-	-
	Age 65+	-1.181	.540	-.209	.031	-	-
3	-	-	-	-	-	10.294*	.489
	Constant	.680	.598	-	.258	-	-
	Gender	.251	.180	.102	.167	-	-
	Level of education	-.329	.202	-.124	.107	-	-
	Environmental involvement	-.062	.175	-.038	.723	-	-
	Environmental issue importance	.121	.151	.083	.426	-	-
	Green product value	.252	.092	.206	.007	-	-
	Age 25 - 34	.469	.385	.090	.226	-	-
	Age 35 - 44	-.429	.522	-.059	.413	-	-
	Age 45 - 54	-.639	.264	-.191	.017	-	-
	Age 55 - 64	-.346	.214	-.133	.110	-	-
	Age 65+	-.935	.441	-.165	.036	-	-
	Green trust	.643	.090	.540	.000	-	-

* $p < .001$

Chapter 5: Discussion

The aim of the present research was threefold. The first objective was to discover whether a positive relation existed between ad greenness and green trust. Secondly, a possible moderating role of social distance on the relationship between ad greenness and green trust was examined. The third goal was to ascertain whether green trust positively influenced purchase intentions. To answer these questions, an online experiment was conducted in which participants were exposed to one of four specific experimental conditions.

The first hypothesis stated that ad greenness has a positive effect on green trust. Ad greenness concerns the extent to which green claims made in an advertisement are specific, informative and useful. Initial outcomes of the study hinted at rejection of the hypothesis by indicating that the level of ad greenness was not significantly related to green trust. However, further exploration showed that there was a positive relation between the degree to which such ad greenness was perceived and the level of green trust. It appears that green trust is not so much affected by the extent to which green advertising claims are specific, informative and useful, but rather by the degree to which those claims are perceived to be specific, informative and useful. Interestingly, the research also presented evidence for an indirect effect of perceived ad greenness on green trust through the concept of environmental claim skepticism. The more the green advertisement claims are perceived as specific, informative and useful, the less they are perceived as untruthful, exaggerated and deceptive. This, in turn, translates into an increased level of green trust. The results add to and are in partial accordance with prior research by Davis (1993) in which he proposes that the level of specificity of a green advertising claim is related to the perceived trustworthiness of the advertiser. The conducted research indicates that believability of the claim works as a mechanism for translating a specific, informative and useful green claim into green trust in the advertiser.

The second hypothesis posited that social distance negatively moderates the relationship between ad greenness and green trust. For this study, social distance refers to the degree of psychological closeness that people feel towards the advertiser. Results provided no evidence for a significant interaction effect of ad greenness and social distance on green trust. In addition, no proof was found for a main effect of social distance on green trust. As a result, the second hypothesis was rejected. The degree of psychological closeness towards the advertiser in no way

influenced the level of green trust. It should be noted that the manipulation of social distance could not be assumed as functional. Results regarding social distance should therefore not be considered absolute truths. That the experimental conditions of social distance were found to be of no influence can possibly be explained by the fact that social distance is primarily experienced from person to person and much less from person to organization. Although organizations can be regarded as a social groups to which social identification applies (Ashforth & Mael, 1989; Bhattacharya & Sen, 2003; Pratt, 1998), psychological closeness will arguably be experienced more clearly in a person-to-person context. Presenting people a short contextual story about a brand with relatively low power that produces in their home country might not be enough for them to consider that brand as part of the in-group, especially when that brand is unknown to them. If all participants perceived the brand in a similar manner, as part of the out-group, no difference in credibility would have been achieved, as Clark and Maass (1988) indicate that members of the in-group are considered more credible. Following Hovland and Weiss (1951) who state that communication originating from a source with low credibility is discounted, it would be expected that if credibility was equally low in both experimental conditions, the same amount of discounting would have occurred. In the context of green claims, the level of green trust would remain unaffected as a result.

The final hypothesis suggested that green trust has a positive effect on purchase intentions. Findings showed strong support for this hypothesis by indicating green trust as a positive, significant, and relatively substantial predictor of purchase intentions when controlling for gender, age, level of education, environmental involvement, environmental issue importance, and green product value. Higher levels of green trust are associated with higher intentions to purchase. The results confirm prior research into the relationship between trust and purchase intentions. In general, trust towards a brand increases purchase intentions of the products associated with that brand (Harris & Goode, 2010; van der Heijden, Verhagen, & Creemers, 2003; Schlosser, White, & Lloyd, 2006). Similar to research by Chen and Chang (2012), the present study shows that this general truth holds in an environmental context as well. Besides green trust, green product value was also indicated to be a positive and significant predictor of purchase intentions. The more a product is viewed as environmentally friendly and beneficial, the higher the purchase intentions. The finding connects with research by Chen and Chang (2012) by highlighting green perceived product value as an important antecedent of purchase intentions.

5.1 Theoretical implications

Outcomes of the study contribute to theory by reinforcing prior findings as well as offering several new insights. Prior research established concreteness of green advertising claims as an antecedent of trust towards the advertiser (Davis, 1993). This paper expands on that by showing that the more comprehensive concept of ad greenness, which comprises the elements of claim specificity, informativeness and usefulness, influences trust towards the advertiser. In addition, the present research provides evidence for a partial mediating role of claim believability between ad greenness and green trust. The higher an advertisement is rated in terms of ad greenness, the less its claims are perceived as untruthful, exaggerated and deceptive, which subsequently results in a higher level of green trust. An important realization regarding this indirect effect is that the believability was geared towards the claims and not towards the advertiser. This demonstrates that the relationship between claim concreteness and trust in the advertiser is more complex than previously assumed. Furthermore, this study offered confirmatory insights concerning the relationship between green trust and purchase intentions. Green trust positively predicted purchase intentions and turned out to have a relatively strong impact compared to other theoretically relevant variables.

Remarkably, the degree to which participants viewed general environmental issues, and plastic pollution in particular, as important and personally relevant, was indicated to have no effect on their purchase intentions. This finding is inconsistent with prior research in which general environmental involvement and specific environmental issue importance are determined as factors influencing pro-environmental behavior (Cervellon, 2013; Kronrod et al., 2012). Part of the explanation for this finding might be that a product was offered for which a cheaper alternative is widely available. Water is a primary physiological need which is often free and generally accessible from taps. The cost considerations associated with tap water as an alternative to bottled water might have overshadowed the effects of environmental involvement and environmental issue importance on purchase intentions. In addition, habitual purchasing behavior could possibly have played a mitigating role in the effects of environmental involvement and environmental issue importance on purchase intentions.

Results concerning the variable of green product value also attracted attention in terms of theoretical implications. Green product value, which refers to the degree to which a product is viewed as environmentally friendly and beneficial, seemed to be of marginal influence to green trust and of significant influence to purchase intentions. The finding is in accordance with research

by Chen and Chang (2012) in which they similarly prove that green perceived value of the product has an effect on both green trust and purchase intentions. This indicates that the green perceived value of the product is of substantial value for achieving successful green marketing and is therefore of vital importance to the field of research into green marketing. Another variable that was found to be of predictive value to purchase intentions was age. Compared to the reference category ranging in age from 18 to 24, participants aged 45 to 54 as well as participants over the age of 65 significantly displayed lower purchase intentions. Previous studies investigating the relationship between age and environmentally-friendly behavior have made contradictory discoveries (Fisher et al., 2012). To add to the debate on how age and environmentally-friendly behavior are related, this study's findings suggest that younger people seem to generally be more inclined to purchase green marketed products. However, it should be noted that not all age groups produced significant results because they were unequally represented in the sample.

5.2 Managerial implications

For practitioners the results offer insights on how to devise green advertising strategies without being perceived as deceptive. When green advertisements and the claims made within them are seen as more specific, informative and useful, they are perceived as more believable. This provides a practically applicable and effective method of combatting greenwashing. Brands centered around a green marketing strategy should design their advertisement in a way that maximizes perceived ad greenness if they desire to be perceived as virtuous. This means that claims should be specific, detailed and contain both factual and useful information to instigate green trust of consumers. The element of trust is essential for brands that have adopted a long-term orientation (Ganesan, 1994). Building an image of being a sincere green brand could provide the foundation for a long-term sustainable competitive advantage (McDaniel & Rylander, 1993). However, results imply that aiming to raise green trust could also prove beneficial in the short-term as green trust is shown to be a positive predictor of immediate purchase intentions. Since a high level of green trust could be advantageous to both short- and long-term objectives, heightening the level of perceived ad greenness while simultaneously lowering consumers' degree of skepticism towards the green claims is crucial.

Findings regarding green perceived value of the product also hold value for practice. As mentioned before, the degree to which a product is regarded as environmentally friendly and

beneficial directly affects both green trust and purchase intentions. This strengthens the position that advertising is unable to "successfully market a product not perceived by consumers as making a real environmental contribution" (Davis, 1993, p. 32). Therefore, practitioners should target their advertising campaigns at augmenting the green perceived value of the product offering. In doing so, marketers should steer away from simply claiming that a product is beneficial to the environment and shift focus to showing how that product is advantageous.

Chapter 6: Conclusion

Results of the conducted research indicate that perceived ad greenness increases green trust directly, but also indirectly through its negative effect on environmental claim skepticism. In addition to the direct effect, this means that when green claims in an advertisement are increasingly perceived as specific, informative and useful, they are decreasingly judged as untruthful, exaggerated and deceptive, which leads to higher levels of green trust. Subsequently, that green trust is shown to be a positive predictor of purchase intention.

6.1 Limitations

First and foremost, the non-functioning manipulation for social distance was a severe limitation. Two contextual stories, centered around the theoretically underpinned dimensions of similarity and power, were used to describe two companies varying in terms of social distance from the participants. Since the manipulation was unable to induce different levels of social distance, results concerning the concept had little value. As a consequence, no definitive conclusion could be drawn with regard to the possibility of judgmental discounting of information due to social distance.

Secondly, motivated by factor analyses, multiple items were deleted from the measurement scales. This caused an issue in three cases because the constructs had to be formed by combining only two items which is undesirable and not recommended (Hair et al., 2014, p. 610; Raubenheimer, 2004). Although the reliability coefficients for the three constructs were still acceptable with values above .70, they were generally lower than the constructs comprising three or more items.

A final limitation was that participants were not evenly distributed over all age groups. This rendered findings regarding certain age groups non-significant. As a result, meaningful remarks could only be made about a few categories. Especially the age groups 25 to 34, 35 to 44, and the group aged over 65 were underrepresented in the sample. This is particularly unfortunate in view of the yet to be clarified role of age in relation to pro-environmental behavior (Fisher et al., 2012). Of course, heterogeneity in the demographic distribution also slightly reduces the generalizability of results.

6.2 Future research suggestions

Some attractive areas for future research arise from the conducted research and its limitations. Firstly, in view of building green trust, the role of social distance and related judgmental discounting of information remains unexplored. Since the manipulation of social distance was ineffective, it is impossible to judge the concept as relevant or irrelevant in the environmental context. Follow-up research should be performed to examine if social distance can truly be disregarded when studying environmental matters. How social distance is to be manipulated in such follow-up research should be carefully considered and pre-tested. Based on the dysfunctional manipulation used in this study, it is advisable to present respondents with situations that are personally applicable. For example, a situation of low social distance could involve a close friend or a relative as the source of information, whereas in a situation of high social distance a foreign person could be used as the information source. Participants can be expected to translate that to their own situation and thus perceive a difference in social distance.

Another interesting avenue for future research would be to comparatively study products that are environmentally friendly and environmentally unfriendly. Green perceived value of the product was indicated to influence both green trust and purchase intentions. It would be valuable to learn just how substantial the concept is to the proposed model. Examining in contrast products that are inherently different in terms of greenness would make green perceived value of the product central to the investigation. Additionally, it would be interesting to ascertain how green perceived value would impact green trust and subsequent purchase intentions if it was split up into green value of the product and green value of the advertisement.

Lastly, the role of environmental claim skepticism in building trust through green marketing could be examined more closely. Qualitative research should be conducted to discover what elements in a claim add to its believability. The present research has demonstrated that specificity, informativeness and usefulness are related to the believability of the claims. However, it does not shed light on topics such as the way of phrasing, word choice and visual aspects regarding the claims. Qualitative research could be conducted to get an overall image of what people value in the design of such claims.

