



Green sells, but how?

Cultural Differences in Sustainable Advertising in Social Commerce

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Abstract

The aim of this master thesis was to scrutinize the field of cross-cultural and green advertising in social commerce among millennials and Generation Z consumers which could potentially contribute to greener consumerism and more sustainability. To examine whether advertisements with a nature appeal could lead to higher purchase intentions than simple branding appeals and whether this differed among two individualistic European cultures with a contrastive economic and environmental status, a 2 x 2 between-subject design was established. A sample of 201 participants was exposed to two types of green advertisement stimuli. Controlling for brand attitude the ANCOVA yielded non-significant results for the type of appeal, the type of culture, and interaction effects. Furthermore, a mediation analysis was conducted in order to investigate the role of consumer attitude and confirmed a full mediated model. The results of this thesis highlight the importance of branding in e-commerce and could indicate the increasing assimilation of European cultures towards a more homogeneous consumer behaviour and individualistic society. In addition, the link between an advertisement appeal, consumer's attitude and purchase intention could be confirmed in the context of social commerce. Nevertheless, the outcomes might be limited due to a missing cross-cultural approach for the mediation and an uncontrolled manipulation which could be addressed in future research, as well as experiencing nature in online advertisements.

Keywords: green advertising, nature appeals, branding, social commerce, cross-cultural persuasion, consumer attitudes, cultural dimensions, individualism

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Cultural Differences in Sustainable Advertising in Social Commerce

The first two decades of the 21st century have confronted the world with rapid change and development in the fields of climate change, globalisation, and digitalisation. The consumer groups most relevant for advertising researchers and brands in 2020 are millennials (born between 1980 and 1995) and Generation Z (born between 1995 and 2010), who are both building the largest groups amongst online consumers and who are used to fast delivery, ethical consumption, and increased spending power (see, e.g., Bilgihan, 2016; Bucic et al., 2012; Kapusy & Lógó, 2017; UPS, 2016). To understand the processes of visual persuasion of these two generations brands and advertising researchers are in need of understanding and combining the three issues of climate change, globalisation, and digitalisation in order to successfully persuade consumers online to evoke pro-environmental behaviour. This would potentially contribute to a more sustainable future, consumerism, and successful environmental campaigns.

For several years already climate change has been considered a serious threat to humans, animals, and future generations (WWF, 2020). There are different approaches to tackle it, for example by laws, regulations, and a change in human behaviour. Treaties like the “Paris Agreement”, signed in 2016, were implemented and countries committed themselves to adhere to these guidelines in order to limit CO² emissions and the increase of global temperature to a maximum of 1.5 °C (UNFCCC, 2016). Nevertheless, regulations and agreements have not yet seemed to be effective in fighting climate change, as the Paris treaty failed to reduce absolute global emissions relative to 2015 (Liu et al., 2020). This raises the question of other possible solutions or aids.

This is the reason for considering the market economy and its marketing options in creating a demand for sustainable products, as well as designing efficient environmental campaigns. Consumer self-reports revealed a trend in awareness and demand for “green”

products and the human brain signals positive feelings by looking at green advertisements (Vezech et al., 2017). This emphasises the awareness of consumers with regard to green goods and the psychological benefits. Furthermore, it raises the question of how advertisers and communication researchers could best persuade audiences towards more sustainability. To meet this demand, advertisers have been trying to integrate nature aspects into the design process of persuasive advertisements or environmental campaigns (Leonidou et al., 2011). Besides the visual aspect, other factors need to be considered.

In order to understand cross-cultural persuasion in a globalised world, brands and communication researchers these days need to reach and examine an audience from all around the world and most crucially, from different cultures. While researchers need to be aware of cultural differences when observing psychological processes in persuasion to create efficient campaigns, brands need to know how to reach these individual customer types and create a strong and sustainable brand. For instance, they might want to expand their business activities to emerging markets and promote their innovative sustainable products to a global mass audience. There is strong evidence that different cultures respond to advertisements differently, which is well documented in Hofstede's cultural dimensions and advertising research (de Mooij & Hofstede, 2010; Paul, 2019).

Following the differences in the cultural dimensions and different environmental and economic situations, this thesis compares the two cultures of Poland and the Netherlands in their purchase intentions for different green advertising appeals. Their cultural differences occur across Hofstede's (2020) six cultural dimensions: power distance, uncertainty avoidance, individualism, long-term orientation, masculinity, and indulgence. While Poland is considered high on power distance, high on uncertainty avoidance, short-term oriented, masculine, and a low indulgence culture, the Netherlands scores on the lower end in these categories (Hofstede, 2020). The Netherlands is considered an individualistic country, whilst for Poland, the issue seems to be slightly more complex and contradictory. Even though

Poland is considered to be an individualistic society, elements like hierarchy, structure, and tradition are still prevalent in Polish culture (Hofstede, 2020). This makes Polish culture an interesting case to study and to compare with a more individualistic culture like the Netherlands. This thesis could investigate whether this sense of traditional and hierarchical thinking still makes a difference in the evaluation process of advertising content.

Additionally, Polish consumers are interesting to investigate in terms of green advertising because the country itself does not seem to have climate change high on its agenda. The reigning party PiS, for example, has a government support program for replacing old heating systems which has only fulfilled 3% of its mandate, and the government is maintaining close ties with the coal industry (Barbiroglio, 2020; Schwartzkopff & Schulz, 2017). A total of four out of the biggest coal plants in Europe are located in Poland, with coal still being the main resource of energy for heating and power generation (Holnicki et al., 2017). Greenhouse gas emissions, especially for traffic are well above the average of the EU27 and a lot higher than in the Netherlands (EEA, 2018). Additionally, Polish citizens have the highest exposure to urban air pollution among all European countries and with approximately 2800 deaths per year air pollution becomes a burden for people's health (Holnicki et al., 2017). As people are increasingly living in urban areas (Estevez et al., 2016) this is particularly a concern for bigger cities and emphasized by the fact that there are 12 Polish cities among the top 50 most polluted cities in Europe (Holnicki et al., 2017; IQAir, 2019). Furthermore, the growing Polish market could be of interest to brands regarding future investments and advertising. According to Global Finance Magazine (2020), Poland is one of the most trending emerging markets in the world with a forecast of tremendous growth. This justifies the need to understand the best practice to persuade Polish consumers online who might show a growing demand for green products in a country with a poor environmental status.

In contrast, Dutch culture seems to stand in opposition to Polish culture on a number of economic and environmental points and Dutch consumers are thus, a plausible research target for this comparison. The Netherlands' environmental and economic situation can be both considered acceptable and stable. There is only one Dutch city in the top 50 of most polluted cities in Europe and air pollution is not as problematic as in Poland (IQAir, 2019). The Netherlands has proven to be a dynamic environment in terms of low-carbon energy transformation (van der Loos, 2020) and societal acceptance of sustainability is generally high (Akerboom, 2020). In addition, being ranked the 14th richest country in the world (Poland is 46th) illustrates its economic wealth and stability (IMF, 2019). Even though the country has been affected by the coronavirus crisis, it is expected that governmental and fiscal support is high and will help the country to recover quickly (IMF, 2019). Opposed to Poland, it can be inferred that government support for environmental issues is high (Kamperman & Biesbroek, 2017) and the economic situation is solid. Though, the current pandemic might have an impact on shaping this economy as well.

Due to the coronavirus outbreak, a trend of sharply growing revenues in e-commerce could be observed (Adobe Analytics, 2020) and purchases made on a smartphone have almost doubled across Europe from 2015 to 2018 (UPS, 2018). This highlights the relevance of focusing on e-commerce in this study. Above all, social commerce, which evolved out of traditional e-commerce and the use of social media, is becoming increasingly relevant for selling consumer products online (Alalwan et al., 2017) and Instagram is the current number one platform among advertisers (Stelzner, 2020). Instagram stories in specific, a feature launched in 2016, should be considered as an effective targeting option for brands and campaigns, as it gained significant and salient popularity among millennials and Generation Z, who seem to be most loyal to this kind of advertising (Belanche et al., 2019). Hence, Instagram stories, and their peer effects concerning purchase intentions (Copeland & Zhao, 2020), seems to be a reasonable vehicle for researching green advertising among young

consumers. Advertising on the platform could potentially contribute to more sustainable consumerism, especially in countries with problematic environmental situations.

