Tone and image harmony: The effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention and the moderating effect of CSR interest

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Abstract

Purpose – Amongst the pressing demand for companies to engage in Corporate Social Responsibility (CSR) efforts and the recognition that communicating about these efforts on social media is crucial, this study aims to investigate the influence of key CSR communication elements – message tone and image choice – on Instagram on consumers' purchase intention. The study contributes to the existing literature by investigating the separate influence of these elements and expands prior research by exploring how they interact. Moreover, it expands prior research by considering the moderating role of CSR interest and the influence of demographics. These contributions help companies maximize consumer responses to their CSR communication.

Design/methodology – A quantitative experiential study with a 2 (message tone: factual versus self-promotional) x 2 (image choice: positive emotional versus negative emotional) design was conducted. Employing a simple random sampling approach, 210 people filled out an online survey. The data was analysed with R, using multiple Welch Two Sample t-tests and moderation analysis.

Results – The study shows that message tone and image choice have an effect on consumers' purchase intention and that a factual message tone as well as a negative emotional image is preferred. The study also shows that the combination of a factual message tone and a negative emotional image has a more positive effect on consumers' purchase intention than a factual message tone combined with a positive emotional image and that the combination of a negative emotional image and a factual message tone has a more positive effect than a negative emotional image combined with a self-promotional message tone. Moreover, this study shows that CSR interest has a moderating role in the effect of message tone and image choice on purchase intention, and a negative association is revealed. Furthermore, it was found some demographics influence the effect of message tone and image choice in CSR communication on purchase intention.

Conclusion – The study highlights the importance for companies to use the preferred combination of CSR elements to elicit favourable consumer responses. Moreover, the study demonstrates that transparency and honesty are key aspects of effective CSR communication on social media. Given the evolving consumer landscape found in this study, there is a pressing call for further research into demographic differences regarding the influence of CSR communication elements on consumers' purchase intention.

Keywords: CSR communication | CSR interest | Instagram | Image Choice | Message tone

1. Introduction

As more people are gaining access to mass media, companies are being pushed to move beyond traditional marketing methods says Chong (2017). She emphasizes that where once branded content, aimed at creating fun and engaging materials, was the go-to formula to lead to instant consumer popularity, companies nowadays are required to build upon this relatively simple marketing approach. On top of that, digitization is rapidly changing the communicative environment for corporations (Vogler & Eisenegger, 2021). According to Chadwick (2017), "Today's media environment is far more diverse, fragmented, and polycentric, and new practices have developed out of the rise of digital communication." (as cited in Vogler & Eisenegger, 2021, p. 2). However, Chong (2017) notes that this constant exposure to advertisements makes today's society sceptical of marketing.

In addition to these changes in the communicative environment and the rising scepticism, Chong (2017) states that today's society has an increasing desire to make an active impact on the world. As a result, an overwhelming demand for Corporate Social Responsibility (CSR) has emerged to which brands must respond to make sure consumers have favourable brand perceptions. This demand for CSR has only become more important in the current post-pandemic world as the Covid-19 pandemic has ushered businesses worldwide to rapidly change for the good of employees, customers, and society in general (Karagiannopoulou, Sariannidis, Ragazou, Passas & Garefalakis, 2023). They state that due to the new reality of working in different conditions, focusing on providing equal access to resources, and battling a global disease, companies nowadays are more concerned with finding a balance between income and impact.

"Communication is considered as heart of CSR" say Ali, Jiménez-Zarco, and Bicho (2015, p. 1), meaning that companies do not only have to act socially responsible but also need to communicate their actions to their consumers. Over the last few years, social media has become one of the most popular trends in online marketing branding, introducing a new channel of brand communication to enhance consumers' brand attitude and brand engagement (Schivinski & Dabrowski, 2014; Tsimonis & Dimitriadis, 2014). Due to its increasing popularity, social media can be considered a powerful and successful tool for sustainable business communication (Ali et al., 2015). But the question is how CSR can effectively be promoted on social media.

CSR communication on social media consists of both textual and visual communication elements. Regarding the textual elements, research indicates that message tone has a large

influence on the effectiveness of CSR communication and is thus considered an essential CSR communication dimension (Kim & Ferguson, 2014; Kim & Ferguson, 2018; Kim, 2019). However, the influence of message tone is insufficiently researched and, therefore, still underexplored (Kim & Ferguson, 2018; Kim, 2019). More research is thus needed to investigate how to effectively choose message tone. Next to tone, Ali et al. (2015) state that now that social media, where visualizations play a pivotal role, is considered a powerful and successful tool for CSR communication, the use of visuals next to text within CSR messages is becoming key. Initial research on visual CSR communication has been performed, but more comprehensive and concise research is still needed to determine what kind of images brands, given certain circumstances, must use (Garcia & Greenwood, 2013; Chung & Lee, 2017; Lock & Araujo, 2020). Chung and Lee (2017) state that researchers especially have little understanding of how emotional content of images influences the effectiveness of CSR communication. On top of that, a research gap can be identified in the interaction between message tone and image choice in CSR communication. To this day, it is unclear how these variables influence each other's effect on CSR communication effectiveness.

Moreover, Chung and Lee (2017) suggest that it is important for future research to focus on the influence of individual differences when it comes to CSR communication. A consumer's interest in CSR could have a large influence on how CSR communication on social media is perceived (Kim & Ji, 2017), and thus must be researched how this moderates the effect of message tone and image choice on CSR communication effectiveness.

Lastly, existing research on CSR communication on social media focuses mostly on Facebook and Twitter, showing a limited focus on Instagram. However, a shift in the ecology of social media towards visual images can be identified (Milanesi, Kyrdoda & Runfola, 2022), indicating that there is a need to focus more on image-based social media platforms like Instagram. Consequently, more research into CSR communication on Instagram is needed.

To fill these research gaps, the goal of this study is to explore how message tone and image choice in CSR communication on Instagram affect consumer responses. More specifically it is of interest how it affects consumers' purchase intention. Additionally, it will be explored how this effect is moderated by CSR interest. Therefore, the research question is formulated as follows:

What is the effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention, and to what extent is it moderated by CSR interest?

This paper is organized into four parts. First, the theory for this study is described and a theoretical model is presented. Then the methodology is outlined and the findings are reported. Finally, the results are discussed and theoretical and practical implications, limitations, and future research suggestions are presented.

2. Theoretical framework

This theory section first focuses on the concept of purchase intention. Then CSR communication and social media marketing on Instagram will be discussed. After which the different CSR components will be talked through. Moreover, the influence of CSR interest will also be taken into consideration. Lastly, a theoretical model will be presented.