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Appendices

Appendix A.1: Demographic items

1. *What is your gender?*
2. *What is your age?*
3. *What is the highest level of education you have completed?*

Appendix A.2: Green trust items

1. *I believe that this brand's environmental image is generally reliable.*
2. *I believe that this brand's environmental performance is generally dependable.*
3. *I believe that this brand's environmental claims are generally trustworthy.*

Appendix A.3: Purchase intention items

1. *I would be likely to buy this product.*
2. *I would consider buying this product.*
3. *I am willing to buy this product.*

Appendix A.4: Ad greenness items

1. *The information in the advertisement is specific.*
2. *The advertisement provides valuable information.*
3. *The information in the advertisement is useful to me in evaluating the product.*
4. *The information in the advertisement is useful to me in making a buying decision.*

Appendix A.5: Social distance items

1. *I feel that the brand is socially similar to me.*
2. *I feel that the brand is equally powerful as me.*
3. *I feel that the brand is different from me.* *

* Reverse-coded

Appendix A.6: Environmental claim skepticism items

1. *The claims made in the advertisement seem true.* *
2. *The claims made in the advertisement are exaggerated.*
3. *The claims made in the advertisement are intended to mislead.*

* Reverse-coded

Appendix A.7: Environmental involvement items

1. *Environmental issues are important to me.*
2. *Environmental issues are of concern to me.*
3. *Environmental issues mean a lot to me.*
4. *Environmental issues matter to me.*
5. *Environmental issues are significant for me.*

Appendix A.8: Environmental issue importance items

1. *It is important for me to help reduce plastic pollution.*
2. *I think a lot about ways to help reduce plastic pollution.*
3. *Helping reduce plastic pollution is at the bottom of my priorities list.* *
4. *I try to help reduce plastic pollution.*

* Reverse-coded

Appendix A.9: Green product value items

1. *Bottled water is an environmentally concerned product.*
2. *Bottled water is an environmentally friendly product.*
3. *Bottled water is an environmentally beneficial product.*

Appendix B: Research integrity form

Name: Twan Rooijmans	Student number: 4385063
RU e-mail address: tgc.rooijmans@student.ru.nl	Master specialisation: Marketing

Thesis title: Gaining trust through greenness: How green advertising messages translate into green trust for varying degrees of social distance.
Brief description of the study:

It is my responsibility to follow the university's code of academic integrity and any relevant academic or professional guidelines in the conduct of my study. This includes:

- Providing original work or proper use of references;
- Providing appropriate information to all involved in my study;
- Requesting informed consent from participants;
- Transparency in the way data is processed and represented;
- Ensuring confidentiality in the storage and use of data;

If there is any significant change in the question, design or conduct over the course of the research, I will complete another Research Integrity Form.

Breaches of the code of conduct with respect to academic integrity (as described / referred to in the thesis handbook) should and will be forwarded to the examination board. Acting contrary to the code of conduct can result in declaring the thesis invalid

Student's Signature: _____ **Date:** 14/03/2018

To be signed by supervisor

I have instructed the student about ethical issues related to their specific study. I hereby declare that I will challenge him / her on ethical aspects through their investigation and to act on any violations that I may encounter.

Supervisor's Signature: _____ **Date:**

Appendix C.1: Pre-test results ad greenness

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ShallowAG	9	1,75	4,50	2,8611	,88487
DeepAG	9	3,75	4,75	4,2222	,34106
Valid N (listwise)	9				

Appendix C.2: Pre-test results social distance

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
LowSD	13	1,67	3,33	2,2564	,59557
HighSD	13	3,00	5,00	4,1026	,59914
Valid N (listwise)	13				

Appendix D.1: Factor analysis green trust

Correlation Matrix[a]

		GreenTrustQ 1	GreenTrustQ 2	GreenTrustQ 3
Correlation	GreenTrustQ1	1,000	,763	,734
	GreenTrustQ2	,763	1,000	,692
	GreenTrustQ3	,734	,692	1,000
Sig. (1-tailed)	GreenTrustQ1		,000	,000
	GreenTrustQ2	,000		,000
	GreenTrustQ3	,000	,000	

a. Determinant = ,175

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,742
Bartlett's Test of Sphericity	Approx. Chi-Square	183,110
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
GreenTrustQ1	1,000	,848
GreenTrustQ2	1,000	,817
GreenTrustQ3	1,000	,794

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
GreenTrustQ1	,921
GreenTrustQ2	,904
GreenTrustQ3	,891

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,460	81,985	81,985	2,460	81,985	81,985
2	,312	10,398	92,383			
3	,228	7,617	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.2: Factor analysis purchase intention

Correlation Matrix[a]

		PurchaseIntentionQ1	PurchaseIntentionQ2	PurchaseIntentionQ3
Correlation	PurchaseIntentionQ1	1,000	,836	,765
	PurchaseIntentionQ2	,836	1,000	,860
	PurchaseIntentionQ3	,765	,860	1,000
Sig. (1-tailed)	PurchaseIntentionQ1		,000	,000
	PurchaseIntentionQ2	,000		,000
	PurchaseIntentionQ3	,000	,000	

a. Determinant = ,076

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,740
Bartlett's Test of Sphericity	Approx. Chi-Square	270,552
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
PurchaseIntentionQ1	1,000	,852
PurchaseIntentionQ2	1,000	,919
PurchaseIntentionQ3	1,000	,870

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
PurchaseIntentionQ1	,923
PurchaseIntentionQ2	,959
PurchaseIntentionQ3	,933

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,641	88,036	88,036	2,641	88,036	88,036
2	,237	7,897	95,933			
3	,122	4,067	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.3: Factor analysis ad greenness

Correlation Matrix[a]

		AdGreenness Q1	AdGreenness Q2	AdGreenness Q3	AdGreenness Q4
Correlation	AdGreennessQ1	1,000	,712	,548	,527
	AdGreennessQ2	,712	1,000	,805	,660
	AdGreennessQ3	,548	,805	1,000	,794
	AdGreennessQ4	,527	,660	,794	1,000
Sig. (1-tailed)	AdGreennessQ1		,000	,000	,000
	AdGreennessQ2	,000		,000	,000
	AdGreennessQ3	,000	,000		,000
	AdGreennessQ4	,000	,000	,000	

a. Determinant = ,062

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,724
Bartlett's Test of Sphericity	Approx. Chi-Square	291,967
	df	6
	Sig.	,000

Communalities

	Initial	Extraction
AdGreennessQ1	1,000	,624
AdGreennessQ2	1,000	,840
AdGreennessQ3	1,000	,831
AdGreennessQ4	1,000	,738

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
AdGreennessQ1	,790
AdGreennessQ2	,917
AdGreennessQ3	,911
AdGreennessQ4	,859

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,032	75,811	75,811	3,032	75,811	75,811
2	,552	13,809	89,620			
3	,287	7,166	96,786			
4	,129	3,214	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.4: Factor analysis social distance

Correlation Matrix[a]

		SocialDistanceQ1R	SocialDistanceQ2R	SocialDistanceQ3
Correlation	SocialDistanceQ1R	1,000	,552	,372
	SocialDistanceQ2R	,552	1,000	,259
	SocialDistanceQ3	,372	,259	1,000
Sig. (1-tailed)	SocialDistanceQ1R		,000	,000
	SocialDistanceQ2R	,000		,003
	SocialDistanceQ3	,000	,003	

a. Determinant = ,596

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,597
Bartlett's Test of Sphericity	Approx. Chi-Square	54,429
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
SocialDistanceQ1R	1,000	,731
SocialDistanceQ2R	1,000	,641
SocialDistanceQ3	1,000	,429

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
SocialDistanceQ1R	,855
SocialDistanceQ2R	,801
SocialDistanceQ3	,655

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,802	60,064	60,064	1,802	60,064	60,064
2	,767	25,557	85,620			
3	,431	14,380	100,000			

Extraction Method: Principal Component Analysis.

Correlation Matrix[a]

		SocialDistanceQ1R	SocialDistanceQ2R
Correlation	SocialDistanceQ1R	1,000	,552
	SocialDistanceQ2R	,552	1,000
Sig. (1-tailed)	SocialDistanceQ1R		,000
	SocialDistanceQ2R	,000	

a. Determinant = ,695

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,500
Bartlett's Test of Sphericity	Approx. Chi-Square	38,413
	df	1
	Sig.	,000

Communalities

	Initial	Extraction
SocialDistanceQ1R	1,000	,776
SocialDistanceQ2R	1,000	,776

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
SocialDistanceQ1R	,881
SocialDistanceQ2R	,881

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,552	77,621	77,621	1,552	77,621	77,621
2	,448	22,379	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.5: Factor analysis environmental claim skepticism

Correlation Matrix[a]

		ClaimSkepticismQ1R	ClaimSkepticismQ2	ClaimSkepticismQ3
Correlation	ClaimSkepticismQ1R	1,000	,380	,448
	ClaimSkepticismQ2	,380	1,000	,529
	ClaimSkepticismQ3	,448	,529	1,000
Sig. (1-tailed)	ClaimSkepticismQ1R		,000	,000
	ClaimSkepticismQ2	,000		,000
	ClaimSkepticismQ3	,000	,000	

a. Determinant = ,555

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,659
Bartlett's Test of Sphericity	Approx. Chi-Square	61,845
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
ClaimSkepticismQ1R	1,000	,561
ClaimSkepticismQ2	1,000	,644
ClaimSkepticismQ3	1,000	,702

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
ClaimSkepticismQ1R	,749
ClaimSkepticismQ2	,802
ClaimSkepticismQ3	,838

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,907	63,567	63,567	1,907	63,567	63,567
2	,633	21,087	84,654			
3	,460	15,346	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.6: Factor analysis environmental involvement

Correlation Matrix[a]

		EnvironmentalInvolvementQ1	EnvironmentalInvolvementQ2	EnvironmentalInvolvementQ3	EnvironmentalInvolvementQ4	EnvironmentalInvolvementQ5
Correlation	EnvironmentalInvolvementQ1	1,000	,700	,753	,791	,603
	EnvironmentalInvolvementQ2	,700	1,000	,765	,756	,545
	EnvironmentalInvolvementQ3	,753	,765	1,000	,814	,714
	EnvironmentalInvolvementQ4	,791	,756	,814	1,000	,639
	EnvironmentalInvolvementQ5	,603	,545	,714	,639	1,000
Sig. (1-tailed)	EnvironmentalInvolvementQ1		,000	,000	,000	,000
	EnvironmentalInvolvementQ2	,000		,000	,000	,000
	EnvironmentalInvolvementQ3	,000	,000		,000	,000
	EnvironmentalInvolvementQ4	,000	,000	,000		,000
	EnvironmentalInvolvementQ5	,000	,000	,000	,000	

a. Determinant = ,019

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,881
Bartlett's Test of Sphericity	Approx. Chi-Square	413,126
	df	10
	Sig.	,000

Communalities

	Initial	Extraction
EnvironmentalInvolvementQ1	1,000	,775
EnvironmentalInvolvementQ2	1,000	,742
EnvironmentalInvolvementQ3	1,000	,858
EnvironmentalInvolvementQ4	1,000	,841
EnvironmentalInvolvementQ5	1,000	,625

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
EnvironmentalInvolvementQ1	,880
EnvironmentalInvolvementQ2	,862
EnvironmentalInvolvementQ3	,927
EnvironmentalInvolvementQ4	,917
EnvironmentalInvolvementQ5	,791

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,842	76,847	76,847	3,842	76,847	76,847
2	,484	9,689	86,536			
3	,302	6,045	92,581			
4	,203	4,052	96,633			
5	,168	3,367	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.7: Factor analysis environmental issue importance

Correlation Matrix[a]

		IssueImportanceQ1	IssueImportanceQ2	IssueImportanceQ3R	IssueImportanceQ4
Correlation	IssueImportanceQ1	1,000	,624	,313	,297
	IssueImportanceQ2	,624	1,000	,203	,376
	IssueImportanceQ3R	,313	,203	1,000	,115
	IssueImportanceQ4	,297	,376	,115	1,000
Sig. (1-tailed)	IssueImportanceQ1		,000	,000	,001
	IssueImportanceQ2	,000		,017	,000
	IssueImportanceQ3R	,000	,017		,118
	IssueImportanceQ4	,001	,000	,118	

a. Determinant = ,469

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,635
Bartlett's Test of Sphericity	Approx. Chi-Square	79,362
	df	6
	Sig.	,000

Communalities

	Initial	Extraction
IssueImportanceQ1	1,000	,706
IssueImportanceQ2	1,000	,700
IssueImportanceQ3R	1,000	,243
IssueImportanceQ4	1,000	,371

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
IssueImportanceQ1	,840
IssueImportanceQ2	,837
IssueImportanceQ3R	,493
IssueImportanceQ4	,609

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,020	50,506	50,506	2,020	50,506	50,506
2	,909	22,730	73,236			
3	,712	17,795	91,031			
4	,359	8,969	100,000			

Extraction Method: Principal Component Analysis.

Correlation Matrix[a]

		IssueImportanceQ1	IssueImportanceQ2	IssueImportanceQ4
Correlation	IssueImportanceQ1	1,000	,624	,297
	IssueImportanceQ2	,624	1,000	,376
	IssueImportanceQ4	,297	,376	1,000
Sig. (1-tailed)	IssueImportanceQ1		,000	,001
	IssueImportanceQ2	,000		,000
	IssueImportanceQ4	,001	,000	

a. Determinant = ,520

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,603
Bartlett's Test of Sphericity	Approx. Chi-Square	68,684
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
IssueImportanceQ1	1,000	,699
IssueImportanceQ2	1,000	,757
IssueImportanceQ4	1,000	,426

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
IssueImportanceQ1	,836
IssueImportanceQ2	,870
IssueImportanceQ4	,653

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,882	62,719	62,719	1,882	62,719	62,719
2	,749	24,976	87,695			
3	,369	12,305	100,000			

Extraction Method: Principal Component Analysis.

Correlation Matrix[a]

		IssueImportanceQ1	IssueImportanceQ2	IssueImportanceQ4
Correlation	IssueImportanceQ1	1,000	,624	,297
	IssueImportanceQ2	,624	1,000	,376
	IssueImportanceQ4	,297	,376	1,000
Sig. (1-tailed)	IssueImportanceQ1		,000	,001
	IssueImportanceQ2	,000		,000
	IssueImportanceQ4	,001	,000	

a. Determinant = ,520

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,603
Bartlett's Test of Sphericity	Approx. Chi-Square	68,684
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
IssueImportanceQ1	1,000	,699
IssueImportanceQ2	1,000	,757
IssueImportanceQ4	1,000	,426

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
IssueImportanceQ1	,901
IssueImportanceQ2	,901

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,882	62,719	62,719	1,882	62,719	62,719
2	,749	24,976	87,695			
3	,369	12,305	100,000			

Extraction Method: Principal Component Analysis.