Poland's transition away from the main energy resource coal and towards a better environmental position will be a long and slow process (Barbiroglio, 2020), so persuading Polish consumers to buy sustainable products or by environmental online campaigns would be more feasible in the short-term and could contribute to a greener society in general. Even though this might not completely improve Poland's environmental position, it could potentially fuel ambitions for greater change. A shift towards more concern for environmental struggles and air pollution, especially among young people is already being observed (Barbiroglio, 2020; Schwartzkopff & Schulz, 2017). It would be interesting to observe how environmental campaigns or green advertisements could contribute to this change.

Considering the research about advertising on Instagram stories and green marketing, there still seems to be a lack of exploring what visual design features contribute to an appealing and persuasive advertisement of sustainable consumer products online. This thesis investigates cross-cultural persuasion in social commerce, particularly whether a green advertisement appeal with displaying nature, compared to solely focusing on the brand, could be beneficial for the visual persuasion of advertisements. A further consideration takes into account cultural differences using the framework of Hofstede which can be linked to advertising research (de Mooij & Hofstede, 2019). Therefore, it will be compared how two individualistic European cultures with different cultural factors and economic and environmental situations vary in the evaluation of green advertisements. This leads to the following research questions:

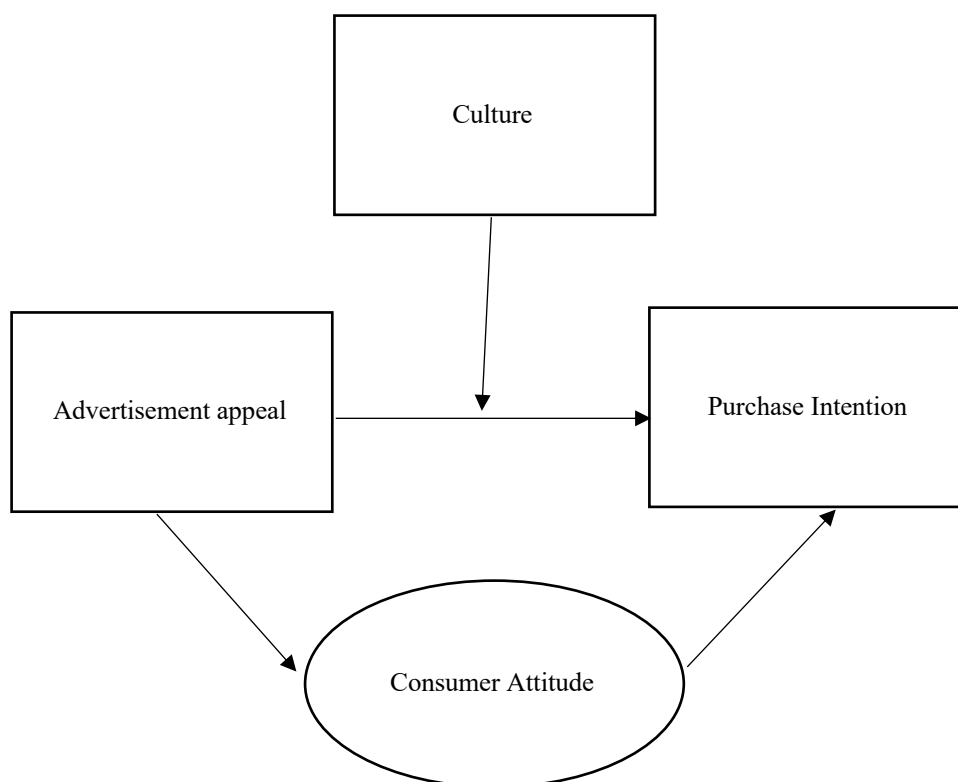
RQ₁: To what extent do advertisements of sustainable consumer products with a 'nature' appeal lead to more positive attitudes and purchase intentions among potential online customers on Instagram?

RQ₂: Are sustainable advertising appeals perceived differently by cultures with varying levels of individualism like the Netherlands and Poland?

This master thesis aims to answer these research questions illustrated in the conceptual model in Figure 1. It will base its theoretical research approach on linking consumer behaviour, green advertising, and cross-cultural research together to examine cross-cultural persuasion in social e-commerce.

Figure 1

Conceptual Model with Moderation and Mediation Effects



Theoretical Framework

Green advertisement appeals are designed to persuade consumers to buy products that are supposedly less harmful to the environment (Schuhwerk & Lefkoff-Hagius, 1995). Since the beginning of the 21st century, a sharp rise in international green advertisements has been detected and global brands are continuously striving to develop a green image and focus more on environmental marketing with consumer goods (Leonidou et al., 2011). This suggests that

consumer interests are less focused solely on the products but on how and where products are sourced.

Furthermore, the importance of systematically planning and adopting green advertising and campaigns in a proactive way is stressed by Leonidou et al. (2011), as well as explicit and understandable information in order to gain trust and credibility. In addition, visual factors like branding are essential for creating trust and loyalty among millennial consumers online (Biglihan, 2016). These factors seem to be crucial for successful advertisements, although they should be accompanied by a global and culture-focused approach in order to meet the demands of a diverse and international consumer group.

Following this, it seems to be self-evident that brands and advertising researchers need to understand how to make advertisements of sustainable products or environmental campaigns more appealing across different cultures in order to gain a competitive advantage or a positive campaign outcome (Leonidou et al., 2011). A universal advertising focus could produce misinterpretations and the feeling of missing out on cultural identity which could be harmful to a brand (Broderick et al., 2011). Therefore, diverse marketing strategies are favourable in terms of positive consumer attitudes and campaign outcomes (Epps & Demangeot, 2013). The effectiveness of cross-cultural green marketing campaigns can be investigated with several psychological and cultural determinants like, for instance, power distance, uncertainty avoidance, and individualism.

Green Advertisement Appeals

Green advertisement appeals can have a strong influence on attitudes and purchase intentions. There is substantial evidence that particularly visual content in advertisements is capable of increasing positive attitudes towards a product (Rossiter & Percy, 1980). Research has determined a strong link between an ad-appeal and purchase intention and inherently different kinds of appeals have different effects on green purchase intentions (Tih et al., 2016). For this reason, it would be beneficial for companies and governments to know how to

best create visual content online, personalized for various cultures, to persuade millennials and Generation Z consumers to more sustainable consumerism and pro-environmental behaviour.

To understand persuasion in the context of sustainability it is essential to find out which advertising appeals could lead to efficient persuasion. The consumer psychology and green advertising literature have examined two different types of appeals advertisers can use other-benefit-appeals and self-benefit appeals. While other-benefit appeals are connected to altruism and caring about society as a whole, self-benefit appeals highlight specific product features, individual well-being, and self-actualisation (Fisher et al., 2008; Ryoo et al., 2020). Elaborating on this, an example for other-benefit appeals could be the use of nature in an advertisement, such as natural elements like forests, mountains, or rivers (Hartmann et al., 2013). In contrast, self-benefit appeals could simply focus on the brand, features, and status (Griskevicius et al., 2010). These elements could have different psychological effects on the perception of visual content.

The green advertising literature highlights different psychological benefits derived from evaluating advertising content and that could have a potential influence on behavioural intentions: self-expressive benefits and nature experiences¹ (Hartmann & Apaolaza-Ibáñez, 2012). While self-expressive benefits elicit self-enhancement and status through buying eco-friendly products and signify the role of brands (Aaker, 1999), nature experiences can be stimulated by natural representations in advertisements (Hartmann & Apaolaza-Ibáñez, 2012). These psychological benefits could have consequences for consumer behaviour, attitudes, and purchase intentions and therefore, need to be considered when designing a green advertisement in order to evoke favourable consumer attitudes.