2.1. Purchase intention

Purchase intention is "the possibility that consumers will plan or be willing to purchase a certain product or service in the future" (Wu, Yeh & Hsiao, 2011, p. 32) and focuses on the decision-making of why one buys a specific product or brand (Mirabi, Akbariyeh & Tahmasebifard, 2015). Mirabi et al. (2015) and Morwitz (2014) consider it to be an important tool to predict the buying process. According to Mirabi et al. (2015), consumers' purchase decision is a complex process and is usually related to consumers' behaviour, perception, and attitude towards a brand. They say that purchase behaviour is considered "a key point for consumers to access and evaluate" a certain product or a brand (p. 268). On top of that, they state that a firm's communication on social media platforms can be considered one of the factors influencing the consumer decision-making process. Research by Schivinski (2013) shows that firm-created social media communication has a positive effect on consumers' mindset and brand evaluation, influencing consumers' purchase intention. Moreover, research by Poturak and Softić (2019) shows that social media posts significantly impact the distribution of information about a particular brand, impacting the purchase decisions of consumers. Additionally, various research indicates that CSR communication on social media has a positive effect on consumers' purchase intention (Bianchi, Bruno & Sarabia-Sanchez, 2018; Sharma, Poulose, Mohanta & Antony, 2018; Fernández, Hartmann & Apaolaza, 2021). However, Fernández et al. (2021) state that companies are not successfully tapping into this potential of social media communication, and more research is needed.

2.2. CSR communication

CSR can be defined as "a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders" (United Nations Industrial Development Organization, 2023). Brands do not only have to generate profit but are also expected to contribute to the society and environment the company operates in

(Probst, 2022). According to Vogler and Eisenegger (2021), citizens are increasingly demanding that corporations justify and legitimate their social and environmental actions next to their economic actions. Next to acting socially responsible, Ali et al. (2015) state that brands must also communicate their efforts to their consumers. Companies often make use of CSR communication to emphasize the importance of their engagement in socially responsible activities, making their consumers aware of their efforts (Probst, 2022). He states that "effective CSR communication is used to achieve desirable outcomes" (p. 5). Communicating about CSR can, however, also cause stakeholders to question why the company is engaged in such activities as over-communicating can lead to questioning the brand's motivations (Parcha, 2017). Therefore, brands must be cautious of how they communicate their CSR activities.

2.3. Social media marketing and Instagram

Social media marketing is defined as "commercial marketing events or processes that use social media in an attempt to positively influence consumers' purchase behaviour" (Dann, 2010, as cited in Chen & Lin, 2019, p.22) and has become increasingly relevant since the rapid development of the Internet (Chen & Lin, 2019). According to them, it allows brands to deepen their communications and interactions with consumers. In today's digital age, the perceived transparency of social media platforms allows brands to effectively communicate their CSR activities and efforts as consumers view these platforms as trustworthy (Ali et al., 2015). In addition, the perceived trustworthiness of social media platforms increases customer engagement in companies' CSR efforts (Kesavan, Bernacchi & Mascarenhas, 2013). With the shift in the ecology of social media towards visual images, there has been a growing use of image-based social media platforms, such as Instagram (Milanesi et al., 2022). They state that the use of Instagram by companies is quickly increasing, and thus can be considered an interesting platform to effectively communicate about CSR. As it is key on this platform to have a high emphasis on the combination of text and visuals, it is interesting to investigate how to design CSR communication elements focusing on message tone and image choice.

2.4. Message tone

Scepticism can be considered one of the biggest challenges of CSR communication (Kim & Ferguson, 2018). According to them, message tone, an essential CSR communication dimension,

is highly related to this consumer scepticism of an organization's CSR communication. Kim (2019) states that due to this associated scepticism, a distinction in message tone within CSR communication is often made between a factual and a self-promotional tone. She defines a factual message tone as "factual quality and feeling expressed in CSR communication by companies; it indicates whether CSR communication is self-promotional or factual in tone" (p. 1146). When using a factual tone, the public considers that the company holds honest motives in supporting social causes as facts are used says Kim and Ferguson (2018). On the contrary, they state that when using a self-promotional tone, the public views the company as having greater self-serving motives. They also state that especially a self-promotional tone is considered suspicious and thus is related to higher levels of scepticism. Previous research by Kim and Ferguson (2014) also indicated that consumers prefer CSR communication messages that are based on facts and that they do not like self-promotional messages from companies. They found that especially females did not like a self-promotional tone, that older groups did not like a self-promotional tone more than younger groups did not, and that a factual tone is preferred more by those with a higher income ($100,000-$149,999) than by those with a lower income ($25,000-$49,999). They also found that older age groups (over 45) are more concerned with CSR message tone than relatively younger groups (18-44) are, suggesting that older groups prefer facts more than self-promotional messages. Kim (2019) adds that a factual message tone has a significant positive effect on increasing consumers' CSR knowledge and trust levels in the company's commitment, engagement, and reputation. She also states that a self-promotional tone significantly affects consumers' CSR knowledge, engagement, and reputation positively, but that it affects consumers' trust levels negatively. From this, it becomes clear that the research of Kim (2019) mostly differs in message tone preference when it comes to its effect on consumers' trust levels. The question, therefore, is how important consumers' trust is for their purchase intention. Research by Mahliza (2020) investigating the importance of trust for purchase intention indicates that trust is a crucial factor that influences one's purchase intention. Research by Sohn and Kim (2020) also states that trust is highly correlated to one's purchase intention. Therefore, previous research in which message tone has a positive effect on trust should extensively be taken into consideration when determining the right message tone to foster favourable purchase intention. Based on previous research, it can thus be expected that a factual message tone is more effective than a self-promotional message tone. The following hypothesis can be stated:

H1: A factual message tone in CSR communication has a more positive influence on consumers' purchase intention than a self-promotional message tone.

2.5. Image choice

Due to the visual turn that has taken place on the Internet, images have become more powerful and important online say Lock and Araujo (2020). In like manner, Milanesi et al. (2022) claim that a shift in the ecology of social media towards visual images is taking place. They state that, nowadays "the social media landscape is increasingly characterized by the use of images as a highly impactful way of communication" (p. 1). Moreover, Garcia and Greenwood (2013) state that the use of visuals is an important aspect of corporate communication as visuals allow brands to frame perceptions through a channel that consumers willingly accept as reflective of reality. The use of images has thus become a vital tool and visualizing CSR communication can, therefore, be considered key. Image-based social media platforms are experiencing significant growth among consumers and businesses and are thus increasingly important according to Milanesi et al. (2022). They say that especially the use of Instagram, an image-based platform where visuals are the main focus of a post, is rapidly increasing. The right image choice is thus of great importance for this platform. On top of that, they say that visuals evoke emotions among consumers. Companies, therefore, use visuals to seek emotional responses from consumers to influence their purchase intention (Garcia & Greenwood, 2013; Lock & Araujo, 2020). According to Chung and Lee (2017), visuals can vary in emotional content and one of the dimensions that emotional content of images can vary is in valence. Valence can be defined as "the positivity or negativity of the emotion" (p. 932), indicating that emotionally loaded images can either be positive or negative. Positive emotional images consist of "promising and desirable situations in which the goal of the CSR activity is achieved or the issue that a CSR activity addressed was resolved" (p. 935). Showing, for example, clean drinking water. Negative emotional images consist of "threatening and dangerous situations related to an issue in which the problem had not been solved" (p. 935). Showing, for example, dried-out land or dehydrated animals. Negative visuals can help the public identify and recognize the gap between a negative situation and their environmental goal for the future, triggering goal-oriented behaviour to save at-risk people or environments (Kim, Kang & Mattila, 2012; Chung & Lee, 2017). Positive visuals, on the other hand, do not provide cues to identify such gaps (Chung & Lee, 2017). According to Kim et al. (2012), companies using visuals

that trigger goal-oriented behaviour will lead to consumers holding favourable attitudes towards the company, positively influencing consumers' purchase intention. Based on previous research, it can thus be concluded that the use of negative emotional images, presenting the current negative situation, is more effective than the use of positive emotional images, presenting the ideal situation. The following hypothesis can be stated:

H2: The use of negative emotional images in CSR communication has a more positive influence on consumers' purchase intention than the use of positive emotional images.