Appendix D.8: Factor analysis green product value

Correlation Matrix[a]

		GreenProductValueQ1	GreenProductValueQ2	GreenProductValueQ3
Correlation	GreenProductValueQ1	1,000	,095	,215
	GreenProductValueQ2	,095	1,000	,715
	GreenProductValueQ3	,215	,715	1,000
Sig. (1-tailed)	GreenProductValueQ1		,164	,013
	GreenProductValueQ2	,164		,000
	GreenProductValueQ3	,013	,000	

a. Determinant = ,463

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,502
Bartlett's Test of Sphericity	Approx. Chi-Square	80,882
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
GreenProductValueQ1	1,000	,132
GreenProductValueQ2	1,000	,796
GreenProductValueQ3	1,000	,849

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
GreenProductValueQ1	,364
GreenProductValueQ2	,892
GreenProductValueQ3	,921

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,777	59,221	59,221	1,777	59,221	59,221
2	,948	31,610	90,831			
3	,275	9,169	100,000			

Extraction Method: Principal Component Analysis.

Correlation Matrix[a]

		GreenProductValueQ2	GreenProductValueQ3
Correlation	GreenProductValueQ2	1,000	,715
	GreenProductValueQ3	,715	1,000
Sig. (1-tailed)	GreenProductValueQ2		,000
	GreenProductValueQ3	,000	

a. Determinant = ,489

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,500
Bartlett's Test of Sphericity	Approx. Chi-Square	75,380
	df	1
	Sig.	,000

Communalities

	Initial	Extraction
GreenProductValueQ2	1,000	,857
GreenProductValueQ3	1,000	,857

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
GreenProductValueQ2	,926
GreenProductValueQ3	,926

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,715	85,727	85,727	1,715	85,727	85,727
2	,285	14,273	100,000			

Extraction Method: Principal Component Analysis.

Appendix E.1: Reliability analysis green trust

Reliability Statistics

Cronbach's Alpha	N of Items
,887	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GreenTrustQ1	6,26	3,895	,812	,811
GreenTrustQ2	6,25	4,750	,782	,846
GreenTrustQ3	6,47	4,139	,761	,858

Appendix E.2: Reliability analysis purchase intention

Reliability Statistics

Cronbach's Alpha	N of Items
,932	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PurchaseIntentionQ1	6,22	6,025	,830	,925
PurchaseIntentionQ2	5,89	5,651	,903	,867
PurchaseIntentionQ3	6,11	6,062	,848	,911

Appendix E.3: Reliability analysis social distance

Reliability Statistics

Cronbach's Alpha	N of Items
,710	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SocialDistanceQ1R	3,54	1,167	,552	.
SocialDistanceQ2R	3,24	1,418	,552	.

Appendix E.4: Reliability analysis ad greenness

Reliability Statistics

Cronbach's Alpha	N of Items
,893	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AdGreennessQ1	9,27	14,441	,653	,901
AdGreennessQ2	9,19	12,663	,838	,833
AdGreennessQ3	9,09	13,075	,825	,838
AdGreennessQ4	9,06	13,436	,742	,870

Appendix E.5: Reliability analysis environmental claim skepticism

Reliability Statistics

Cronbach's Alpha	N of Items
,710	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ClaimSkepticismQ1R	6,37	3,693	,476	,685
ClaimSkepticismQ2	6,03	3,896	,537	,618
ClaimSkepticismQ3	6,25	3,105	,585	,548

Appendix E.6: Reliability analysis environmental involvement

Reliability Statistics

Cronbach's Alpha	N of Items
,918	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EnvironmentalInvolvementQ1	17,02	9,140	,802	,900
EnvironmentalInvolvementQ2	17,15	8,258	,776	,903
EnvironmentalInvolvementQ3	17,32	7,492	,878	,882
EnvironmentalInvolvementQ4	17,04	8,952	,858	,891
EnvironmentalInvolvementQ5	17,32	8,726	,692	,920

Appendix E.7: Reliability analysis environmental issue importance

Reliability Statistics

Cronbach's Alpha	N of Items
,714	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
IssueImportanceQ1	3,44	1,276	,624	.
IssueImportanceQ2	4,51	,477	,624	.

Appendix E.8: Reliability analysis green product value

Reliability Statistics

Cronbach's Alpha	N of Items
,833	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GreenProductValueQ2	1,88	1,116	,715	.
GreenProductValueQ3	1,92	1,105	,715	.

Appendix F.1: Manipulation check ad greenness

Descriptives

MeanAG

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
ShallowAG	53	2,6321	1,17322	,16115	2,3087	2,9555	1,00	4,75
DeepAG	55	3,4545	1,08876	,14681	3,1602	3,7489	1,00	5,00
Total	108	3,0509	1,19908	,11538	2,8222	3,2797	1,00	5,00

ANOVA

MeanAG

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18,258	1	18,258	14,274	,000
Within Groups	135,587	106	1,279		
Total	153,845	107			

Appendix F.2: Manipulation check social distance

Descriptives

MeanSD

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LowSD	53	3,2358	,92821	,12750	2,9800	3,4917	1,00	5,00
HighSD	55	3,5364	1,05345	,14205	3,2516	3,8212	1,00	5,00
Total	108	3,3889	1,00078	,09630	3,1980	3,5798	1,00	5,00

ANOVA

MeanSD

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,438	1	2,438	2,467	,119
Within Groups	104,729	106	,988		
Total	107,167	107			

Appendix G: Univariate normality for all constructs

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
MeanAG	108	1,00	5,00	3,0509	1,19908	-,352	,233	-1,100	,461
MeanSD	108	1,00	5,00	3,3889	1,00078	-,137	,233	-,336	,461
MeanGT	108	1,00	5,00	3,1636	1,00414	-,469	,233	-,437	,461
MeanPI	108	1,00	5,00	3,0370	1,19564	-,290	,233	-,969	,461
MeanECS	108	1,00	5,00	3,1080	,88230	,070	,233	-,128	,461
MeanEI	108	1,80	5,00	4,2926	,72211	-1,101	,233	1,352	,461
MeanEII	108	1,50	5,00	3,9722	,82551	-,671	,233	-,244	,461
MeanGPV	108	1,00	5,00	1,8981	,97578	1,007	,233	,203	,461
Valid N (listwise)	108								

Appendix H: ANCOVA assumptions for hypothesis 1

Levene's Test of Equality of Error Variances[a]

Dependent Variable: MeanGT

F	df1	df2	Sig.
2,482	1	106	,118

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

a. Design: Intercept + MeanECS + MeanGPV + GroupAG

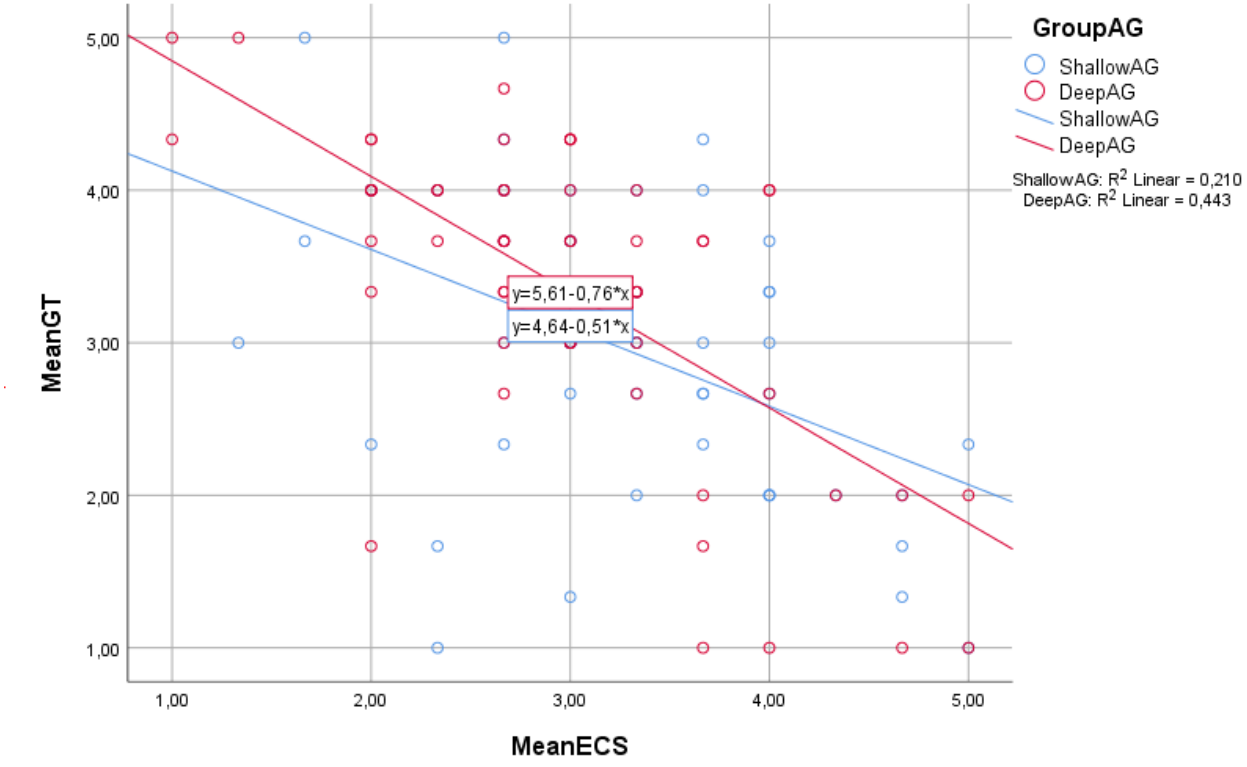
Correlations

		GroupAG	MeanECS
GroupAG	Pearson Correlation	1	-,146
	Sig. (2-tailed)		,131
	N	108	108
MeanECS	Pearson Correlation	-,146	1
	Sig. (2-tailed)	,131	
	N	108	108

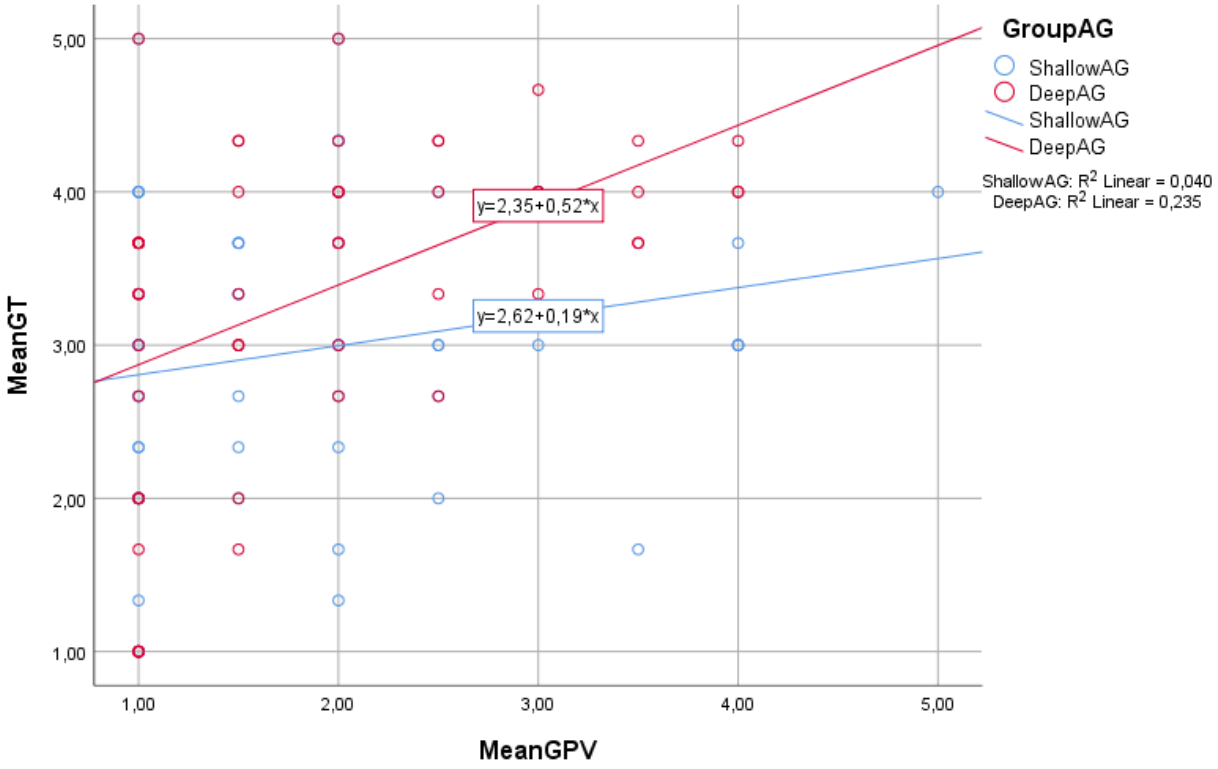
Correlations

		GroupAG	MeanGPV
GroupAG	Pearson Correlation	1	,011
	Sig. (2-tailed)		,906
	N	108	108
MeanGPV	Pearson Correlation	,011	1
	Sig. (2-tailed)	,906	
	N	108	108