¹ Nature experiences can evoke the feeling of being in nature through seeing natural scenery in brand advertisements (Hartmann & Apaolaza-Ibáñez, 2012).

The moral foundations theory from Haidt and Joseph (2004) could help in explaining why these different psychological benefits could lead to different evaluations. The theory addresses the idea of evolutionary inherited and learned functions of morality with a significant cultural variation. Different cultures develop different moral systems of hierarchy, beliefs, feelings, and intuitions, which lead to different cognitive processing of social information, and people process visual content intuitively with inherited knowledge and heuristics (Haidt & Joseph, 2004). Applied to advertising research, intuition and heuristics could affect how different kinds of visual advertisement appeals are processed and evaluated, which varies across cultures.

By combining the two types of appeals with the psychological benefits of potential advertising design, the importance of comparing other-benefit appeals focused on a healthy society, altruism, and nature (Griskevicius et al., 2010; Kahn, 2001), and self-benefit appeals, targeting self-actualisation and branding (Griskevicius et al., 2010; Tybout & Carpenter, 2012) becomes reasonable. Thus, it is evident that there are a variety of variables interacting with each other, and companies and communication researchers need to compare and contrast these variables when making choices in regard to advertising and campaigns. This is why this thesis scrutinizes the other-benefit appeal represented by a nature appeal and the self-benefit appeal represented by a branding appeal and applies previous research to the new social commerce environment which uses multimedia content.

Studies have shown explicitly that pictures or videos of nature can simulate nature and lead to similar emotional responses like actually experiencing it (Hull & Stewart, 1992; Kaplan & Kaplan, 1989; Nassauer, 1982). Furthermore, advertisements containing nature imagery can elicit positive reactions leading to more positive attitudes toward the displayed product or brand and thereupon to higher purchase intentions (Batra & Ray, 1986; Edell & Burke, 1987). A link between natural imagery and purchase intentions, mediated by consumer attitude was noted by Hartmann and Apaolaza-Ibáñez (2012). They compared green

advertisements of energy brands and found that nature experience appeals had the most powerful influence on consumers' attitudes toward a brand. This supports the strong influence pictures of nature can have on forming positive attitudes and in evaluating advertising content.

Another consideration regarding natural imagery is the depicted colour green, which is generally described as a happy colour and is likely to elicit positive attitudes towards an advertisement and purchase intentions in green marketing (Cimbalo et al., 1978; Lim et al., 2020). Colour evidently has an influence on purchase decisions in e-commerce and especially green can elicit positive attitudes and purchase intentions when it is not used for "greenwashing" a brand's image (Broeder & Scherp, 2018; Lim et al., 2020). Because of this, it is expected that an advertisement with a nature appeal and green colours would elicit higher attitudes towards the advertisement and in turn, higher purchase intentions.

Moreover, Griskevicius et al. (2010) showed that motives of status and self-enhancement can lead consumers to preferably buy sustainable products instead of non-green products. In this case, the self-expressive benefits arise through doing something good for the environment (Hartmann & Apaolaza-Ibáñez, 2012). Though, in terms of consumer behaviour, status motives and self-expressive benefits require social visibility. That means there needs to be an opportunity to express the status and self-actualisation by showing environmental concern in public (Griskevicius et al. 2010; Hartmann & Apaolaza-Ibáñez, 2012). This point is supported by Green and Peloza (2014) and could explain the results of Hartmann & Apaolaza-Ibáñez (2012). As mentioned before, they found a significant relationship between nature experiences and other-benefit appeals with purchase intentions but not for self-expressive branding appeals. As their research focused on the energy industry, no social visibility effects occurred (Hartmann & Apaolaza-Ibáñez, 2012) and this is why this thesis uses the social commerce environment to investigate potential self-expressive benefits.

In general, it seems to be evident that other-benefit appeals, represented by the nature imagery, do have a larger effect on green purchase intentions (Tih et al., 2016). Therefore, this thesis tries to extend the findings of previous research (Hartmann & Apaolaza-Ibáñez, 2012; Tih et al. 2016) by scrutinizing the effects of these different appeals in the context of sustainable consumer goods that ensure social visibility through social commerce, and by considering Hofstede's dimensions for two European cultures that are similar regarding individualism. Following the previous examined strong link between the type of ad-appeal and purchase intentions, the dominance of other-benefit appeals over self-benefit appeals in green advertising, and the power of nature imagery the thesis proposes:

H₁: Online consumers will yield higher purchase intentions for sustainable consumer products with a 'nature' appeal than with a branding appeal.

The Impact of Culture

By investigating advertisements of sustainable products online it is appealing to compare millennials and Generation Z consumers of two European cultures who show different cultural and environmental characteristics. Millennials and Generation Z around the globe are a noticeably diverse consumer group (Licsandru & Cui, 2019), which highlights the importance of focusing on cultural traits and distinct levels of individualism when addressing them. As mentioned before, Poland and the Netherlands are ample examples and can be compared with several cultural frameworks and dimensions.

This academic work uses Hofstede's (2020) dimensions and the individualism/collectivism measure (IDV-COLL) from Minkov et al. (2017) in order to explain possible discrepancies between the two cultures. Hofstede's cultural dimensions were criticised by research and more accurate cultural frameworks were tried to be created (Fischer et al., 2010; Vignoles et al., 2016). The framework is nevertheless valuable due to its simplicity and straightforwardness, which can be beneficial and easy to access for communication researchers (de Mooij & Hofstede, 2019). Furthermore, Magnusson et al.

(2008) state that other cultural frameworks only show minor improvements and were not established to analyse consumer behaviour or advertising research (de Mooij & Hofstede, 2010).

With regards to Hofstede's (2020) cultural dimensions and the more recent IDV-COLL index from Minkov et al. (2017), there are three dimensions that are crucial to the persuasion of advertising appeals: power distance, uncertainty avoidance, and individualism (Minkov et al., 2017). Power distance addresses the population's attitude towards inequalities and uncertainty avoidance expresses how a society deals with unknown situations and future events (Hofstede, 2020). Individualism is concerned with the interdependence among members of a society and whether people define themselves as "I" or "We" (Hofstede, 2020). These characteristics result from different mental and social processes which are culturally inherited and lead to distinct types of information processing, motivation, emotion and thinking style (de Mooij & Hofstede, 2010). These could result in different reactions to advertisement appeals (de Mooij & Hofstede, 2010). Hence, this thesis focuses on examining potential variation in the evaluation of advertisement appeals among the two cultures and takes into consideration the cultural dimensions and characteristics of Hofstede (2020) and the individualism scale of Minkov et al. (2017).

Polish Societal Culture. Supported by the literature, Polish societal culture has been described as high on uncertainty avoidance, high on power distance, and individualistic (de Mooij & Hofstede, 2010, Minkov et al., 2017). Yet, this individualism is challenged by traditional, religious and hierarchical values, and is significantly lower than in the Dutch societal culture. As uncertainty avoidance is high, Polish people might be less open to innovative products, less open to change, and more prone towards security (de Mooij & Hofstede, 2010). Regarding consumer behaviour, this leads to consequences for the adoption of new products and radical innovation (Steenkamp et al., 1999). This could affect the

evaluation of innovative green advertising content and the level of individualism needs to be discussed further.

Polish society is described as an individualistic culture but it scores significantly lower in individualism than the Netherlands (Minkov et al., 2017). Less individualistic cultures show not such a strong relationship between having a certain attitude (e.g., a green lifestyle) and future behaviour like a purchase intention (de Mooij & Hofstede, 2010). Occasionally, a reverse relationship is possible, where consumers would first have to use a product and then form an attitude (Chang & Chieng, 2006). These consumers can be characterized by a less conceptual thinking style, which makes it less likely to be persuaded by abstract green advertisements and more likely by actual product features (de Mooij & Hofstede, 2010). Decisions for the buying process are usually based on trust in the company and through word-of-mouth (de Mooij & Hofstede, 2010). Hence, seeing innovative green advertisements online by possibly unknown brands might not increase people's purchase intentions, while product-centred advertisements of known brands might do. To support this claim, other dimensions need to be inspected.