2.6. Message tone X Image choice

As content on Instagram is often a combination of text and visual elements, it is important to know how message tone and the use of emotional images influence each other and how they interact. Although no previous research exists on the interaction between message tone and image choice in CSR communication, previous research by Dhanesh, Duthler, and Li (2022) does show that social media platforms increasingly foreground visuals over text. Additionally, Li and Xie (2019) state that especially the right image choice has a large influence on consumer responses to a social media post as it increases consumer engagement. On top of that, the visual turn and ecology shift on social media towards visual images also indicate that image choice has the potential to have a large influence on consumer responses to a social media post (Lock & Araujo, 2020; Milanesi et al., 2022). Based on this, it can be assumed that the effect of message tone on consumers' purchase intention depends on image choice. As Hypothesis 2 suggests that the use of a negative emotional image is preferred over the use of a positive emotional one, the following hypotheses have been formulated:

H3a: A factual message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a factual message tone with a positive emotional image.

H3b: A self-promotional message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a self-promotional message tone with a positive emotional image.

As the tone of a message is still considered a crucial element of CSR communication on social media by Kim and Ferguson (2018) and Kim (2019), the same assumption can be made the other way around. Thus, it can be assumed that the effect of image choice on consumers' purchase intention depends on the choice of message tone. As Hypothesis 1 suggests that a factual message tone is preferred over a self-promotional one, the following hypotheses have been formulated:

H3c: A negative emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a negative emotional image with a self-promotional message tone.

H3d: A positive emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a positive emotional image with a self-promotional message tone.

2.7. CSR interest

Consumers most likely have different interests in CSR. One consumer could care more about companies' CSR activities than another. Kim and Ji (2017) state that these different interests result in people having different expectations of these activities and thus the companies' CSR communication. For example, a consumer who is not really interested in CSR probably does not expect the company to participate in CSR activities. Let alone communicate about such activities. However, a consumer who is very interested in CSR might have high expectations of the company's involvement in CSR activities and its communication about it. According to Kim and Ji (2017), CSR interest could thus have a large influence on how CSR communication on social media is perceived. Kim and Ferguson (2018) state that the success of a company's CSR communication depends on consumers' willingness to accept a company's characteristics. In this case, these characteristics are focused on the company's involvement in socially responsible activities. To increase the public's acceptance of the company's CSR communication, companies must make their messages personally relevant to the customers they say. This indicates that the success of the communication depends on the consumers' personal relevance in CSR, which is their CSR interest. Similar to the research of Kim and Ji (2017), this suggests that those who are interested in CSR are more likely to accept the company's CSR communication. Whereas a

consumer who is not that interested in CSR is most likely more reluctant to accept the company's CSR communication. Therefore, it could be expected that consumers' interest in CSR influences the relationship between CSR communication and consumers' purchase intention. More specifically, this could mean that CSR interest moderates the relationship between message tone and image choice and consumers' purchase intention. Therefore, the following hypothesis has been formulated:
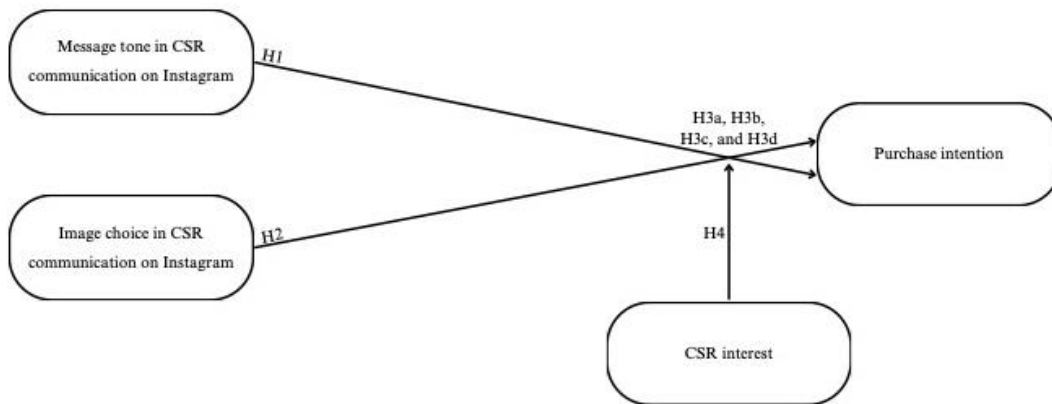
H4: Consumers' CSR interest moderates the relationship between message tone and image choice in CSR communication and consumers' purchase intention.

2.8. Theoretical model

Based on the theoretical framework and existing research gap, a theoretical model for this study is designed. This theoretical model is portrayed in Figure 1.

Figure 1

Theoretical model

3. Methodology

3.1. Research design

For this study, a quantitative experiential approach was chosen to explore the effects of message tone and image choice in CSR communication on Instagram on consumers' purchase intention. Additionally, the moderating effect of CSR interest was explored. This was done by means of a 2 (message tone: factual versus self-promotional) x 2 (image choice: positive emotional versus negative emotional) design. An online survey was carried out for this study as this is a common way to analyse consumers' purchase intention (Yin, Wu, Du & Chen, 2010; Martinez & Kim, 2012; Hussain & Ali, 2015).

In the survey, the participants were shown different manipulated Instagram posts that vary in message tone and image choice (see Figure 2). Group 1 was shown an Instagram post with a factual message tone and a positive emotional image, group 2 was shown an Instagram post with a factual message tone and a negative emotional image, group 3 was shown an Instagram post with a self-promotional message tone and a positive emotional image, and group 4 was shown an Instagram post with a self-promotional message tone and a negative emotional image. In the posts with a factual message tone, the caption included several factual statements such as the number of trees planted or lakes cleaned and specific locations. In contrast, posts with a self-promotional message tone used phrases like 'probably' and suggested being the most active company when it comes to helping the nature. The image used for the posts with a negative emotional image showed a lake with polluted water streaming into it, portraying a threatening or dangerous situation. The image used for the posts with a positive emotional image showed people planting new trees, illustrating an ideal situation. The Instagram post the participants were shown was posted by Sole Flex, a fictional company that produces all kinds of shoes for various occasions (see Figure 3 for the different Instagram posts, Appendix A shows the Dutch versions of the posts).