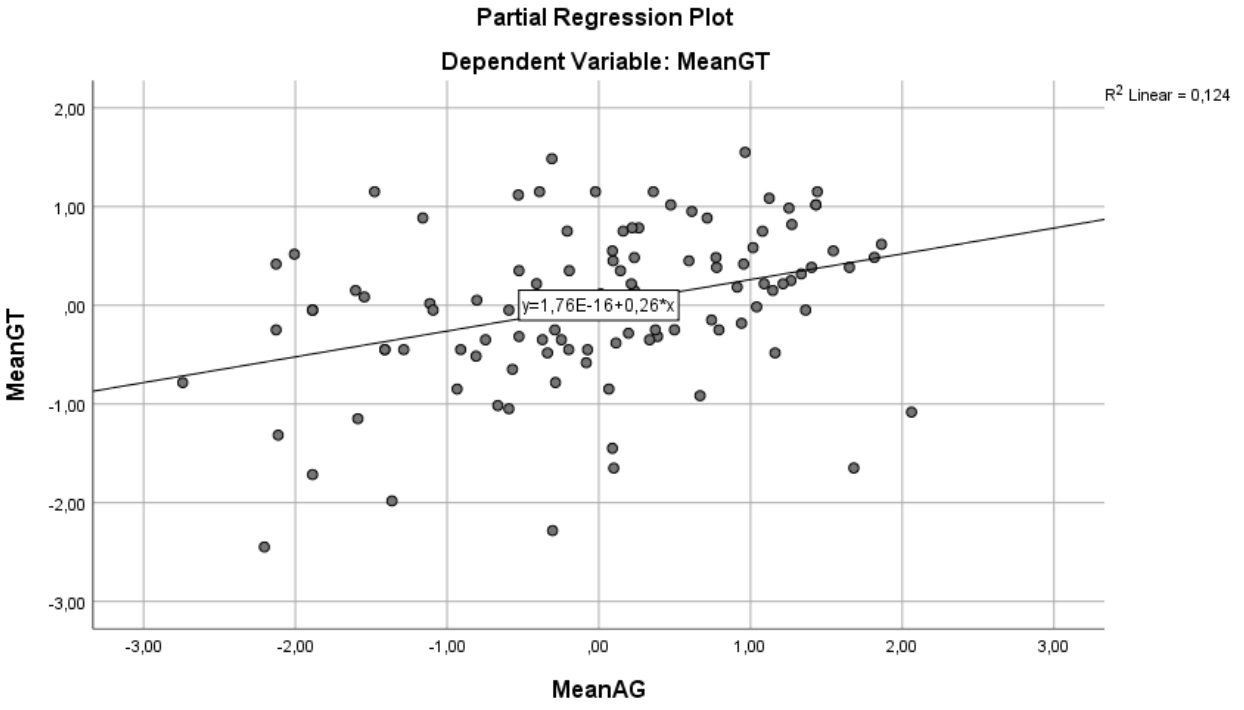
Graph

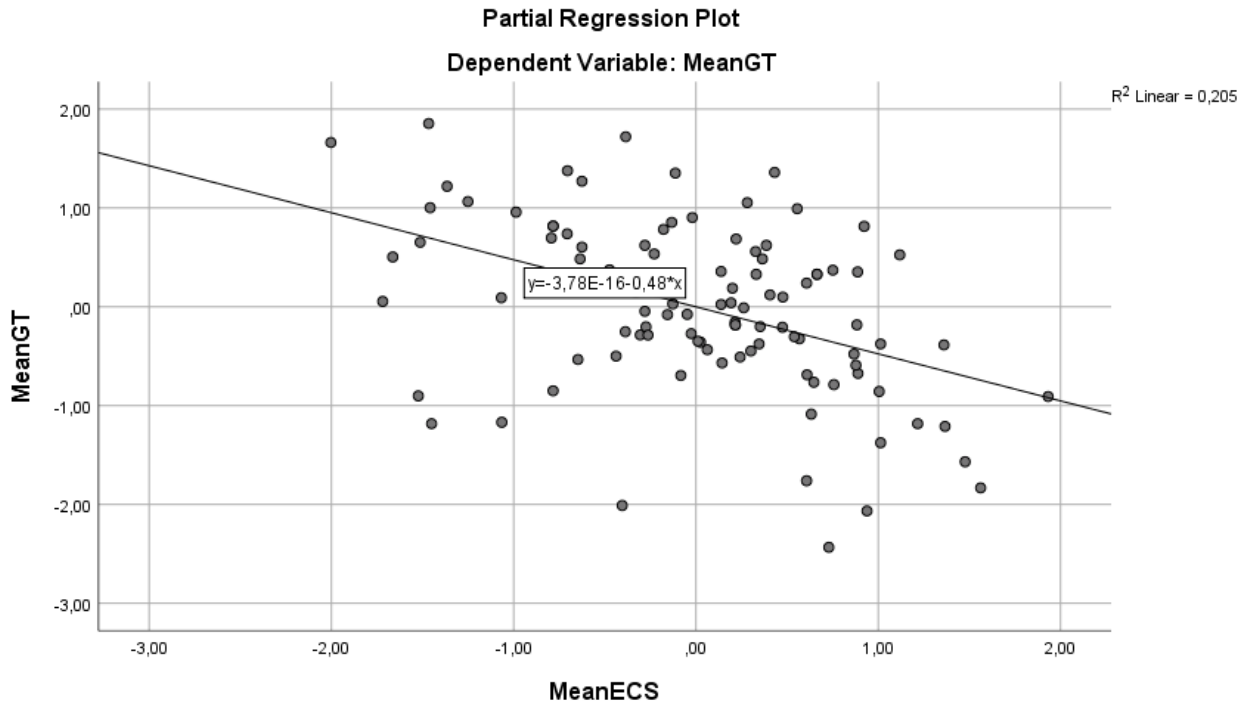


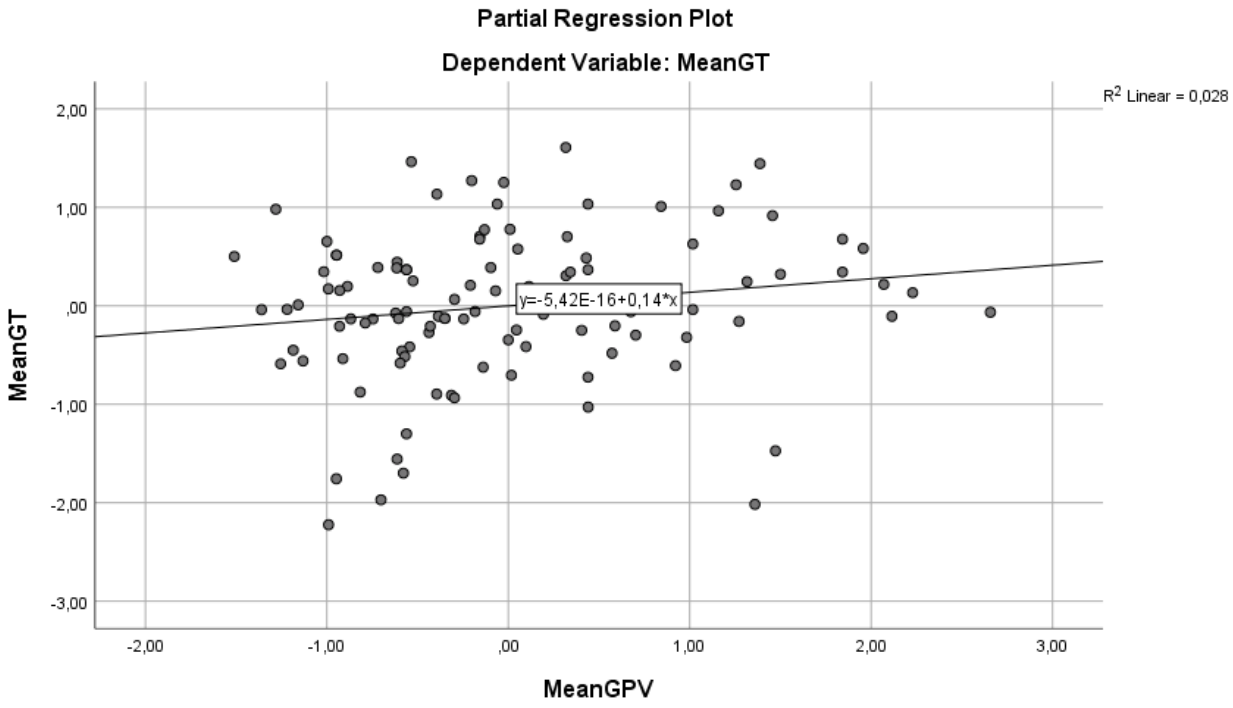
Graph


GroupAG
ShallowAG
DeepAG
ShallowAG
DeepAG
ShallowAG: R2 Linear = 0,040
DeepAG: R2 Linear = 0,235
y=2,35+0,52*x
y=2,62+0,19*x
MeanGT
MeanGPV
5,00
4,00
3,00
2,00
1,00
1,00
2,00
3,00
4,00
5,00

Appendix I: Regression assumptions for hypothesis 1






Partial Regression Plot
Dependent Variable: MeanGT
R² Linear = 0,028
y=-5,42E-16+0,14*x
MeanGT
MeanGPV
2,00
1,00
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-2,00
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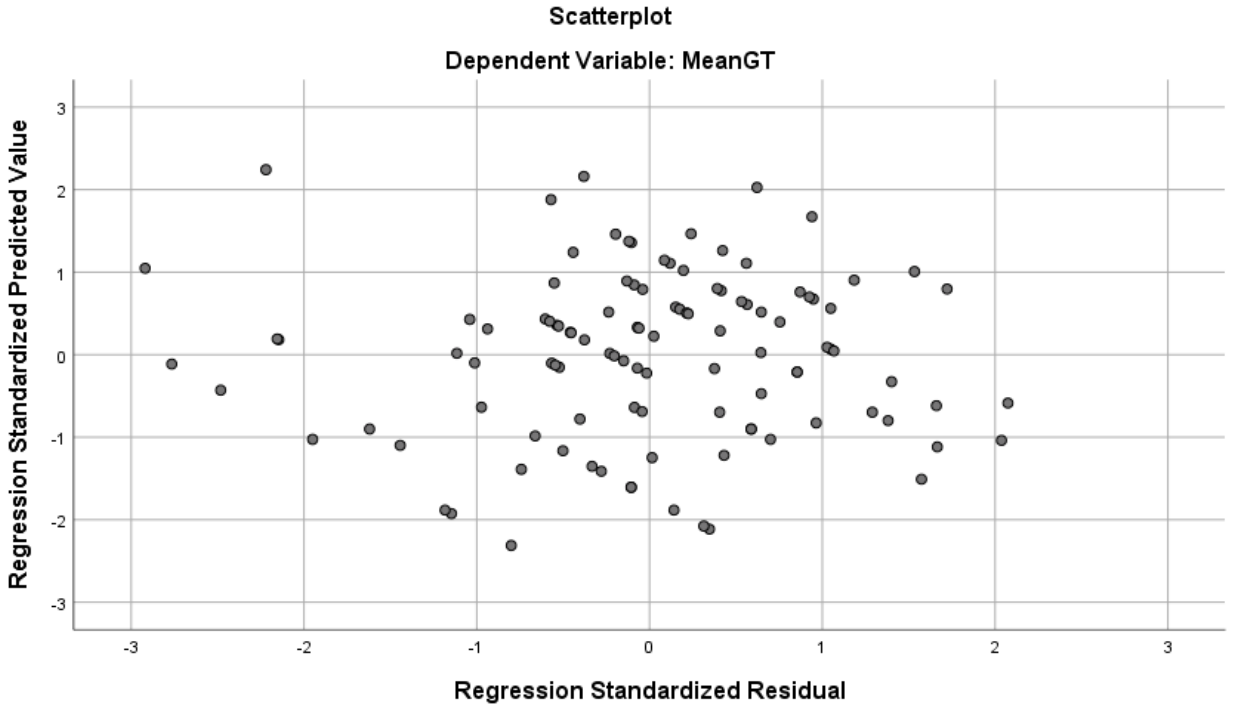
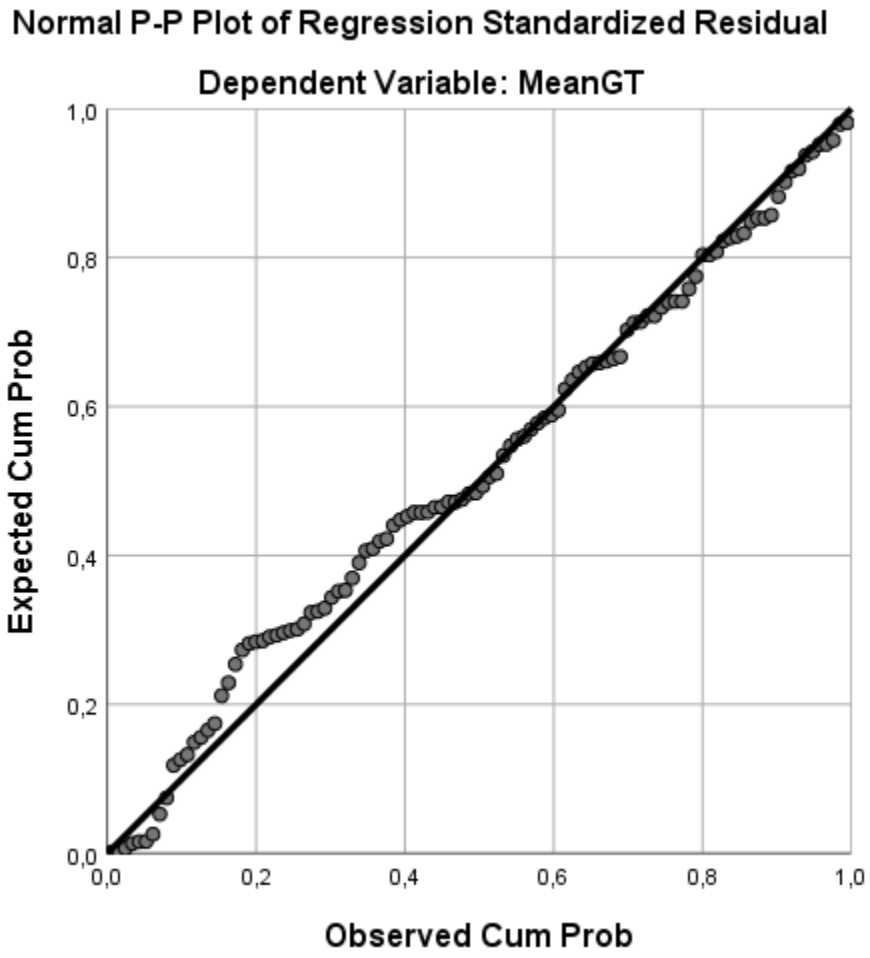
-1,00
,00
1,00
2,00
3,00