Next to the three introduced essential dimensions for advertising research, other dimensions could help in explaining potential discrepancies in the evaluation of ad-appeals among different cultures. According to Hofstede, (2020) the dimension masculinity can be described by competition, achievement, success, and self-enhancement. In less individualistic cultures there seems to be a need to express masculinity, which in turn leads to the promotion of self-esteem and self-actualisation. Combining this with high uncertainty avoidance and high power distance, the importance of branding as a major role in advertisement and (social) e-commerce could become evident. This is backed up by the literature, concluding that Polish consumers are in favour of branding and quality, especially concerning costly products (Grundey & Bakowska, 2008; Stępień et al., 2018). In order to show status, people prefer to make their brands socially visible and consumers showing this kind of materialism are better

persuaded by self-benefit appeals (Ryoo et al., 2020). As masculinity and branding importance are high among Polish consumers, this thesis expects them to prefer a branding appeal over a nature appeal.

The short-term orientation of the culture could mean placing less importance on saving the future while falling back on traditional and normative feelings (Hofstede, 2020). One example is the already discussed and prevailing coal industry that could be seen as a short-term motivated tradition with no desire for drastic change. Because of this, the high uncertainty avoidance, and the desire of structure and rules (de Mooij & Hofstede, 2010), Polish consumers could be in favour of self-benefit appeals in the form of branding and advertisements focused on the product itself instead of other-benefit appeals like nature.

Dutch Societal Culture. Contrary to Polish culture, Dutch people show less uncertainty avoidant and power distant behaviour. Their long-term orientation is correlated with higher levels of adaptation, willingness to change traditions, and the importance to save and invest (Hofstede, 2020). Hereby, their culture is much more future-oriented, which in turn could have an impact on environmental awareness, higher attitudes towards sustainable products, and higher purchase intentions.

As an individualistic country (Minkov et al., 2017), consumers prefer consistency between their feelings and actions (de Mooij & Hofstede, 2010). This means, when consumers show positive attitudes for sustainable goods, they may also be expressing their purchase intention for those goods. Individualistic consumers tend to search actively for information about products via friends or the media (de Mooij & Hofstede, 2010). They show high tendencies in wanting to be informed and problem-solving (de Mooij & Hofstede, 2010; Stern & Resnik 1991). For that reason, specifically, the level of individualism could play a role in the evaluation of green advertisements.

The discrepancy in individualism between Poland and the Netherlands is emphasized further with the measure of Minkov et al. (2017). On the proposed IDV-COLL scale the

Netherlands scored higher than any other country with a score of 182 in terms of individualism, while Poland is 31st in the list with a score of -15. Accordingly, Poland is considered significantly less individualistic than the Netherlands and there seems to be a need to examine whether this leads to a difference in perceiving advertisement appeals.

Additionally, individualistic cultures are more feminine which means that standing out from a group of people is less desirable (Hofstede, 2020). Due to this and the fact that the Netherlands scores considerably lower in uncertainty avoidance, power distance, and masculinity, it is expected that in their culture branding is less valued. In addition, their low-context culture (Hall, 1976; Hofstede, 2011) with a preference for clear and explicit style of communication could favour the nature experience appeal because it genuinely highlights the product in the context of preserving nature. Indeed, Dutch consumers show high interest in sustainability topics (Veldhuizen et al., 2017) and are more future-oriented.

As Dutch consumers are considered long-term oriented, more in favour of investing and saving the future, and with a lower uncertainty avoidance generally more actively involved in leisure and health, it is expected that they yield higher scores regarding purchase intentions for sustainable products (de Mooij & Hofstede, 2010). Being individualistic, they are rather inclined to buy new and innovative products, for instance from unknown brands, while less individualistic consumers are more interested in the product itself and concrete features (de Mooij & Hofstede, 2010). The cultural dimension of indulgence could be a link to support the claims made from individualism, power distance, and uncertainty avoidance.

The cultural dimension indulgence from Hofstede (2020) is described as “the extent to which people try to control their desires and impulses” (Hofstede, 2020, p. 1). On the indulgence scale, Dutch people score more than twice as high than Polish people and hence, Dutch consumers seem to be more inclined towards realising impulses, desires, leisure, and optimism (Hofstede, 2020). In general, this could make them significantly more likely to buy green products online to fulfil their environmental or self-actualisation desires.

Culture as a Moderator

Furthermore, a moderating effect of culture on the relationship of ad-appeal and purchase intentions is interesting to investigate for sustainable products in the context of social commerce. Advertising online is tremendously affected and moderated by culture (Brettel & Spilker-Attig, 2010; Thi et al., 2016) and there is a clear need for different green marketing or environmental campaigns for distinct consumer groups which differ in environmental involvement (Leonidou et al., 2011). This is the case for these two types of cultures and consumer groups.

Consequently, building upon the cultural frameworks from Hofstede (2020) and Minkov et al. (2017), this thesis tries to predict consumer attitudes and purchase intentions of different advertisement appeals by combining the cultural dimensions and the IDV-COLL measure with the Dutch and Polish culture. Due to these factors, differing levels of evaluations and purchase intentions for sustainable products online are expected. According to the previously discussed cultural characteristics, this work anticipates that both cultures perceive green advertisement content in a different way. Due to cross-cultural and advertising research, it is expected that Dutch consumers will generally show higher levels of buying products online and will prefer a nature appeal, while Polish consumers will prefer a branding appeal. Thus, this thesis proposes:

H₂: Online consumers from the Netherlands will show higher purchase intentions for sustainable consumer products online than Polish online consumers.

H₃: The effect of advertising appeal on purchase intention is moderated by culture, such that a) Polish consumers will prefer a branding appeal and b) Dutch consumers will prefer a 'nature' appeal.

Consumer Attitudes and Behaviour

There is persistent evidence that the type of ad-appeal influences consumers' attitudes towards certain products which will then, positively affect their intention to buy those

products or services. In particular, consumers' attitude towards an advertisement is described as a favourable or unfavourable reaction towards a certain advertisement based on several factors, depending on what influence it had on changing consumers' emotional state (Lee et al., 2016). The relationship between ad-appeal and consumer attitudes was confirmed by Burton and Lichtenstein (1988) and the role of consumer attitude as a mediator explaining the relationship of natural imagery, other-benefit appeals, and purchase intentions was verified by Hartmann and Apaolaza-Ibáñez (2012). Therefore, the ability of an advertisement to affect a consumer's attitude plays a crucial role in persuading a consumer to buy the product and evaluate the effectiveness of an ad (Chih-Chung et al., 2012; Mackenzie & Lutz, 1989).

The attitude people form towards an advertisement is to a large extent based on how valuable they consider it, including the factors: informativeness, entertainment, irritation, deceptiveness, advertising value, and credibility (Brackett & Carr, 2001; Ducoffe, 1995). Special interest for this thesis topic lies on the fact that the advertisement value, resulting out of the factors mentioned, significantly predicts millennial's attitudes towards Instagram stories ads (Mahatmavidya & Yasa, 2020; Murillo et al., 2017). Hence, this thesis tries to evaluate the influence of consumer attitudes in the context of Instagram stories by drawing upon different theories.

The theory of planned behaviour (TPB), drawn from behavioural intention theory and with a focus on consumer behaviour, could assist in analysing the action of what makes consumers buy sustainable goods online (Ajzen, 1991). The theory claims that the decision process of buying a product is not solely rational and that a person's social behaviour has an underlying reason and control (Ajzen, 2008). Applied to consumer behaviour, TPB describes the preceding behaviour of an intention to purchase products or services. This behaviour is categorized by the factors: subjective norms, attitudes toward buying the product, and behavioural control (Ajzen, 2008). From a consumer's attitude and the mentioned factors, conclusions about a certain behaviour can be drawn and there is a significant link between

attitudes and intentions. Hence, it appears to be likely that the intention to purchase a product or service is preceded by an attitude toward that product or service (Ajzen, 1988, 1991).