Figure 2

Survey participants groups

	Message tone	
	Factual	Self-promotional
Positive emotional	Group 1	Group 2
Negative emotional	Group 3	Group 4

(Image choice)

Figure 3

Different Instagram posts

Group 1:

Group 2:

Group 3:
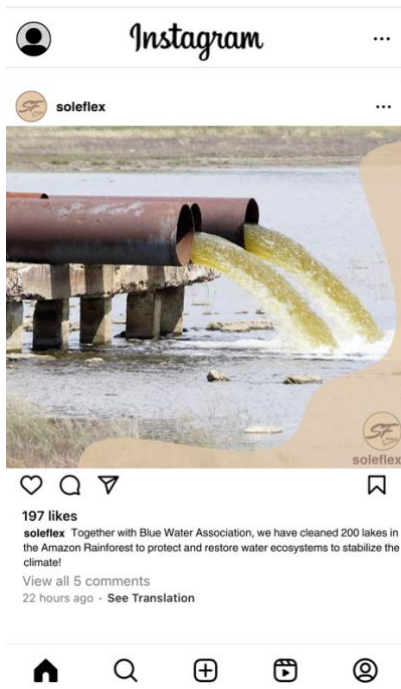
Group 4:
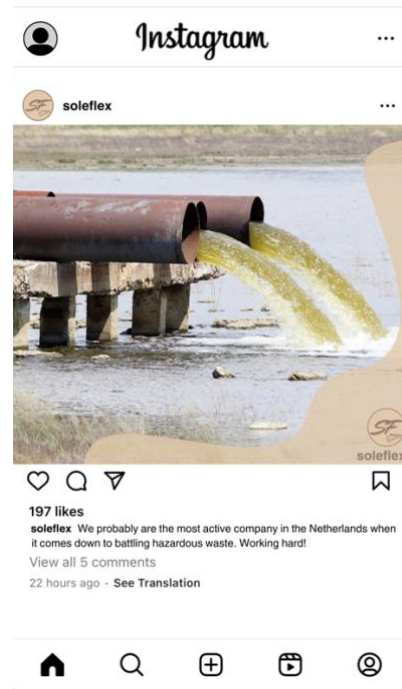
3.2. Pre-testing the stimulus materials

Before the online survey was shared with the participants, a pre-test took place to select the best stimulus materials and to check the coherence and clarity of the materials (Ahmad, 2016, IGNET, 2017). This pre-test helped determine which message tone and image choice best fit the given conditions. A sample size of 23 people was used for the pre-test. Each participant was presented with six statements, varying in message tone, and six images, varying in emotional content. For this pre-test, the message tone of an Instagram post was assessed using four adopted items from Kim (2019). Examples of these items are "The company's message is based on factual information" and "The company's message is too self-congratulatory". The emotional content of the image was assessed using eight items based on the items of Kim et al. (2012). For example, "The image makes me feel happy" and "The image makes me feel bad" were used. The items were slightly adapted to fit the survey and can be found in Appendix B. The pre-test itself can be found in Appendix C. The results of the pre-test were analysed using ANOVA analysis and a Tukey's Honestly Significant Difference (HSD) test in R. Table 1 shows an overview of the mean and standard deviation for each statement. From this table, it was concluded that statement 6 is considered the most factual statement (scored highest) and statement 1 is considered the most self-promotional statement (scored lowest).

Table 1

Pre-test results statements

Statement	Mean (SD)
Statement 1	2.32 (1.08)
Statement 2	2.83 (1.44)
Statement 3	5.14 (1.32)
Statement 4	2.54 (1.18)
Statement 5	5.18 (0.91)
Statement 6	5.53 (1.06)

Table 2 shows an overview of the mean and standard deviation for each image. From this, it was concluded that image 4 is considered the most positive emotional image (scored highest) and that image 3 is considered the most negative emotional image (scored lowest).

Table 2

Pre-test images results

Image	Mean (SD)
Image 1	4.14 (1.28)
Image 2	2.73 (1.15)
Image 3	2.13 (0.96)
Image 4	5.69 (0.96)
Image 5	2.24 (1.17)
Image 6	2.21 (1.26)

Additionally, a Welch Two Sample t-test was executed to determine whether there is a significant difference between the selected factual and self-promotional statements and the selected positive and negative emotional images. As a significant difference between the most factual statement and most self-promotional statement, as well as a significant difference between the most positive emotional image and the most negative emotional image, was found, the suggested statements and images were selected for the survey (see Table 3 for the statement results and Table 4 for the image results).

Table 3

Results significance difference between statements

Mean (SD) most factual statement	Mean (SD) most self-promotional statement	P-value
5.53 (1.06)	2.32 (1.08)	<0.01*

* $p \leq 0.05$

Table 4

Results significance difference between images

Mean (SD) most positive emotional image	Mean (SD) most negative emotional image	P-value
5.69 (0.96)	2.13 (0.96)	<0.01*

* $p \leq 0.05$

3.3. Procedure and research instrument

The online survey started with a short introduction, highlighting the study's focus, describing the survey's structure, assuring confidentially, and requesting consent for data usage. Following the introduction, the participants were asked to answer some questions on their social media usage. Subsequently, the survey unfolds into three main parts: part 1 focuses on CSR interest, part 2 assesses participants' purchase intention when being shown the Instagram post, and part 3 involves evaluating the Instagram post for a manipulation check. Finally, the participants were asked several demographic questions. As the experiment was designed to gather responses from a diverse audience, the base language of the survey was English. However, as this study has been performed from within the Netherlands, the respondents could also choose to change the language to Dutch. The complete survey, both in English and in Dutch, can be found in Appendix D.

Each component of the survey consisted of several constructs, each containing several questions, with each question representing an individual item. These items were based on items used in previous research. Most of the items were adapted slightly to fit the survey. An overview of the used items can be found in Appendix B. The items, designed to measure specific aspects, were later combined into constructs for the analysis. The reliability of the constructs was assessed using Cronbach's alpha.

For the different constructs, Likert scale statements were formulated. The Likert scale is a widely used and easy-to-use tool for surveys. The scale consisted of seven points, ranging from strongly disagree to strongly agree, to give the participants as many choices as possible to make it easier to fit their thoughts (Sauro & Dumas, 2009). The statements were formulated in such a way that participants did not feel inclined to choose a certain answer but chose something they truly believe fit their perception best.

3.3.1. *Social media use*

For the social media question regarding platform usage, the most popular social platforms suggested by Szeto, Mamo, Afrin, Militello, and Barber (2021) were put as answer options. The participants were presented with options including Facebook, X (Twitter), Instagram, TikTok, YouTube, Snapchat, and 'Other'. Subsequently, for the question on social media use frequency, the frequency indication outlined by Ahmed (2019) was used.

3.3.2. *Purchase intention*

To measure purchase intention, four items from Coyle and Thorson (2001) were adopted. Examples of these items are "I will purchase from this company the next time I need a product/service" and "I will recommend this company to my friends". The Cronbach's alpha for the construct of purchase intention was 0.93, indicating satisfactory internal consistency.

3.3.3. *CSR interest*

To measure CSR interest, several items from Fadun (2014) were adopted. These items were chosen as they are based on the well-known and widely used CSR model of Carroll (1991) which consists of four layers: economic CSR, legal CSR, ethical CSR, and philanthropic CSR. Using these items allowed for also creating constructs of each layer of Carroll's model next to creating the construct of CSR interest in general. For example, "Companies should be committed to being as profitable as possible" is one of the items that measures economic CSR and "Companies should voluntarily support projects that enhance the community's quality of life" is one of the items that measures philanthropic CSR. The Cronbach's alpha for the constructs were as follows: 0.66 for economic CSR, 0.71 for legal CSR, 0.78 for ethical CSR, 0.79 for philanthropic CSR, and 0.75 for CSR interest in general. This shows that all alpha's were over 0.65, again indicating satisfactory internal consistency.