Scatterplot
Dependent Variable: MeanGT
Regression Standardized Predicted Value
Regression Standardized Residual
3
2
1
0
-1
-2
-3



Appendix J: Sobel test for testing environmental claim skepticism as mediator between ad greenness and green trust

Input:			Test statistic:	Std. Error:	*p*-value:
a	-0.298	Sobel test:	3.53447346	0.04257777	0.00040859
b	-0.505	Aroian test:	3.50085273	0.04298667	0.00046377
s_a	0.065	Goodman test:	3.56908181	0.04216491	0.00035823
s_b	0.091	Reset all	Calculate		

Appendix K: ANCOVA assumptions for hypothesis 2

Levene's Test of Equality of Error Variances[a]

Dependent Variable: MeanGT

F	df1	df2	Sig.
1,140	3	104	,337

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

a. Design: Intercept + MeanECS + MeanGPV + GroupAG + GroupSD + GroupAG * GroupSD

Correlations

		GroupAG	MeanECS
GroupAG	Pearson Correlation	1	-,146
	Sig. (2-tailed)		,131
	N	108	108
MeanECS	Pearson Correlation	-,146	1
	Sig. (2-tailed)	,131	
	N	108	108

Correlations

		GroupAG	MeanGPV
GroupAG	Pearson Correlation	1	,011
	Sig. (2-tailed)		,906
	N	108	108
MeanGPV	Pearson Correlation	,011	1
	Sig. (2-tailed)	,906	
	N	108	108

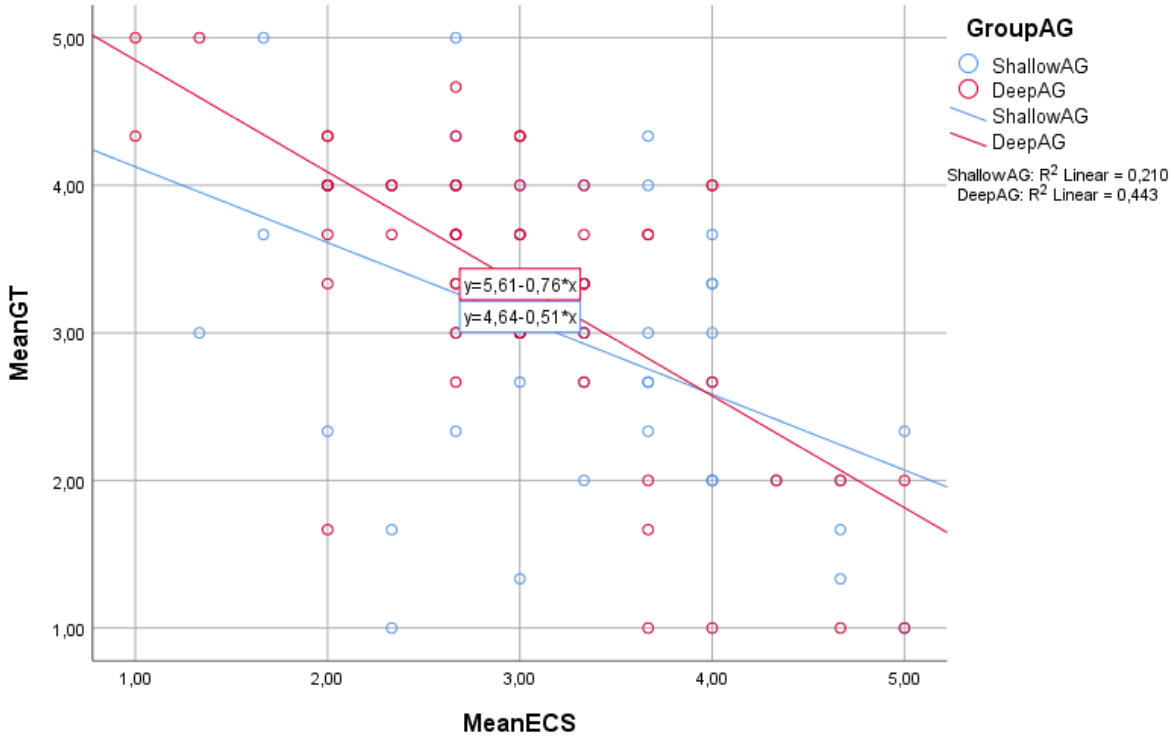
Correlations

		GroupSD	MeanECS
GroupSD	Pearson Correlation	1	,057
	Sig. (2-tailed)		,555
	N	108	108
MeanECS	Pearson Correlation	,057	1
	Sig. (2-tailed)	,555	
	N	108	108

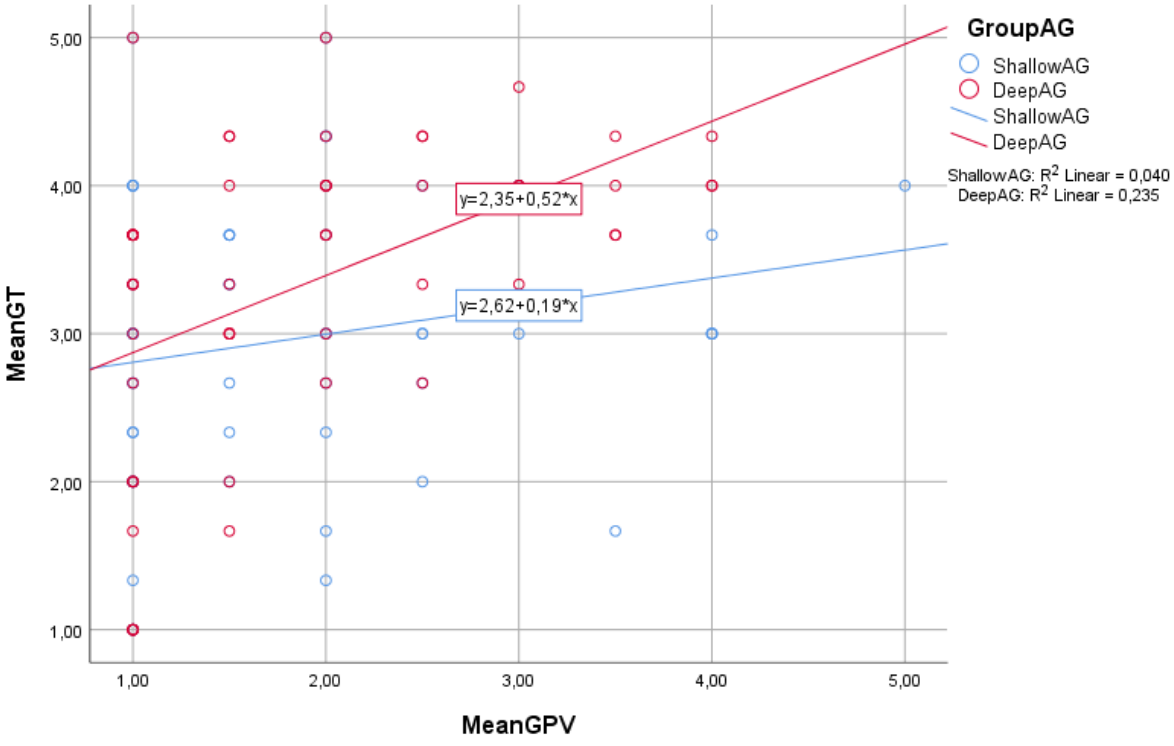
Correlations

		GroupSD	MeanGPV
GroupSD	Pearson Correlation	1	-,103
	Sig. (2-tailed)		,289
	N	108	108
MeanGPV	Pearson Correlation	-,103	1
	Sig. (2-tailed)	,289	
	N	108	108

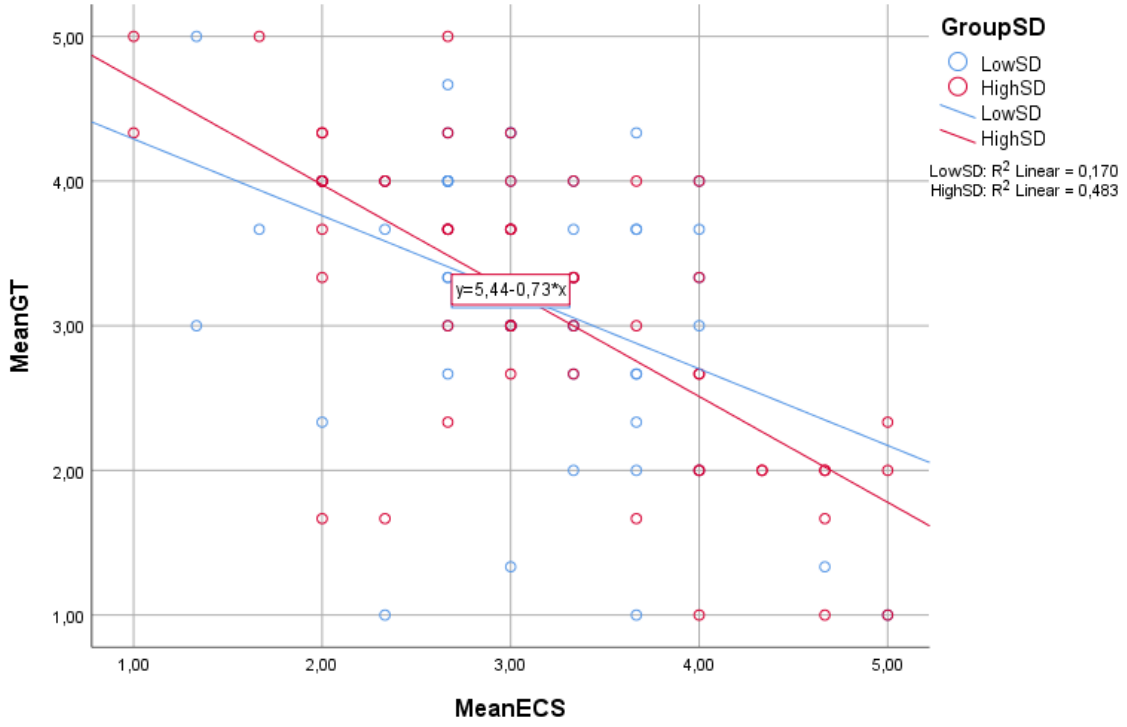
Graph


GroupAG
ShallowAG
DeepAG
ShallowAG
DeepAG
ShallowAG: R2 Linear = 0,210
DeepAG: R2 Linear = 0,443
y=5,61-0,76*x
y=4,64-0,51*x
MeanGT
MeanECS
5,00
4,00
3,00
2,00
1,00
1,00
2,00
3,00
4,00
5,00

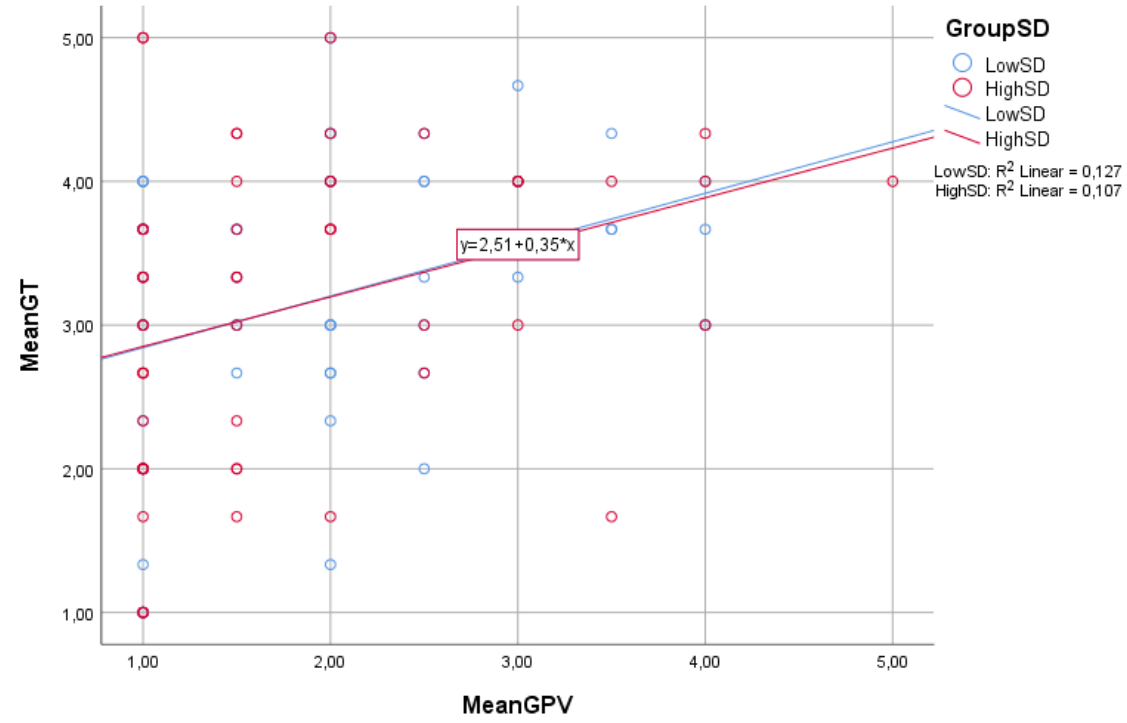
Graph


GroupAG
ShallowAG
DeepAG
ShallowAG
DeepAG
ShallowAG: R2 Linear = 0,040
DeepAG: R2 Linear = 0,235
y=2,35+0,52*x
y=2,62+0,19*x
MeanGT
MeanGPV
5,00
4,00
3,00
2,00
1,00
1,00
2,00
3,00
4,00
5,00