As well, this theory indicates validity across individualistic and collectivistic cultures, and towards sustainable product purchases (Chan & Lau, 2002; Patel et al., 2020). Highly relevant for the social commerce context, Sanne and Wiese (2018) tested and confirmed TPB regarding Facebook advertising, where the attitude was a clear predictor of intention to engage with advertisements on the social media platform. Thus, a similar effect for Instagram stories is expected.

Another essential contribution to advertisement attitudes is Markus and Kitayama's (1991) self-construal theory and ad-self congruency which defines how conform a person's self is with the message of an advertisement. This yields validity across cultures: as western cultures see themselves as self-independent and less individualistic cultures as self-interdependent, there are consequences for perceiving experiences like an ad or emotion. In turn, advertising messages which are congruent with the self-concept of the consumer are more likely to be persuasive and effective than messages which are incongruent, because a positive attitude is formed that will lead to higher intentions (Chang, 2005). Hong and Zinkhan (1995) concretely elaborated that advertisements which are compatible with the self-concept of the viewer will yield to higher attitudes and higher purchase intentions. For instance, young consumers who potentially have sustainability high on their agenda are more congruent with nature advertisement appeals and form higher attitudes towards these appeals. Following the links between the advertisement appeal and consumer attitudes and between attitudes and purchase intentions, it is expected that consumer attitudes mediate the relationship of ad-appeal and purchase intention:

H₄: The relationship of advertisement appeal and purchase intention is mediated by consumers' attitudes towards the advertisement.

Method

To investigate whether there is a difference between a branding appeal and a nature appeal in advertisement evaluation in social commerce and whether this is mediated by consumer attitude and moderated by culture, a 2 x 2 between-subject design was conducted. The independent variable advertisement appeal consisted of two levels: nature and branding. While the former highlighted and placed the product with a background of a natural environment, without a specific focus on the product itself, the latter was more product-centred and highlighted the brand with a blank background. The second independent variable culture consisted of a Dutch and Polish online population. This experiment was carried out using convenience sampling and a personal network of sample participants.

Sampling and Procedure

The sample consisted of 239 participants which were randomly assigned to the four conditions. A power analysis with a medium effect size of 0.25 and power of 0.8 determined a minimum total sample size of 179. As the total sample size exceeded this, generalisation of the sample to the population was possible. To achieve the needed amount for both cultures, the sample was drawn through convenience sampling, by sending the Qualtrics questionnaire to different social media groups and friends. The focus lied on recruiting people in the age range of 18 to 40 in order to create a sample consisting of millennials and Generation Z participants who were the target of the study, and familiar with Instagram Stories. Next to English, the questionnaire was available in Dutch and Polish to capture a representative sample of both cultures with no bias concerning the language.

After reading an introduction paragraph in the Qualtrics questionnaire including the instructions of the study and a confidential disclaimer, the surveyed individuals were asked for their consent to proceed. They were asked some demographic questions regarding their age, gender, nationality, and education. If the nationality was neither Dutch or Polish, they were not able to proceed. This way it was ensured that there are indeed only Dutch and Polish

participants represented in the sample. Following this, they were asked to indicate their Instagram use, their environmental concern, and scepticism towards environmental claims. Then they were instructed to be attentive to the presentation of two advertisements representing one condition, which they were randomly assigned to. In particular, participants were asked to imagine the following scenario: “Imagine you swipe through your Instagram stories and an advertisement like this appears.”

After watching the advertisements, they clicked on proceed and were asked some questions. Firstly, there was a check whether the manipulation for the nature and the brand appeal was successful. Afterward, their attitudes towards the seen advertisements were evaluated, followed by their intent to purchase the product which entailed a t-shirt. Participants were informed that the t-shirt is from Patagonia and their attitude towards this specific brand was measured to make sure this has not influenced their perception and attitude towards the advertisement. Finally, participants saw a debriefing statement that explained the manipulation and purpose of the study.

Advertisement Stimuli

Four different advertisements in the visual environment of Instagram stories were presented. Figure 2 demonstrates the first condition in which Dutch or Polish online consumers were confronted with two Patagonia ads, one imaging a female person wearing a white Patagonia t-shirt with a blank background and the other one a male person wearing a black Patagonia t-shirt with a blank background. This represented the branding appeal. In the second condition, the Patagonia ads again included a female and a male wearing a white and a black Patagonia T-shirt with nature in the background, displayed in Figure 3. This represented the nature appeal. The reason for choosing Patagonia as a brand resulted from its characterisation as a sustainable, widely known, and popular brand with which possible self-actualisation or self-expressive effects could be potentially observed. The pictures were scraped from an Instagram hashtag search and consent was considered. This choice was made

on basis of higher validity by using real and existing Instagram content. To rule out potential confounding factors and to control the manipulation two advertisements were used per condition, with similar characteristics like gender, looks, and t-shirt type. As a result of this, the manipulation could be controlled.

Figure 2

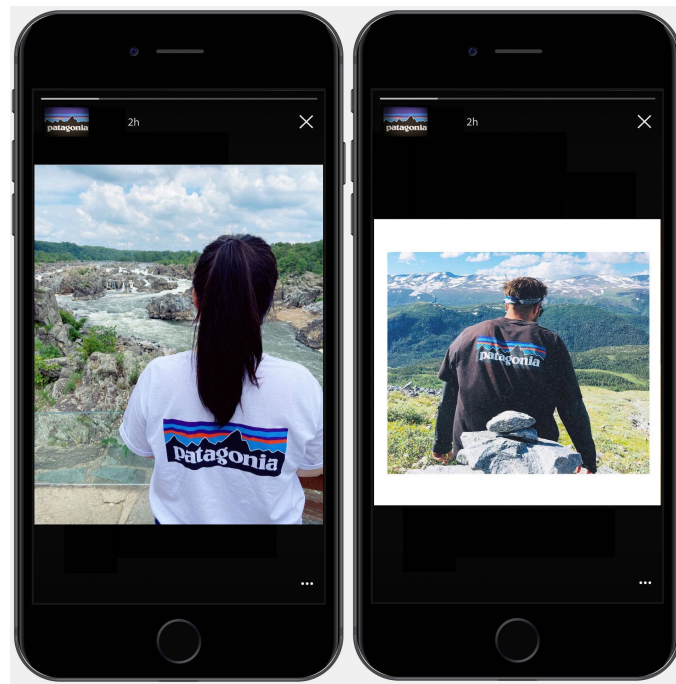
Advertisement Stimuli: Branding Appeal



Note. The two advertisements of the branding condition in the environment of Instagram Stories.

Figure 3

Advertisement Stimuli: Nature Appeal



Note. The two advertisements of the nature condition in the environment of Instagram Stories.

Measures

Participants answered some demographic questions, including their age, gender, nationality, and highest type of education they have achieved. The mediating variable consumer attitude was measured with five items ($\alpha = .95$) on a 7-point semantic differential scale adopted by Spears and Singh (2004) like *I think this advertisement is unappealing/appealing*. It measured to what extent consumers were in favour of the advertisement they saw. Purchase intention was measured with six statements on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) like *The likelihood of me buying this product is high.*, drawn from Pirumyan and Broeder (2016) and adopted towards the product of intent.² It measured participant's willingness to purchase the product of intent. Items five and six had to be reverse coded. The manipulation check was measured with three nature items like *The advertisement makes me feel close to nature.* drawn from Hartmann and Apaolaza-Ibáñez

² The exact value of Cronbach's alpha could not be retrieved from the source but was above .70.

(2012), Kals et al. (1999), and Kaplan and Kaplan (1989) and three self-created branding focus items like *The advertisements are product-centred*. These product-focused elements were created in order to distract participants from the nature questions. Participants who saw the nature appeal were supposed to score higher on these elements. All scales showed sufficient reliability (≥ 0.7) across all items (Pallant, 2007).

Control Variables

There were three control variables included: general environmental concern, brand attitude, and scepticism towards environmental claims. General environmental concern was measured with 11 items on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) like *People should care more about climate change*. The scale was adopted from Dijkstra and Goedhart (2012) and items four and five were reverse coded. Brand attitude was measured on a 7-point semantic differential scale by Spears and Singh (2004) with one item (*Unappealing/ Appealing*). Scepticism towards environmental claims was measured with four items like *I do not believe most environmental claims made on package labels or in advertising*. on a 7-point Likert scale (Mohr et al., 1998) and the first item was reverse coded.