3.3.4. *Manipulation check*

Towards the end of the online survey, a manipulation check took place to determine the effectiveness of the manipulation (Hoewe, 2017). The respondents were asked how they perceived the manipulation. The manipulation of message tone was checked using four adopted items from Kim (2019). "The company's message is based on facts" and "The company's message is too promotional" are examples of these items. Additionally, the manipulation of emotional content of the image was checked using eight items that are based on items from Kim et al. (2012). Examples of these items are "The image makes me feel calm" and "The image makes me feel irritated". Cronbach's alpha was used to assess the reliability of the constructs. The alpha for message tone was 0.73 and the alpha for emotional content of the image was 0.94. Both indicate satisfactory internal consistency as they are over 0.65.

To check the manipulations, Welch Two Sample t-tests were executed. The results show a significant difference between the factual and self-promotional statements as well as a significant difference between the positive emotional and negative emotional images as the p-values are lower than the conventional significance level of 0.05 (see Table 5 for the statement results and Table 6 for the image results).

Table 5

Manipulation check statement results

Mean (SD) factual statement	Mean (SD) self-promotional statement	P-value
3.99 (1.08)	3.12 (0.97)	<0.01*

* $p \leq 0.05$

Table 6

Manipulation check image results

Mean (SD) positive emotional image	Mean (SD) negative emotional image	P-value
4.67 (0.95)	3.20 (1.15)	<0.01*

* $p \leq 0.05$

3.3.5. *Demographic questions*

Lastly, for the demographic questions, the recommendations provided by Fernandez, Godwin, Doyle, Verdin, and Boone (2016) and Hughes, Camden, and Yangchen (2016) were taken into consideration to ensure that the survey aligns with established best practices and maintains ethical standards. Participants were asked to share their demographics in the following categories: age, gender, nationality, educational level, employment status, and income.

3.4. Participants

The online survey for this quantitative study was held among 210 people, a sample size chosen to ensure at least fifty respondents for each condition in the study. The participants were selected via a simple random sampling approach to make sure that each member of the population had an equal chance of being selected. This approach was chosen as it ensures that the selection procedure cannot discriminate and result in a non-representative sample (Gravetter & Forzano, 2010). No names were asked in the survey to make sure that participants were being kept anonymous. The

demographics of the participants can be found in Table 7. The nationality of the respondents has been left out as almost all respondents were Dutch. The table shows that fairly an equal distribution of age, gender, educational level, employment status, and income can be found between the conditions.

Table 7

Demographics of the participants (in percentages) per condition

	Group 1	Group 2	Group 3	Group 4
Age				
15-29 years	34%	46%	31%	35%
30-45 years	34%	15%	20%	17%
46-64 years	32%	38%	45%	46%
65-99 years	0%	2%	4%	2%
Gender				
Female	52%	60%	51%	57%
Male	48%	40%	49%	43%
Educational level				
Elementary school	0%	0%	0%	0%
High school	8%	9%	8%	9%
MBO (Dutch Vocational Education)	16%	18%	16%	22%
University of Applied Sciences (HBO)	48%	42%	43%	48%
Bachelor's degree at University (WO)	8%	16%	14%	9%
Master's degree at University (WO)	18%	15%	16%	11%
Doctorate degree (e.g., PhD)	2%	0%	4%	0%
Employment status				
Student, no side-job	0%	9%	4%	0%
Student with side-job	14%	9%	12%	7%
Student with part-time job	10%	5%	6%	7%
Student with full-time job	0%	2%	0%	2%
Part-time job	24%	22%	20%	24%
Full-time job	52%	49%	49%	54%
Unemployed	0%	2%	4%	4%
Retired	0%	2%	6%	2%
Income				
Less than €25.000	28%	36%	29%	22%
€25.000-€49.999	24%	25%	18%	22%
€50.000-€74.999	10%	20%	18%	17%
€75.000-€99.999	12%	4%	10%	13%
€100.000-€124.999	2%	2%	6%	6%
More than €125.000	10%	7%	12%	7%
Prefer not to say	14%	5%	18%	13%

The participants were also asked to answer several questions on their social media usage. Table 8 shows that a quite equal distribution among the groups can be found.

Table 8

Social Media use of the participants (in percentages) per condition

	Group 1	Group 2	Group 3	Group 4
Facebook				
No	34%	28%	40%	37%
Yes	66%	72%	60%	63%
X (Twitter)				
No	78%	81%	82%	74%
Yes	22%	19%	18%	26%
Instagram				
No	34%	22%	14%	17%
Yes	66%	78%	86%	83%
TikTok				
No	60%	69%	76%	69%
Yes	40%	31%	24%	31%
YouTube				
No	38%	22%	32%	30%
Yes	62%	78%	68%	70%
Snapchat				
No	68%	59%	62%	59%
Yes	32%	41%	38%	41%
Other platforms				
No	80%	78%	82%	80%
Yes	20%	22%	18%	20%
Social media use frequency				
A few times a month	2%	4%	6%	2%
A few times a week	10%	9%	0%	9%
About once a day	26%	4%	20%	19%
Several times a day	10%	6%	6%	4%
Every hour of the day	52%	78%	68%	67%

3.5. Data analysis

The survey results were analysed with the help of R. R is a software system and programming language for statistical computing and graphics that can be used for any type of research and/or analysis. Due to its extensive range of use, R is widely used by researchers across various disciplines (Weston & Yee, 2017). To test hypotheses 1 to 3d, several Welch Two Sample t-tests were executed. A Welch Two Sample t-test provides the ability to compare the means of two independent groups. Moreover, it provides a p-value to see whether there is a significant difference between the two means. To test hypothesis 4, a moderation analysis was done. Prior to these analyses, an outlier analysis was conducted. This analysis revealed that no outliers can be identified that must be removed from the dataset nor are there any respondents who consistently chose the same answer (see Appendix E).

4. Results

In this section, the results of the experiment will be presented. The section focuses on the influence of message tone and image choice in CSR communication on Instagram on consumers' purchase intention. Moreover, it focuses on the moderating role of CSR and the influence of demographics.

4.1. Message tone

H1: A factual message tone in CSR communication has a more positive influence on consumers' purchase intention than a self-promotional message tone.

Table 9

Results Hypothesis 1

Mean (SD) factual message tone	Mean (SD) self-promotional message tone	P-value
3.60 (1.31)	3.07 (1.24)	<0.01*

* p ≤ 0.05

Focusing on identifying the effect of message tone in CSR communication on consumers' purchase intention, the results of the Welch Two Sample t-test in Table 9 show that the respondents who were presented with a factual message tone had a mean purchase intention of 3.60 and those who were presented with a self-promotional message tone had a mean purchase intention of 3.07. As the p-value is below the conventional significance level of 0.05 (p-value is <0.01), a significant difference between the two means can be found. Therefore, the t-test provides conclusive evidence that Hypothesis 1 is supported.

4.2. Image choice

H2: The use of negative emotional images in CSR communication has a more positive influence on consumers' purchase intention than the use of positive emotional images.