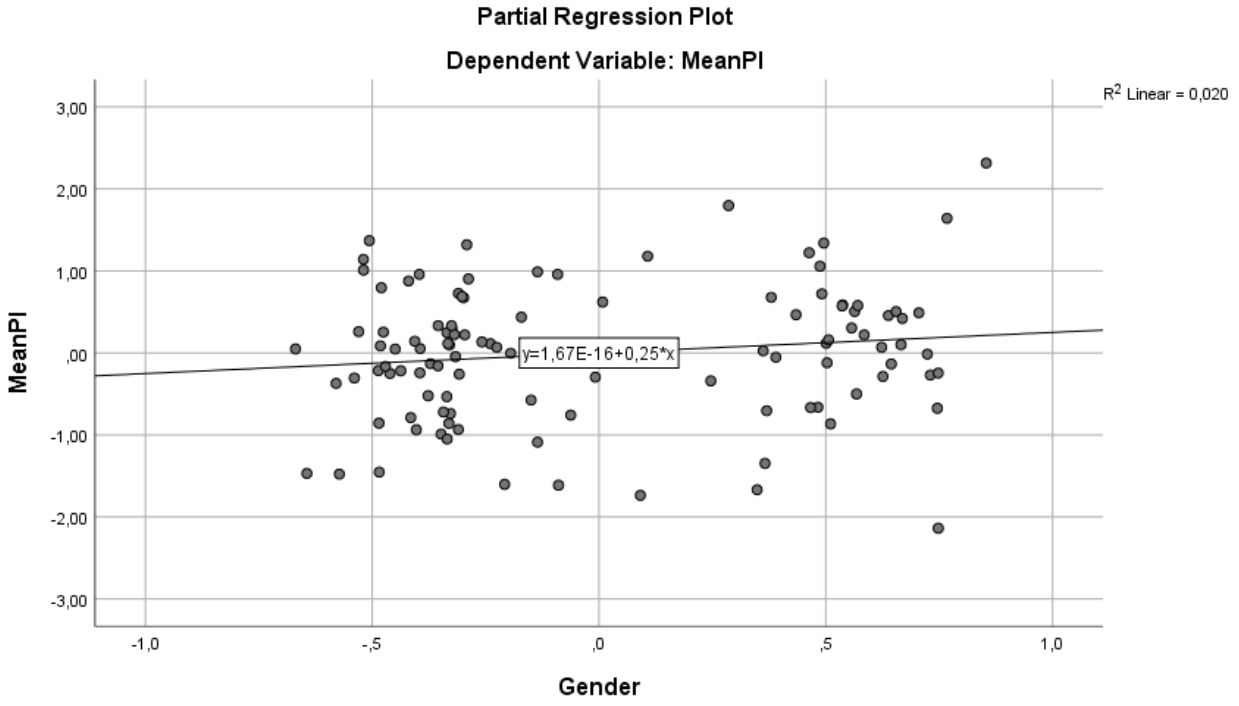
Graph

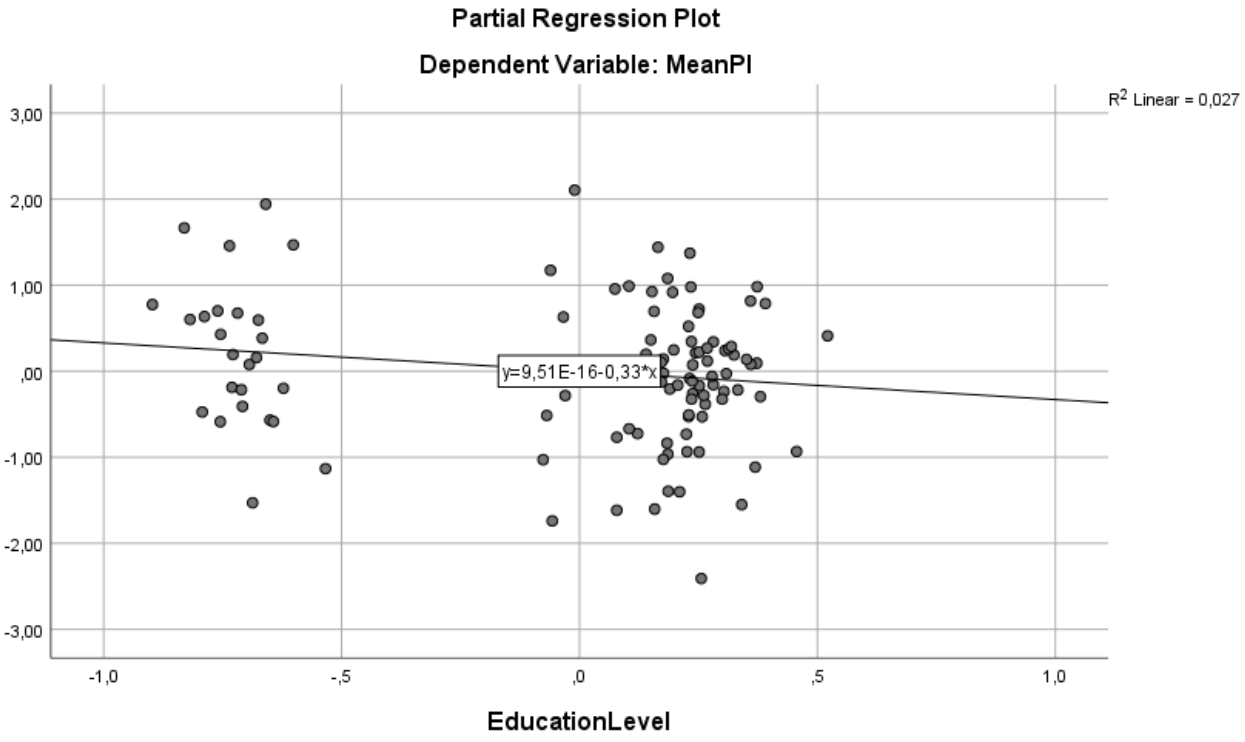

GroupSD
LowSD
HighSD
LowSD
HighSD
LowSD: R2 Linear = 0,170
HighSD: R2 Linear = 0,483
y=5,44-0,73*x
MeanGT
MeanECS
5,00
4,00
3,00
2,00
1,00
1,00
2,00
3,00
4,00
5,00

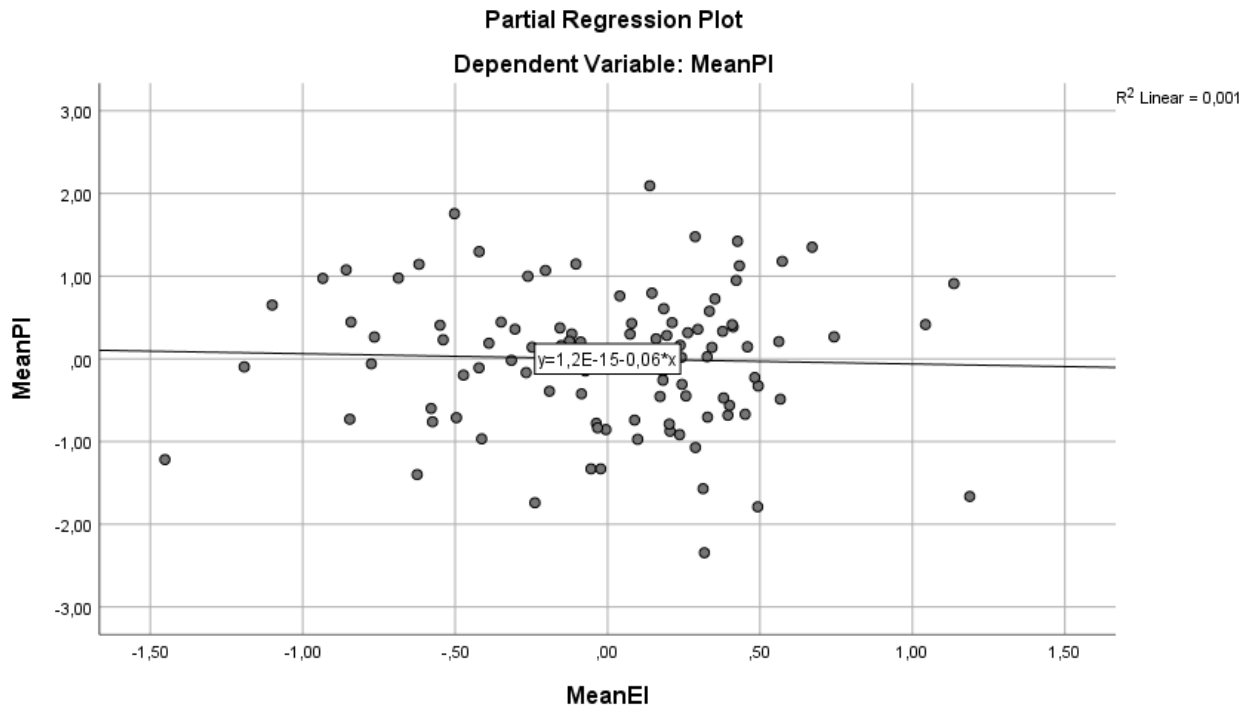
Graph


GroupSD
LowSD
HighSD
LowSD
HighSD
LowSD: R2 Linear = 0,127
HighSD: R2 Linear = 0,107
y=2,51+0,35*x
MeanGT
MeanGPV
5,00
4,00
3,00
2,00
1,00
1,00
2,00
3,00
4,00
5,00

Appendix L: Regression assumptions for hypothesis 3






Partial Regression Plot
Dependent Variable: MeanPI
R2 Linear = 0,001
y=1,2E-15-0,06*x
MeanPI
MeanEI
3,00
2,00
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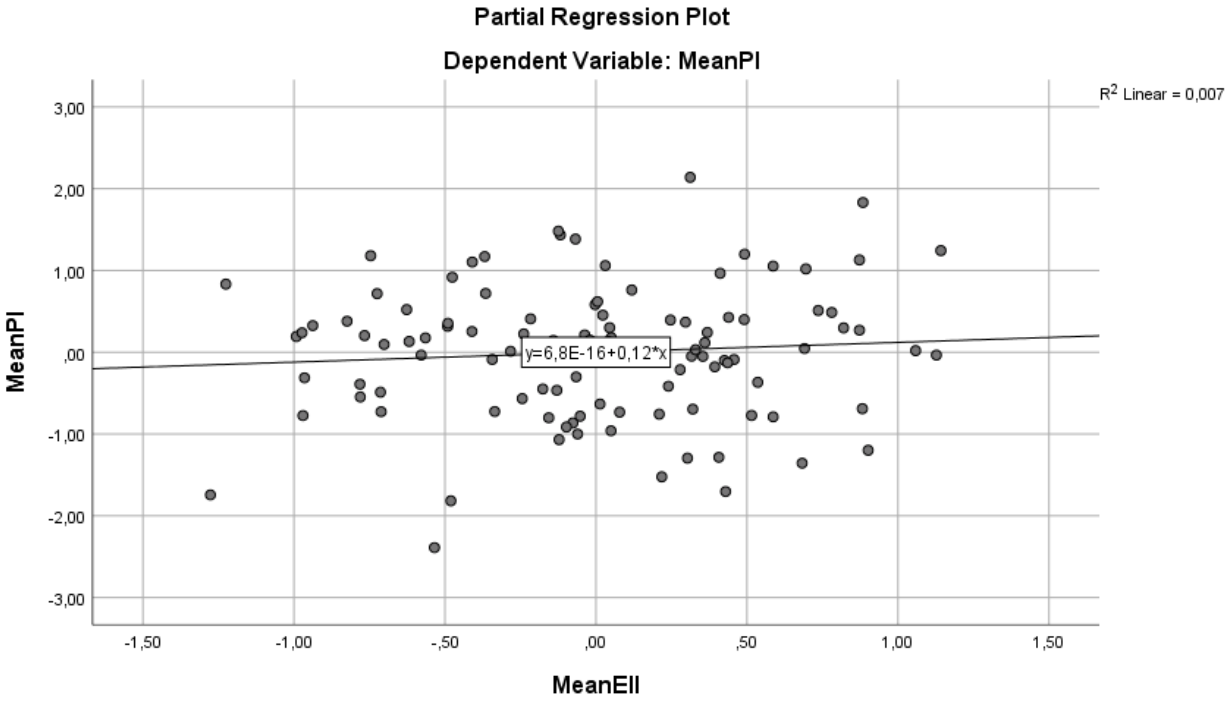
-1,00
-,50
,00
,50
1,00
1,50