Statistical Analysis

To access the main effect of advertisement appeal, the main effect of culture, and the interaction effect of advertisement appeal and culture, a two-way factorial ANCOVA was conducted with the two independent variables advertisement appeal and culture as independent variables and purchase intention as the dependent variable. In addition, a mediation analysis using Hayes' PROCESS macro (Hayes, 2017) model number 4 with the independent variable advertisement appeal, the dependent variable purchase intention, and the mediator consumer attitude was performed.

Population

The total sample of recruited participants consisted of 239 participants. After cleaning the data, 35 cases were excluded due to a low progress rate for which several items were not

answered. Two more cases were deleted because the questions for the dependent variable were not answered. There were no outliers above 3.29 standard deviations from the mean.³ The final sample size was 201 of which 140 were female and 60 males⁴. The sample consisted of 107 Dutch and 94 Polish participants. The average age was 24.28 ($SD = 6.04$, Min. = 16, Max. = 55)⁵. Concerning the level of education, 20.0% had a bachelor's degree, 27.5% a master's degree, and 23.0% a professional degree (e.g., medicine, pharmacy, dentistry), while 26.0% were at least high school graduates.

Results

Manipulation Checks

To check whether the manipulation worked an independent t-test was performed. In particular, it was checked whether participants in the two conditions were aware of the displayed nature or the branding focus. While the assumption of normality for the manipulation check was not met, the assumption of homogeneity of variances was met and bootstrap was performed. Participants in the nature condition ($M = 4.87$, $SD = 1.09$) scored higher on the nature elements in the manipulation check questions than participants in the branding condition ($M = 2.76$, $SD = 1.19$). This difference and the independent t-test yielded a significant result, $Mdif = -2.11$, $t(199) = -13.121$, $p = .001$. The BCA 95% CI [-2.42; -1.80] does not cross zero, which ensured that participants were aware of the presence or absence of nature in the background of the advertisements.

Assumptions

The data was checked to see whether it met all the assumptions to perform a factorial ANCOVA. To assess whether the assumption of normality is met, normality of the dependent variable purchase intention was checked. The dependent variable was not normally distributed

³ The value of one response for brand attitude was manually adjusted from 36 to 3. This was due to a mistake in the Qualtrics survey, which was corrected immediately.

⁴ One respondent did not indicate gender and age.

⁵ Age 16 is acceptable for consent according to ethical standards. It is representative of a sample consisting of Generation Z participants.

(*z-score* skewness = 3.40, and *z-score* kurtosis = -1.51). The assumption of homogeneity of variances was met because Levene's test was significant, $F(3, 88) = 0.56, p = .641$. The factorial ANCOVA is fairly robust against the violations of these assumptions, but the outcomes may not be completely reliable and bootstrap was performed (Levy, 1980). The covariate brand attitude was found to be influential. A Person's correlation test revealed that there was a significant positive correlation between brand attitude and purchase intention, $r = .58, p < .001, 95\% \text{ BCa CI } [0.42, 0.70]$. The brand attitude shares 33.6 % of the variability in purchase intention. The scatterplots of the dependent variable and the covariate for the different groups revealed that regression slopes were equal and thus, the assumption of homogeneity of regression slopes was met. The assumption of independence of the covariate was met, as an ANOVA with advertisement appeal and culture as independent variable and brand attitude as outcome variable yielded non-significant results. The other covariates mentioned in the method section did not show a significant correlation with the dependent variable and were thus, not influential and excluded from the model.

Purchase Intention

To investigate whether advertisements on Instagram stories with a nature appeal are more persuasive than with a branding appeal, whether Dutch consumers are more likely to purchase sustainable products than Polish consumers, and whether this relationship is moderated by culture, a 2 (nature vs. branding) x 2 (Dutch, Polish) factorial ANCOVA was performed. The independent variables were advertisement appeal and culture. The dependent variable was purchase intention ($M = 2.92, SD = 1.42, \alpha = .95$) and the scale had good reliability. The scale of the mediator consumer attitude ($M = 4.49, SD = 1.30, \alpha = .91$) had good reliability. The means and standard deviations for all conditions can be seen in Table 1. The table entails the means and standard deviations of purchase intention for the two different types of appeals nature and branding and the two cultures Dutch and Polish, combined and as a total.

Table 1*Means and Standard Deviations of Purchase Intention among the different Conditions*

	Dutch		Polish		Total		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	N
Advertisement appeal							
Nature	3.61	1.38	3.55	1.63	3.29	1.43	99
Branding	3.47	1.51	2.64	1.41	2.57	1.33	102
Total	3.10	1.46	2.73	1.36	2.92	1.42	201

Note: *M* represents the mean and *SD* represents the standard deviation.

The Role of Appeal

There was no significant main effect of advertisement appeal on purchase intention after controlling for the effect of brand attitude, $F(1, 87) = 0.83, p = .365$. Advertisements with a nature appeal ($M = 3.29, SD = 1.43$) did score higher on purchase intentions than advertisements with a branding appeal ($M = 2.57, SD = 1.33$) but this difference was not significant. Thus, H_1 was rejected. Participants were not more likely to buy the product when they saw an advertisement with nature than when they saw an advertisement focusing solely on the brand.

The Role of Culture

There was no significant main effect of culture on purchase intention after controlling for the effect of brand attitude, $F(1, 87) = 0.74, p = .391$. Dutch consumers ($M = 3.10, SD = 1.46$) did score higher on purchase intentions than Polish consumers ($M = 2.73, SD = 1.36$) but this difference was not significant. Thus, H_2 was rejected and Dutch participants were not significantly more likely to express intention to purchase sustainable products online than Polish consumers.

There was no significant interaction effect of advertisement appeal and culture after controlling for the effect of brand attitude, $F(1, 87) = 0.24, p = .627$. Thus, H_3 was rejected. Polish consumers were not more likely to purchase the product after seeing it with a branding

appeal than with a nature appeal, and neither were Dutch consumers more likely to purchase the product after seeing it with a nature appeal than with a branding appeal.

The Role of Brand

The covariate, brand attitude, was significantly related to purchase intention, $F(1, 87) = 39.11, p < .001$, partial $\eta^2 = .310$. This indicated a large effect and highlights the impact of branding on the relationship of purchase intention with appeal and culture respectively.

Consumer Attitude

To investigate whether the relationship of the independent variable advertisement appeal and the dependent variable purchase intention was mediated by the dependent variable consumer attitude a mediation analysis via Hayes' PROCESS macro was performed. Table 2 entails the means, standard deviations, and correlations of the dependent variable, the independent variable, and the mediating variable.

Table 2

Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2
1. Purchase intention	2.92	1.42		
2. Advertisement appeal	0.50	0.50	.252*** ⁶	
3. Consumer attitude	4.49	1.30	.474***	.376***

Note: *M* and *SD* are used to represent means and standard deviations, respectively. Pearson correlation is depicted. *** indicates $p < .001$.

Firstly, the assumptions were checked. The two predictors advertisement appeal and consumer attitude did not correlate too highly with each other ($r < .6$) and thus, it could be assured that they do not measure the same construct. The correlations can be seen in Table 2. The case summaries revealed that all values for Cook's distance were lower than one (Max. = 0.04). There were no values of the average leverage which were higher than three times the

⁶ Point-Biserial Correlation (r_{PB}) is displayed due to the dichotomous variable advertisement appeal.