Table 10

Results Hypothesis 2

Mean (SD) negative emotional image	Mean (SD) positive emotional image	P-value
3.55 (1.41)	3.10 (1.13)	0.01*

* p ≤ 0.05

The results of the Welch Two Sample t-test in Table 10, which focuses on identifying the effect of image choice in CSR communication on consumers' purchase intention, show that the respondents who were presented with a negative emotional image had a mean purchase intention of 3.55 and those who were presented with a positive emotional image had a mean purchase intention of 3.10. The p-value is 0.01, which is lower than the conventional significance level of 0.05, indicating that a significant difference can be found between the two means. As a result, the t-test provides conclusive evidence that Hypothesis 2 is supported.

4.3. Message tone X Image choice

H3a: A factual message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a factual message tone with a positive emotional image.

H3b: A self-promotional message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a self-promotional message tone with a positive emotional image.

H3c: A negative emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a negative emotional image with a self-promotional message tone.

H3d: A positive emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a positive emotional image with a self-promotional message tone.

Next to identifying the effect of message tone and image choice in CSR communication on consumers' purchase intention, the effects of combinations of message tone and image choice was also investigated.

Table 11

Results Hypotheses 3a to 3d

Group	Mean (SD)	Hypothesis	P-value
Group 1	3.18 (1.10)	Hypothesis 3a	<0.01*
Group 2	3.03 (1.17)	Hypothesis 3b	0.7
Group 3	4.00 (1.37)	Hypothesis 3c	<0.01*
Group 4	3.12 (1.32)	Hypothesis 3d	0.49

* $p \leq 0.05$

Table 11, presenting the results of Welch Two Sample t-tests, shows that respondents who were presented with a factual message tone and a positive emotional image (group 1) had a mean purchase intention of 3.18, respondents who were presented with a self-promotional message tone and a positive emotional image (group 2) had a mean purchase intention of 3.03, respondents who were presented with a factual message tone and a negative emotional image (group 3) had a mean purchase intention of 4.00, and respondents who were presented with a self-promotional message tone and a negative emotional image (group 4) had a mean purchase intention of 3.12.

The p-value for Hypothesis 3a, investigating if there is a difference between groups 3 and 1, is lower than the conventional significance level of 0.05 (p-value is <0.01), indicating that a significant difference between the groups can be found. Hypothesis 3a can, for that reason, be supported.

The p-value of Hypothesis 3b, investigating if there is a difference between groups 4 and 2, however, is greater than the conventional significance level (p-value is 0.70), indicating that no significant difference between the groups can be found. Hypothesis 3b is, therefore, refuted.

For Hypothesis 3c, investigating if there is a difference between groups 3 and 4, the p-value is once again lower than the conventional significance level (p-value is <0.01), indicating that a significant difference between the groups can be found. Hypothesis 3c can, thus, be supported.

Lastly, for Hypothesis 3d, investigating if there is a difference between groups 1 and 2, a p-value greater than the conventional significance level was found (p-value is 0.49), indicating that no significant difference between the groups can be found. Hypothesis 3d is, therefore, also refuted.

4.4. The moderating role of CSR interest

H4: Consumers' CSR interest moderates the relationship between message tone and image choice in CSR communication and consumers' purchase intention.

Focusing on identifying whether consumers' CSR interest moderates the relationship between message tone and image choice in CSR communication and consumers' purchase intention, a distinction was made between CSR interest in general and the four layers of Carroll's CSR model (interest in economic CSR, legal CSR, ethical CSR, and philanthropic CSR). First, it was investigated whether CSR interest in general could be considered a moderator. Next, it was investigated whether the four layers separately could be considered moderators.

4.4.1.   *CSR interest in general*

Table 12

Results Hypothesis 4 – CSR interest in general

	Group 1	Group 2	Group 3	Group 4
Intercept	3.06	2.50	3.99	2.89
Influence of CSR interest	-0.58	-0.46	-0.77	-0.53
P-value CSR interest	<0.01*	<0.01*	<0.01*	<0.01*
Interaction term	0.19	0.18	0.19	0.18
P-value interaction term	<0.01*	<0.01*	<0.01*	<0.01*

* $p \leq 0.05$

Table 12 shows that a negative association between CSR interest and purchase intention was found for all groups as all groups have negative values for the influence of CSR interest and have p-values lower than the conventional significance level of 0.05 (p-values are <0.01). However, the extent to which purchase intention decreases as CSR interest goes up varies among the groups. Group 3 shows the largest decrease in purchase intention (-0.77) and group 2 shows the smallest decrease (-0.46). Table 10 also shows that all groups have a positive estimate for the interaction term with p-values lower than the conventional significance level (p-values are <0.01), indicating that CSR interest in general does act as a moderator. Based on these findings, it can be stated that Hypothesis 4, when focusing on CSR interest in general, cannot be fully supported as although the

results do show that CSR interest acts as a moderator for all groups, the expected positive association was not found.

4.4.2. Differentiating between the four CSR layers

Table 13

Results Hypothesis 4 – CSR layers separately

	Group 1	Group 2	Group 3	Group 4
Economic CSR				
Intercept	3.05	3.11	4.61	2.88
Influence of CSR interest	-0.58	-0.54	-0.86	-0.54
P-value CSR interest	<0.01*	<0.01*	<0.01*	<0.01*
Interaction term	0.19	0.18	0.19	0.18
P-value interaction term	<0.01*	<0.01*	<0.01*	<0.01*
Legal CSR				
Intercept	3.03	2.69	3.16	3.20
Influence of CSR interest	-0.52	-0.44	-0.55	-0.53
P-value CSR interest	<0.01*	<0.01*	<0.01*	<0.01*
Interaction term	0.17	0.16	0.17	0.17
P-value interaction term	<0.01*	<0.01*	<0.01*	<0.01*
Ethical CSR				
Intercept	3.49	2.62	4.05	2.89
Influence of CSR interest	-0.61	-0.45	-0.70	-0.50
P-value CSR interest	<0.01*	<0.01*	<0.01*	<0.01*
Interaction term	0.17	0.17	0.17	0.17
P-value interaction term	<0.01*	<0.01*	<0.01*	<0.01*
Philanthropic CSR				
Intercept	3.43	2.56	3.80	2.73
Influence of CSR interest	-0.77	-0.56	-0.78	-0.51
P-value CSR interest	<0.01*	<0.01*	<0.01*	<0.01*
Interaction term	0.22	0.21	0.20	0.19
P-value interaction term	<0.01*	<0.01*	<0.01*	<0.01*

* $p \leq 0.05$

Table 13 shows that a negative association was found for all CSR layers for all groups as all groups have negative values for the influence of CSR interest and have p-values lower than the

conventional significance level of 0.05 (p-values are <0.01). The extent to which purchase intention decreases as interest in one of the CSR layers goes up varies once again among the groups. Group 3 shows the largest decrease in purchase intention for all CSR layers. Just like Table 10, Table 11 shows that all groups have a positive estimate for the interaction term with p-values lower than the conventional significance level (p-values are <0.01) for all CSR layers, indicating that interest in either of the CSR layers acts as a moderator. Based on these findings, it can be stated that Hypothesis 4, when focusing on interest in economic CSR, legal CSR, ethical CSR, or philanthropic CSR, can once more not be fully supported as although the results do show that interest in the CSR layers acts as a moderator for all groups, the expected positive association was not found.