Partial Regression Plot
Dependent Variable: MeanPI
R2 Linear = 0,007
y=6,8E-16+0,12*x
MeanPI
MeanEII
3,00
2,00
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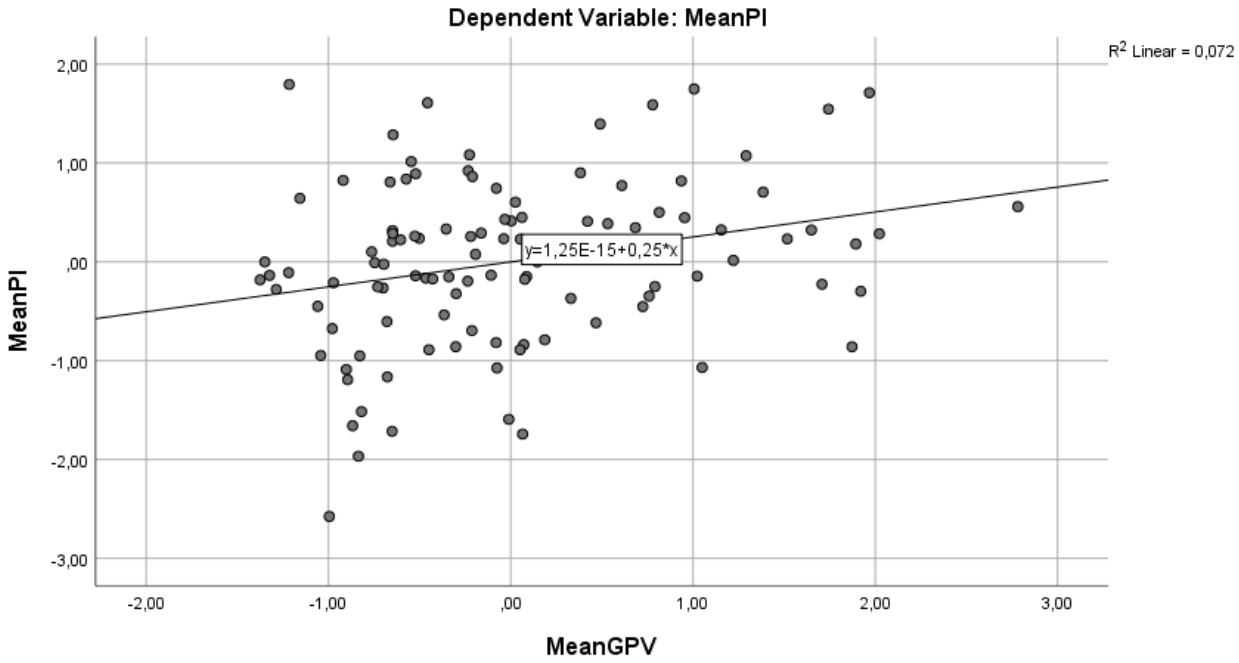
-1,00
-,50
,00
,50
1,00
1,50


Dependent Variable: MeanPI
R² Linear = 0,072
y=1,25E-15+0,25*x
MeanPI
MeanGPV
2,00
1,00
,00
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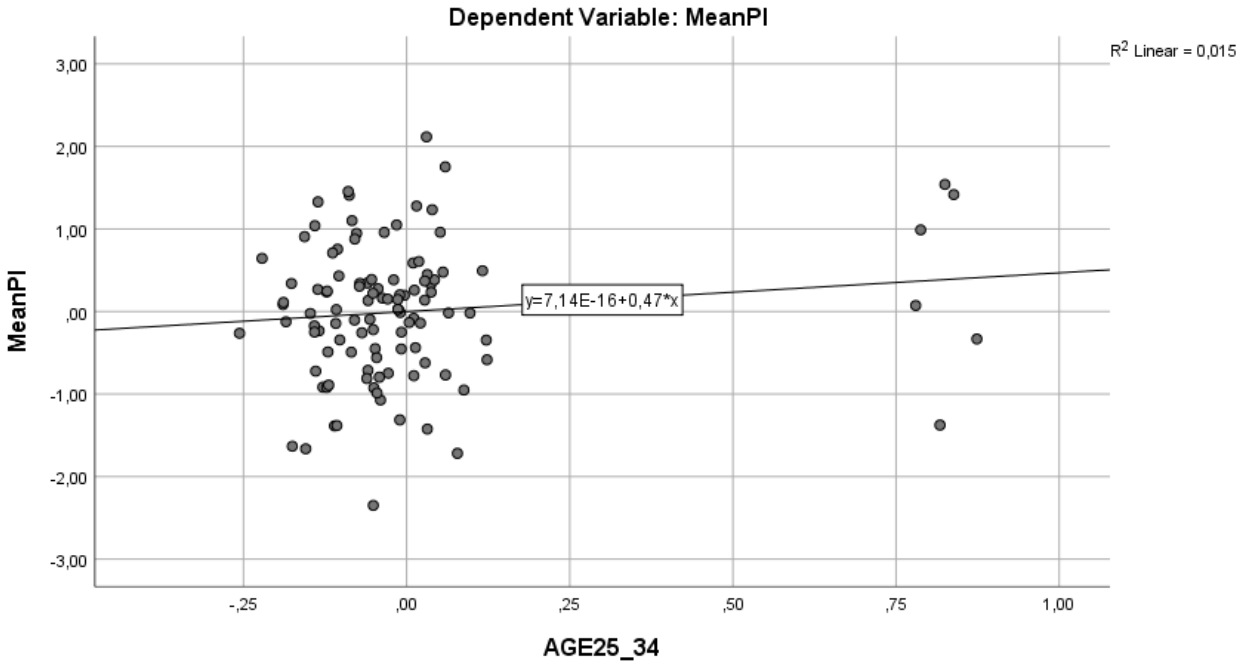
-1,00
,00
1,00
2,00
3,00


Dependent Variable: MeanPI
R² Linear = 0,015
y=7,14E-16+0,47*x
MeanPI
AGE25_34
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2,00
1,00
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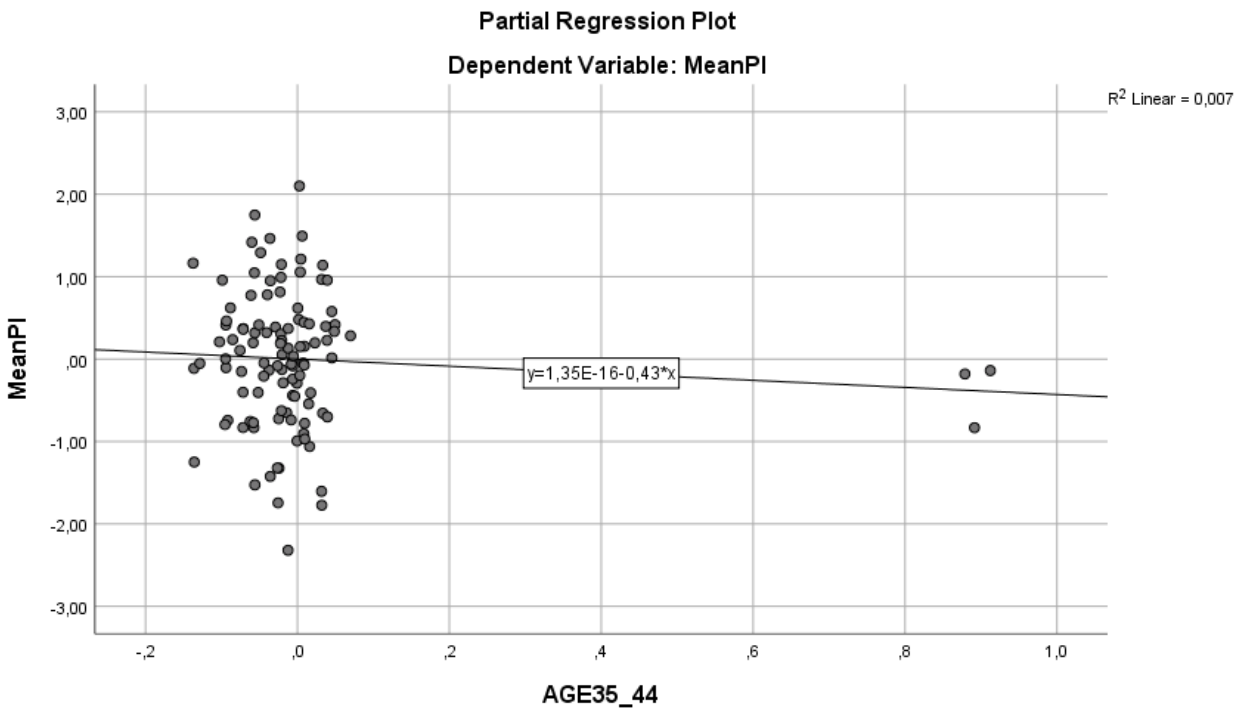
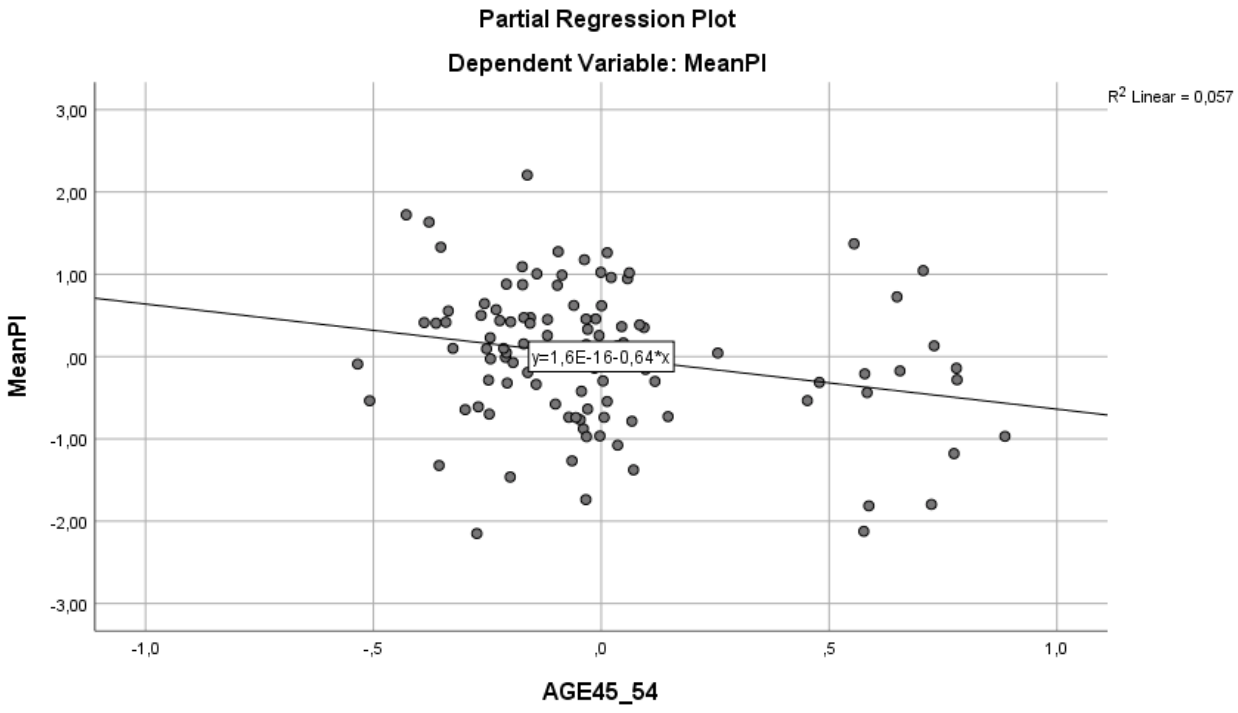
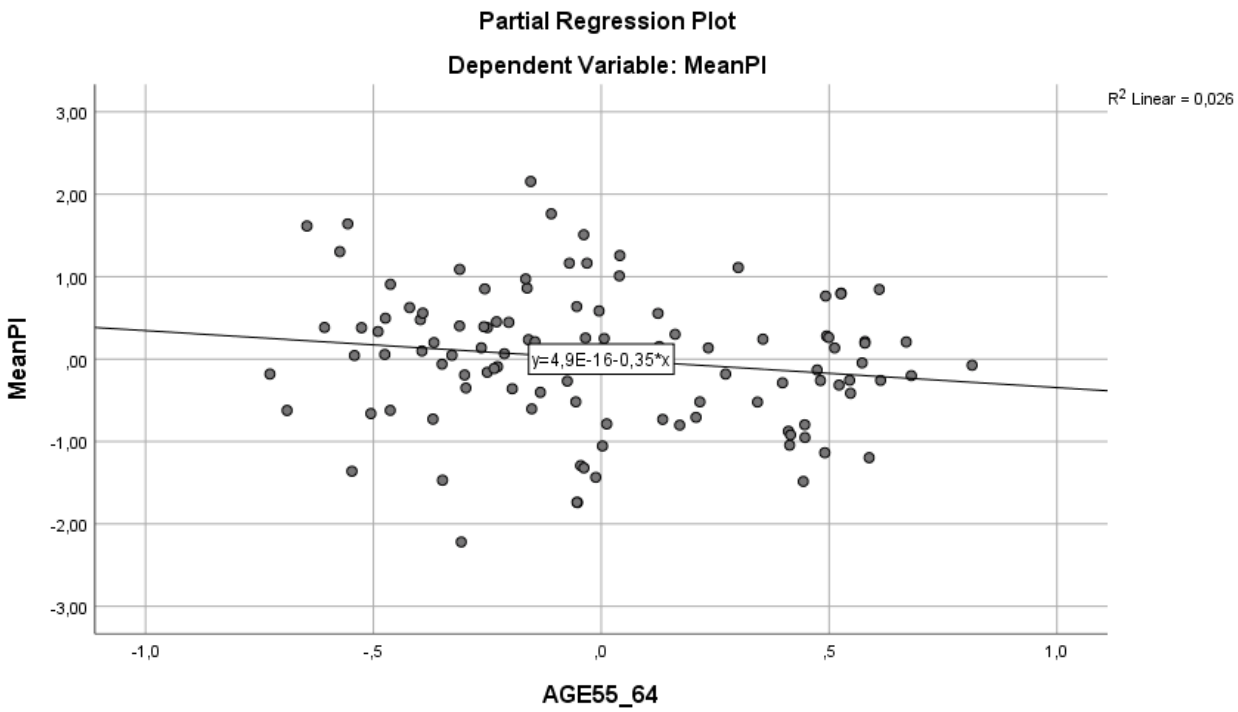
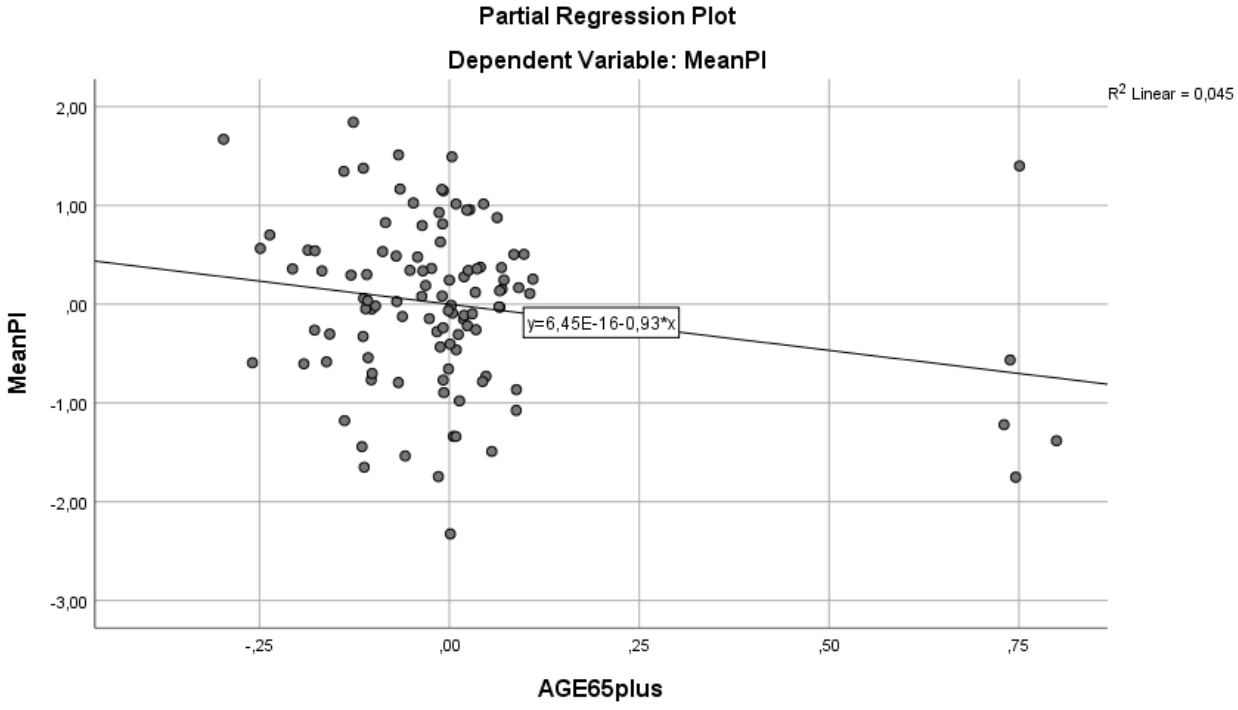
-3,00
-,25
,00
,25
,50
,75
1,00