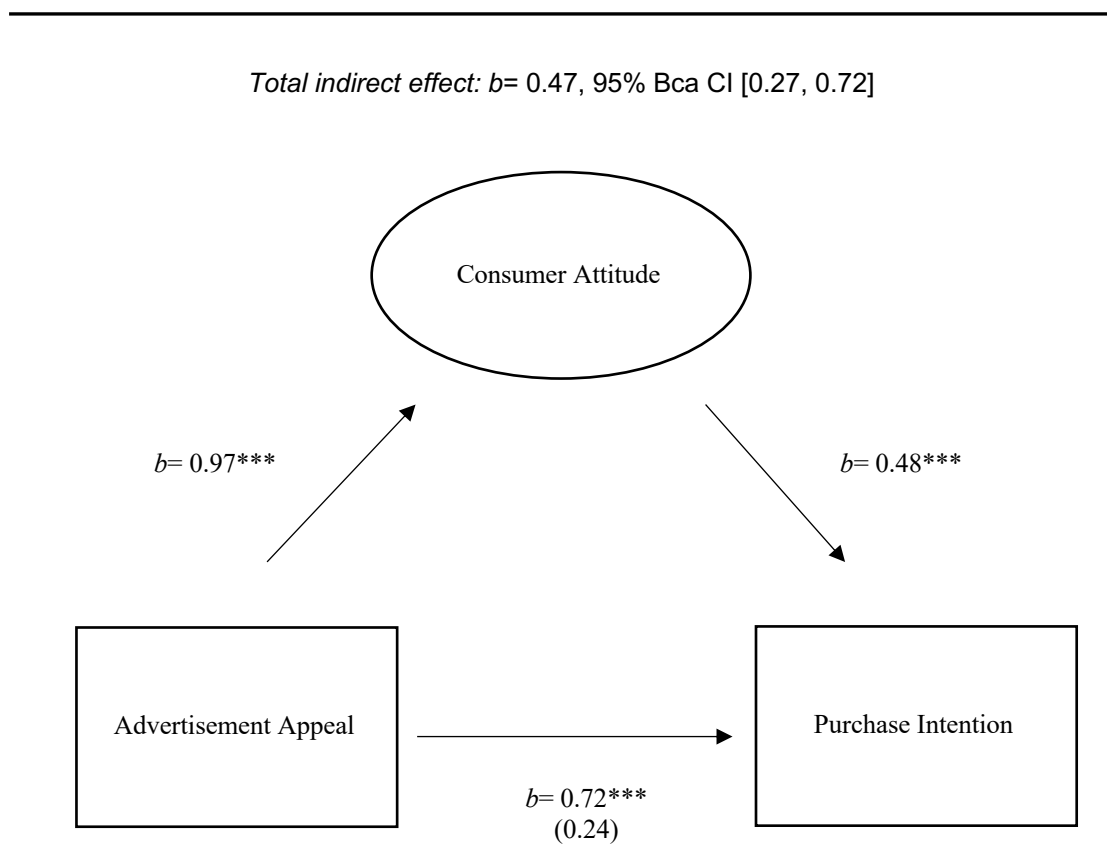
average centered leverage $((2+1)/201)$ and eleven values of Mahalanobis which were higher than the critical value 5.99 of the chi-square distribution with 2 predictors ($p = .05$). Overall, the assumption of influential cases was not of concern, as the compounding values of these validations were fine. There were ten outliers with a standard deviation higher than 2, and no outliers with a standard deviation higher than 3. As this was 5% of the cases, there is no concern. Additionally, there was no problem with multicollinearity. The values for Tolerance were above 0.2 and the values for VIF were below 10 and had an average of around 1. To assess whether the model is sensitive to the violation of the normality assumption, a Kolmogorov-Smirnov test of the standardized residuals was performed and yielded a significant result ($p < .05$). Normality was not met, but by inspecting the histogram and the Q-Q Plot, this was not of concern. The assumption of the independence of errors was met, as the Durbin-Watson value was 1.87, which is between 1 and 3 and close to the desired value of 2. The scatterplot of the predicted values against the standardized residual and the individual plots showed that the data points are somehow randomly positioned and indicated that the assumptions of homoscedasticity and linearity were met. Overall, it can be concluded that the assumptions were met, but normality was violated, and generalising the model to the population might not be possible.

The mediation model was significant, $R^2 = .23$, $F(2, 198) = 29.77$, $p < .001$. Regarding direct effects, there was a significant positive effect of the independent variable advertisement appeal on the mediator consumer attitude ($b = 0.97$, $SE = .17$, $p < .001$) and a significant positive effect of consumer attitude on the outcome variable purchase intention ($b = 0.48$, $SE = .07$, $p < .001$). The direct effect of advertisement appeal on purchase intention in the mediation model was not significant, $b = 0.24$, $SE = .19$, $p = .202$. The total effect showed a significant positive relationship between the independent variable advertisement appeal and the dependent variable purchase intention, $b = 0.72$, $SE = .19$, $p < .001$. Most importantly, there was a significant total indirect effect of advertisement appeal on purchase intention

through consumer attitude, $b = 0.47$, 95% Bca CI [0.27, 0.72]. In particular, the relationship of advertisement appeal and purchase intention could be significantly explained by the mediator consumer attitude in a full mediation model and H_4 was accepted. Hence, if consumers have a favourable attitude towards the advertisement appeal, they are in turn more likely to purchase the product. Figure 4 displays the conceptual model and direct and indirect effects.

Figure 4

Conceptual Model



Note. The Conceptual model of the mediation displaying the effect coefficients (b) for the direct effects of the IV on the mediator, for direct effects of the mediator on the DV, for direct effects of the IV on the DV (in parentheses), the total effect, and the total indirect effect. *** indicates $p < .001$. The independent variable was of binary nature and labelled with 0 = branding and 1 = nature.

Discussion

The main aim of this master thesis was to investigate to what degree advertisements with a nature appeal would be more persuasive and in turn, lead to higher consumer attitudes

and purchase intentions than advertisements only focused on the brand. Secondly, it was examined whether Dutch and Polish consumers differ significantly in purchase intentions with regard to different advertisement appeals displaying sustainable products, and thirdly, the role of culture as a potential moderator was scrutinized. Finally, it was tested whether the relationship between advertisement appeal and purchase intention is mediated by consumer attitude. After controlling for the covariate brand attitude, advertisement appeal and culture were not found to have a significant relationship with purchase intention. Thus, H₁ and H₂ can be rejected. There was no significant interaction effect between advertisement appeal and culture and thus, H₃ can be rejected. The relationship between advertisement appeal and purchase intention is mediated by the variable consumer attitude and therefore, H₄ can be accepted. The main areas of discussion are the missing feeling of nature through online advertisements, unexpected culture effects, controllability concerning the manipulation of the stimuli, and a bias towards Dutch participants, age, and gender. Next to this, key outcomes are a full mediation effect, potential contributions to cultural research, and the influence of branding.

Advertisements with a nature appeal scored higher than advertisements with a branding appeal but this difference was not significant. A reason for this could be that the manipulation of the advertisement stimuli might have not been controlled sufficiently or readily perceivable. Several researchers confirmed that nature in print advertisements can elicit similar responses than actual nature (Hartmann et al., 2013; Schmuck et al., 2018). However, experiencing nature in an online advertisement does not yet seem to be examined sufficiently and might not evoke the feeling of being in nature to the same extent as print advertisements, which would potentially lead to higher green consumer behaviour. Moreover, culture did not show the expected results either. What does it mean that the culture did not show the predicted outcomes?

It can be said that the results did not show the expected cultural deviations. Dutch participants did score higher on purchase intention than Polish consumers, but again this difference was not significant. In addition, Dutch participants did not score significantly higher on purchase intention for the nature appeal than the Polish consumers and the Polish consumers did not score significantly higher on purchase intention for the branding appeal than the Dutch consumers. Hence, the interaction effect between the type of advertisement appeal and type of culture was not significant. The fact that there is no significant difference between Dutch and Polish consumers could be explained by the young age ($M = 24.28$, $SD = 6.04$) and the considerable high level of education of the sample. It can be assumed that most of the participants belonged to a rather urban and globalised Generation Z and millennial population. They might not have shown the culture, tradition, or individualism effects that were expected by Hofstede's (2020) and Minkov et al.'s (2017) cultural research. Moreover, there is proof in the literature for a predominant coherent global consumer culture with a digital identity and homogeneous western values formed by digital acculturation (Dey et al., 2020; Steenkamp, 2019). Furthermore, Polish millennial consumers have been found to show globally coherent consumer behaviour in e-commerce (Korzeniowska, 2015), which displays a contrast to the proposed differences by Hofstede (2020) and could be supported by the results of this study. This could be an indicator of more homogeneous consumer behaviour and individualistic European culture with western values and could clearly mark a contribution to cross-cultural and consumer research. It seems relevant to mention that of the 94 Polish participants only 79 live in Poland which adds to this argumentation and could have had an influence. Therefore, more than half of the total sample lived in the Netherlands which could have contributed to a potential bias towards the sustainability topic and consumer behaviour.