4.5. Summary of hypothesis testing

To summarize, Table 14 gives an overview of all hypotheses and whether they are supported or refuted.

Table 14

Hypotheses results overview

Hypothesis number	Hypothesis	Supported (✓) or Refuted (X)
H1	A factual message tone in CSR communication has a more positive influence on consumers' purchase intention than a self-promotional message tone.	✓
H2	The use of negative emotional images in CSR communication has a more positive influence on consumers' purchase intention than the use of positive emotional images.	✓
H3a	A factual message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a factual message tone with a positive emotional image.	✓
H3b	A self-promotional message tone with a negative emotional image has a more positive effect on consumers' purchase intention than a self-promotional message tone with a positive emotional image.	X
H3c	A negative emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a negative emotional image with a self-promotional message tone.	✓
H3d	A positive emotional image with a factual message tone has a more positive effect on consumers' purchase intention than a positive emotional image with a self-promotional message tone.	X
H4	Consumers' CSR interest moderates the relationship between message tone and image choice in CSR communication and consumers' purchase intention.	X

4.6. Influence of demographic factors

Next to having examined the effect of message tone and image choice on consumers' purchase intention, the influence of various demographic factors was investigated.

4.6.1. *Message tone*

Analysis of the influence of demographic factors on the effect of message tone on consumers' purchase intention, which can be found completely in Appendix F, shows that for both a factual message tone and a self-promotional message tone, no significant differences were found in purchase intention for gender, educational level, employment status, and income. Also, no significant differences were found in purchase intention for a self-promotional message tone when it comes to age. However, the analysis does show a significant difference in purchase intention between ages for a factual message tone. It shows that respondents aged 15-29 have a mean purchase intention of 3.35, while respondents aged 65-99 have a mean purchase intention of 5.75. As the p-value of the difference between these age groups is 0.05, it can be stated that the mean purchase intention of respondents aged 15-29 is significantly lower than that of respondents aged 65-99. Figure 4 shows a visualization of the purchase intentions for the different age groups.

Figure 4

Bar graph of the categorization of age for a factual message tone
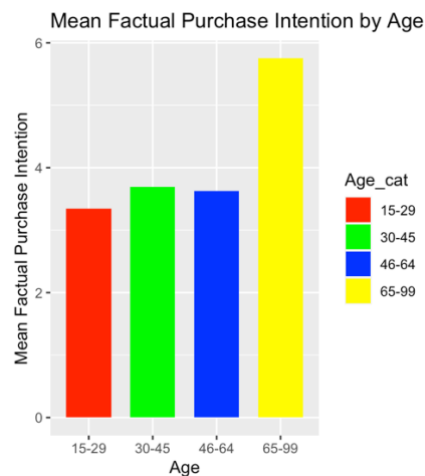
4.6.2. *Image choice*

Analysis of the influence of demographic factors on the effect of image choice on consumers' purchase intention, which can be found completely in Appendix G, shows that no significant differences were found in purchase intention for gender, educational level, employment status, and income, for both a negative emotional image and a positive emotional image. Moreover, no significant differences were found in purchase intention for a positive emotional image when it

comes to age. On the contrary, the analysis does show that some significant differences were found in purchase intention for age for a negative emotional image. Respondents aged 15-29 have a mean purchase intention of 3.30, respondents aged 30-45 have a mean purchase intention of 3.55, respondents aged 46-64 have a mean purchase intention of 3.59, and respondents aged 65-99 have a mean purchase intention of 5.75. The analysis shows that the p-value for the difference between respondents aged 15-29 and respondents aged 65-99 is 0.02. The p-value for the difference between respondents aged 30-45 and respondents aged 65-99 is 0.05. Moreover, the p-value for the difference between respondents aged 46-64 and respondents aged 65-99 is also below the conventional significance level (p-value is 0.04). It can, thus, be stated that respondents aged 15-29, 30-45, or 46-64 have a significantly lower purchase intention than respondents aged 65-99. Figure 5 shows a visualization of these differences in purchase intention between ages.

Figure 5

Bar graph of the categorization of age for a negative emotional image

Mean Negative Emotional Purchase Intention by Age
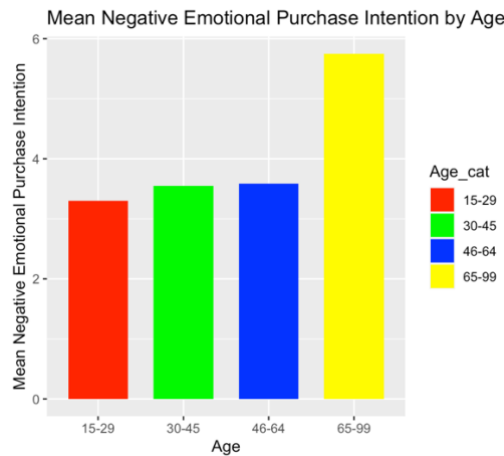
4.6.3. *Message tone X Image choice*

Analysis of the influence of demographic factors on the effect of the combinations of message tone and image choice on consumers' purchase intention (see Appendix H), shows that no significant differences in purchase intention were found for group 1 (factual message tone and positive emotional image), group 3 (factual message tone and negative emotional image), and group 4 (self-promotional message tone and negative emotional image) for all demographic factors (gender, age, educational level, employment status, and income). For group 2 (self-promotional message tone

and positive emotional image), however, the analysis does show that a significant difference can be found for one of the demographic factors: gender. It shows that male participants have a mean purchase intention of 2.65 and that female participants have a mean purchase intention of 3.28. As the p-value of the difference between males and females is 0.05, it can be stated that females have a significantly higher purchase intention than males. Figure 6 shows a visualization of this significant difference between the genders.

Figure 6

Bar graph of the categorization of gender for group 2
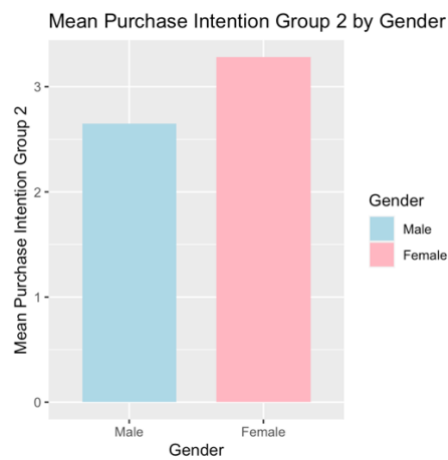
5. Discussion

In this section, the results of this study will be interpreted, explained, and compared with existing literature. The main focus will be on answering the research question and delving into the underlying factors that contribute to the confirmation or refutation of the hypotheses. The discussion also covers the theoretical and practical implications of the study, highlighting the relevance of the findings to the research field and their applications in practical contexts. Furthermore, the study's limitations will be discussed and insights for future research will be provided.