Partial Regression Plot
Dependent Variable: MeanPI
R2 Linear = 0,007
y=1,35E-16-0,43*x
MeanPI
AGE35_44


Partial Regression Plot
Dependent Variable: MeanPI
R2 Linear = 0,057
y=1,6E-16-0,64*x
MeanPI
AGE45_54


Partial Regression Plot
Dependent Variable: MeanPI
R² Linear = 0,026
y=4,9E-16-0,35*x
MeanPI
AGE55_64
3,00
2,00
1,00
,00
-1,00
-2,00
-3,00
-1,0
-,5
,0
,5
1,0


Partial Regression Plot
Dependent Variable: MeanPI
R² Linear = 0,045
y=6,45E-16-0,93*x
MeanPI
AGE65plus
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1,00
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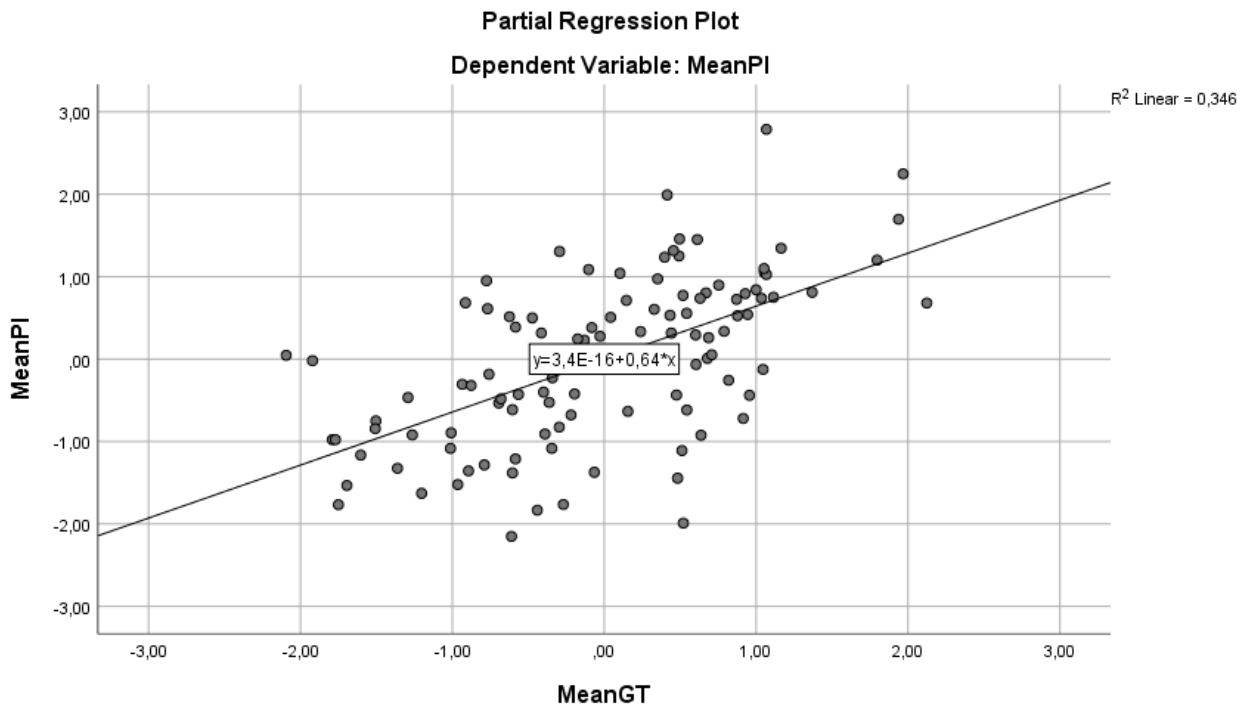
-3,00
-,25
,00
,25
,50
,75


Partial Regression Plot
Dependent Variable: MeanPl
R² Linear = 0,346
y=3,4E-16+0,64*x
MeanPl
MeanGT
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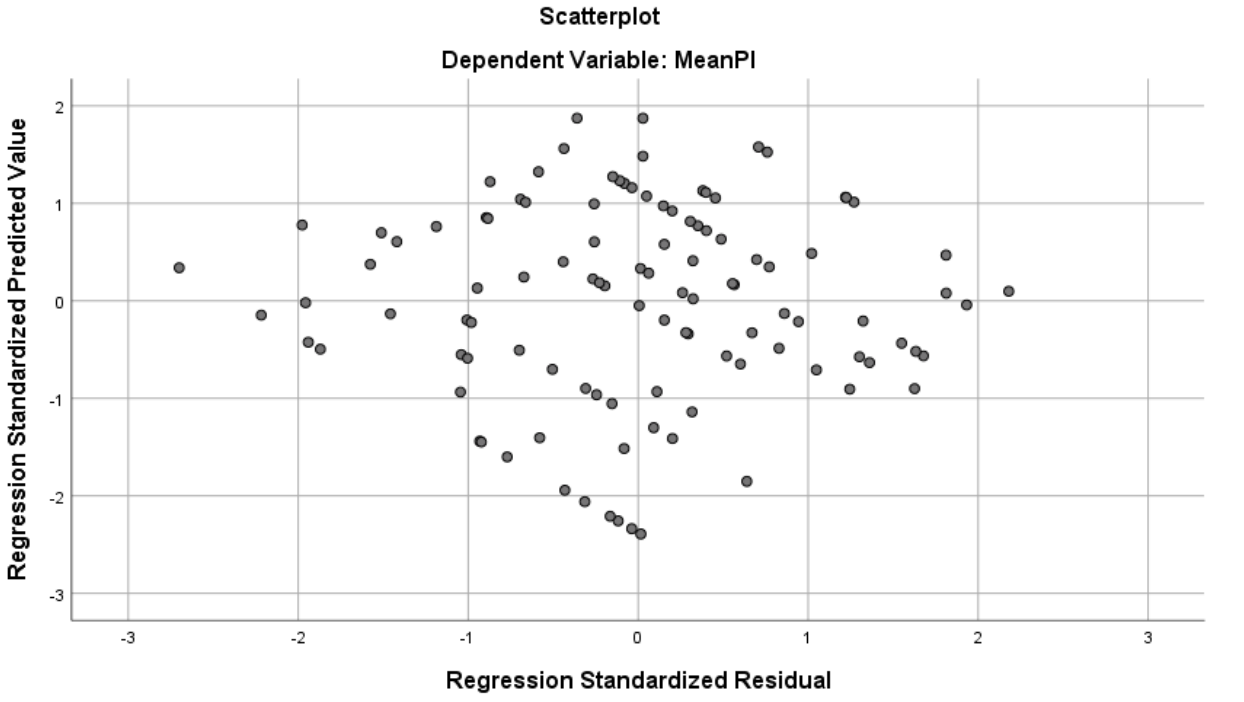
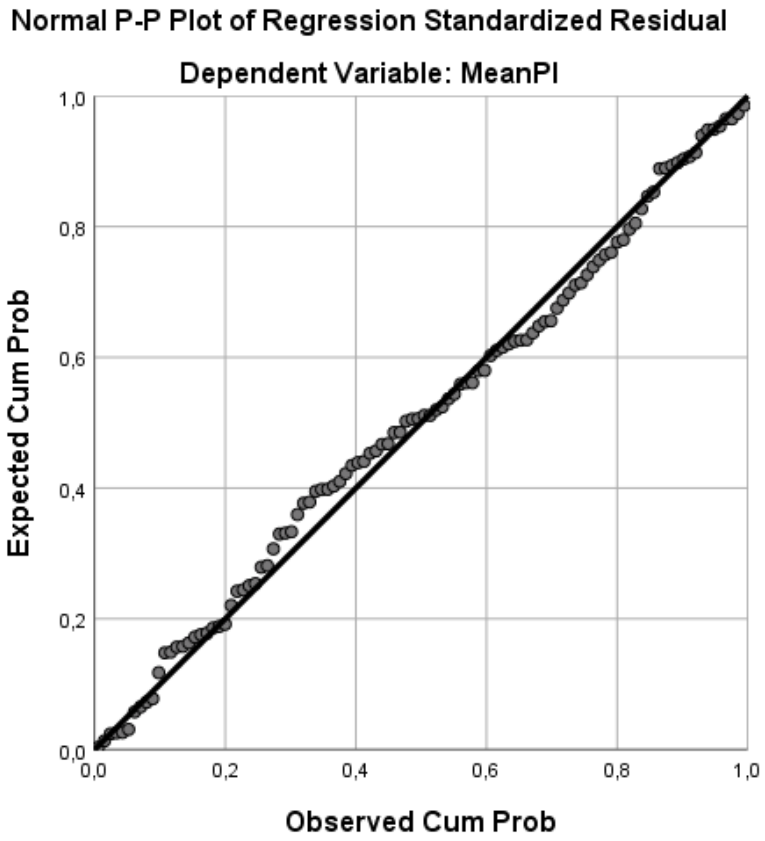
2,00
1,00
,00
-1,00
-2,00
-3,00


Scatterplot
Dependent Variable: MeanPl
Regression Standardized Predicted Value
Regression Standardized Residual
2
1
0
-1
-2
-3


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: MeanPI
Expected Cum Prob
Observed Cum Prob
0,0
0,2
0,4
0,6
0,8
1,0