The positive and significant full mediation model, explained by the variable consumer attitude, might be of interest. This result might contribute to the consumer behaviour literature

and could be proof for applying the theory of planned behaviour (Ajzen, 1991) and the self-construal theory (Markus & Kitayama, 1991) to the social e-commerce environment on Instagram, in particular Instagram stories. This adds to the research by Sanne and Wiese (2018), who applied the TPB solely to Facebook advertising. Furthermore, it supports the link in green advertising research between green advertisements and purchase intention, mediated by consumer attitude, for green online consumer products (Hartmann and Apaolaza-Ibáñez, 2012). One practical implication for advertisers would be the creation of green advertisement appeals that elicit positive consumer attitudes which thus, would lead to higher purchase intentions of the product or service.

Additionally, brand attitude was a clear covariate and correlated highly with the dependent variable purchase intention which could be a sign of visible branding effects and the impact of branding in cross-cultural persuasion in (social) e-commerce. Positioning and forming a strong brand indeed plays a major role in cross-cultural persuasion and can be strongly influenced by the culture of consumers (Steenkamp, 2019). Hence, the role of branding could be highlighted due to this thesis' results.

In general, the results should be taken in the context of a convenience sample which consisted of considerably more women (140) than men (60). In addition, the Dutch sample was significantly more educated than the Polish sample. Thus, the sample cannot be considered completely representative of the two populations. A limitation of the study is the violation of normality which consequently, leads to an interpretation of the results with caution, and generalisation to a wider population might not be possible. Ecological validity is a limitation as the experiment took place online, perhaps even on a computer for some participants, and therefore, the manipulation might have been too uncontrolled. Scraping and choosing real Instagram content might have contributed to the limited controllability of the manipulation. However, by using real Instagram content for the stimuli and by giving participants the feeling of seeing the advertisements on Instagram on a smartphone, ecological

validity could be enhanced. Another limitation concerns the mediation model which did not include a cultural approach. Generally, this approach needs to be seen in the light of criticism for Hofstede's (2020) dimensions. Individualism, for instance, might occur more on an individual level and not on a macro level that would be generalisable to all Dutch or Polish people (Fischer et al., 2010; Vignoles et al., 2016). Future research should address this by shining light on the cultural dimensions on a more individual level.

In consequence of the results of this study and the literature for green advertising and print advertisements, future research could focus on scrutinizing whether natural imagery, particularly in online advertisements, is able to elicit the feeling of being in nature which would potentially lead to more positive attitudes and purchase intentions. Follow-up research could check whether there is indeed no difference between European cultures with different levels of individualism and whether young consumers truly become more homogeneous in terms of buying behaviour. It should examine consumer behaviour taking different cultural frameworks into account which concentrate on the individual levels of cultural characteristics. The mediation effect and therefore, the application of the theory of planned behaviour and the self-construal theory in the social commerce context should be tried to confirmed and further tested in other e-commerce environments. Furthermore, the mediation should be tested with an included cross-cultural perspective. Replicating the study with a different sampling strategy and a more equally distributed and diversified sample in terms of gender, age, and place of living could be beneficial. The branding effects should be further investigated, and whether they indeed play a considerable role among other online advertisement opportunities and whether effects show validity across different brands and cultures. Lastly, the manipulation could be more controlled by editing and using exactly the same images for both conditions with, for instance, adding a nature background in one condition and not in the other. In addition, a lab study could ensure the controllability of the manipulation but at the cost of ecological validity.

Conclusion

To conclude this study, advertisements with a nature appeal were not more persuasive for online consumers than appeals that only focus on the brand. This held true across the two individualistic European cultures of the Netherlands and Poland. The differences of the cultures in environmental and economic situations and cultural dimensions like individualism, uncertainty avoidance, and power distance did not lead to a significant difference. Universally, this could explain that consumer culture among young European adults becomes increasingly homogeneous in terms of consumer behaviour, individualistic, and westernised (Steenkamp, 2019). This could rule out potential cultural effects that are expected from the different cultural dimensions from Hofstede (2020) or a difference in the level of individualism (Minkov et al., 2017).

However, the limitations of an uncontrolled manipulation, the generalisation of cultural dimension to whole populations, and the missing link with culture in the mediation model should be addressed. The results should be interpreted with the awareness of a convenience sample that might not be representative of the two different populations and a not sufficiently controlled manipulation of the stimuli could have influenced the results and future research should address these aspects.

Nevertheless, the results could contribute to the literature. The study could extend cultural studies by supporting a global consumer culture with similar consumer behaviour across individualistic European cultures. Due to a full mediated effect and the significant role of consumer attitude, while evaluating an advertisement, this thesis could contribute to the theory of planned behaviour and the self-construal theory in the context of social commerce. They could mark the clear impact of branding in the visual persuasion of consumers online and could confirm the strong role of branding in e-commerce. Overall, it fills the gap in green advertising literature and cultural research by examining the effects of different green advertisement appeals on purchase intentions for sustainable consumer goods in a social

commerce environment while pairing this with a cross-cultural comparison of two individualistic but differing European cultures.

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Appendix

Scales

Scale	Items	Source
Consumer attitude	<ul style="list-style-type: none"> • Unappealing/ appealing • Bad/ good • Unpleasant/pleasant • Unfavourable/favourable • Unlikable/ likable 	Spears & Singh, 2004
Purchase intention	<ul style="list-style-type: none"> • The likelihood of me buying this jacket is high. • If I were going to buy a jacket, I would consider buying this jacket. • Buying this jacket is appealing to me. • I am likely to buy the jacket shown in the advertisement. • The probability of me buying this jacket is low. (R) • I would not like to order this jacket. (R) 	Pirumyan & Broeder, 2016
Brand attitude	<ul style="list-style-type: none"> • Unappealing/ appealing 	Spears & Singh, 2004

Scale	Items	Source
Manipulation Checks - Nature elements	<ul style="list-style-type: none"> • The advertisement makes me feel close to nature. • The advertisement makes me think of nature, fields, forests and mountains. • The advertisement evokes the sensation of being in nature. 	Hartmann & Apaolaza-Ibáñez, 2012; Kals et al., 1999; Kaplan & Kaplan, 1989
Manipulation Checks - Branding focus elements	<ul style="list-style-type: none"> • The advertisements focus on product features. • The advertisements are product-centred. • The advertisements highlight the product. 	
General environmental concern	<ul style="list-style-type: none"> • People should care more about climate change. • Climate change should be given top priority. • It is annoying to see people do nothing for 	Dijkstra & Goedhart, 2012

Scale	Items	Source
	<p>the climate change problems.</p> <ul style="list-style-type: none"> • People worry too much about climate change. (R) • The seriousness of climate change has been exaggerated. (R) • Climate change is a threat to the world. • I am careful not to waste water. • I am careful not to waste food. • I separate most of my waste for recycling. • I prefer to use public transport or bicycle over car. • I feel it is important to take good care of the environment. 	
Scepticism towards environmental claims	<ul style="list-style-type: none"> • Most environmental claims made on package 	Mohr et al., 1998

Scale	Items	Source
	<p>labels or in advertising are true. (R)</p> <ul style="list-style-type: none">• Because environmental claims are exaggerated, consumers would be better off if such claims on package labels or in advertising were eliminated.• Most environmental claims on package labels or in advertising are intended to mislead rather than to inform consumers.• I do not believe most environmental claims made on package labels or in advertising.	