5.1. Answer to research question

The results of this study provided valuable insight to answer the main research question: '*What is the effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention, and to what extent is it moderated by CSR interest?'.* The findings show that the right choice of message tone and image choice in CSR communication on Instagram has an effect on consumers' purchase intention. It was discovered that a factual message tone elicits a significantly higher purchase intention than a self-promotional message tone and that a negative emotional image evokes a higher purchase intention than a positive emotional image. Furthermore, the findings show that the combination of CSR communication elements can have an effect on consumers' purchase intention as well, but only in specific combinations. While a factual message tone with a negative emotional image generates a significantly higher purchase intention than a factual message tone with a positive emotional image, no significant difference was found between a self-promotional message tone with a negative emotional and a self-promotional message tone with a positive emotional image. Additionally, no significant difference was found between a positive emotional image with a factual message tone and a positive emotional image with a self-promotional tone, even though a negative emotional image with a factual message tone generates a higher purchase intention than a negative emotional image with a self-promotional message tone. From this, it can be concluded that a factual message tone with a negative emotional image is considered the preferred combination of CSR communication elements. Finally, the findings demonstrate that CSR interest moderates the effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention, indicating that people who are interested in CSR respond differently to CSR communication than those who are not that interested

in CSR. Moreover, a negative association was uncovered. This means that when CSR interest goes up, consumers' purchase intention goes down.

5.2. Interpretation of results and hypotheses outcomes

5.2.1. *Main findings*

The study shows compelling evidence that a factual message tone in CSR communication has a more positive influence on consumers' purchase intention than a self-promotional message tone (Hypothesis 1). This finding resonates with previous research by Kim and Ferguson (2014; 2018) stating that consumers prefer companies to hold honest motives rather than companies having greater self-serving motives in supporting social causes. Moreover, the results reinforce the thoughts of Kim and Ferguson (2018) that a self-promotional tone is considered suspicious and thus relates to high levels of scepticism, leading to lower purchase intention. Additionally, the preference for a factual message tone aligns with research of Kim (2019), who also suggested that a factual message tone leads to favourable consumer responses.

The results of the study also show compelling evidence that the use of negative emotional images in CSR communication has a more positive influence on consumers' purchase intention than the use of positive emotional images (Hypothesis 2). This finding coordinates with previous research by Kim et al. (2012) and Chung and Lee (2017) which suggest that consumers prefer companies presenting the current negative situation that help the public identify and recognize the gap between a negative situation and their environmental goals for the future rather than companies presenting the ideal situation as this does not provide these cues to identify such gaps. According to them, this is because negative images trigger goal-oriented behaviour to save at-risk people or environments. The results also align with previous research conducted by Kim et al. (2012), stating that companies that use visuals that trigger goal-oriented behaviour will lead to consumers holding favourable attitudes towards the company, positively influencing consumers' purchase intention.

Focusing on the interaction of the two CSR communication elements, the findings show that a factual message tone and a negative emotional image not only elicit higher purchase intention separately but also when used together (Hypothesis 3a-3d), suggesting they are a good match for CSR communication on social media. This good match between a factual message tone and a negative emotional image corresponds with the two routes to persuasion suggested by the Elaboration Likelihood Model (ELM) of Petty and Cacioppo. The ELM proposes a central route

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and a peripheral route to process information and form attitudes (White, 2011). The central route indicates that individuals, who are highly motivated and able to process arguments and information thoroughly, spend time and effort scrutinizing the information that is presented to them (Chen, Yang, Zhang & Yang, 2018). This goes well with a factual message tone, which enhances the credibility of the company's CSR communication by presenting honest motives, as it results in people becoming more confident that the information they are presented and have thoroughly analysed is true and accurate. On the other hand, the peripheral route indicates that individuals, whose motivation is lower and have a lower ability to process information, rely on peripheral cues such as affective states or emotions to form attitudes towards presented information (SanJosé-Cabezudo, Gutiérrez-Arranz, and Gutiérrez-Cillán, 2009; Chen et al., 2018). The use of a negative emotional image correlates well with this peripheral route, as the image evokes emotional responses and triggers goal-oriented behaviour without requiring thorough processing of the presented information. Consequently, the combination of a factual message tone and a negative emotional image effectively accommodates consumers following either of the two routes to persuasion, as well as those who may be somewhere in between (Lee, Tsohou & Choi, 2017). This integration of the routes leads to increased persuasion and underscores the efficacy of this combination in CSR communication.

It was also found that when combining the CSR communication elements, one does not outweigh the other. The use of the preferred image choice (i.e., negative emotional image) combined with the non-preferred message tone (i.e., self-promotional tone) did not lead to a significantly higher purchase intention. This indicates that the influence of image choice on consumer responses is not independent of the message tone used when the elements are combined, contrary to what was assumed based on previous research (Lock & Araujo, 2020; Milanesi et al., 2022). Equally, it was found that the use of the preferred message tone (i.e., factual message tone) did not lead to a significantly higher purchase intention when combined with the non-preferred image (i.e., positive emotional image). This shows that although message tone can be considered a crucial element of CSR communication on social media (Kim & Ferguson, 2018; Kim, 2019), the influence of message tone on consumer responses is not independent of the image choice when the elements are combined. From this, it can be stated that not one of the CSR communication elements is more important than the other, but rather that the combination of the elements is of key

for companies. This underscores that there is a still high emphasis on the combination of text and visuals in CSR communication, even on an image-based platform like Instagram.

Finally, the results of the study show that CSR interest, both in general and the four CSR layers separately, moderates the relationship between message tone and image choice in CSR communication and consumers' purchase intention (Hypothesis 4), affirming previous research by Kim and Ji (2017) that CSR interest has a large influence on how CSR communication on social media is perceived. However, the results also show that a negative association was found instead of the expected positive association (Kim & Ji, 2017; Kim & Ferguson, 2018). A reason for this difference in association could be the underestimation of the critical attitude consumers establish when being interested in something. Aslan, Fastrich, Donnellan, Jones, and Murayama (2021) say that having an interest in something results in people having deep knowledge about the topic they are interested in, it indicates that one wants to learn something. Furthermore, they say that interest can be considered "a stable feeling that supports continuous and deep exploration of information without distraction through boredom and other external stimulations in the long term" (p. 10). Silvia (2008) also states that "interest ensures that people will develop a broad set of knowledge, skills, and experience" (p. 57). Having a deep knowledge of something often leads to having a more critical attitude. This critical attitude leads to consumers taking a more critical look at companies' CSR communication, which may result in them questioning the authenticity and sincerity more, leading to lower purchase intention. This finding emphasizes the need for companies to be cautious on how they communicate about their CSR efforts.

5.2.2. *Influence of demographic factors*

The analysis of the influence of demographic factors on the effect of message tone and image choice on consumers' purchase intention shows that only a few significant differences were found. Specifically, when focusing on the preferred combination of a factual message tone and a negative emotional image, the analysis even shows that no significant differences were identified. This is surprising as the analysis did find a significant difference in age for a factual message tone, confirming previous research by Kim and Ferguson (2014), and a significant difference in age for a negative emotional image when looking into the influence of demographic factors for the two CSR communication elements separately. Also, a difference in age could be expected for the preferred combination as it matches the observation that people are becoming more prosocial with

age when being shown that others need help (Bailey, Brady, Ebner, and Ruffman, 2020). They say while both younger and older people show the same level of willingness to help, older people tend to put in more effort to help. According to Li and Atkinson (2020), this can be explained by the emotion regulation consumption theory, which holds that "consumers mitigate the feeling of negative emotions by increasing their intention to buy cause-related products" (p. 1). Consequently, this observed prosocial behaviour among older people contributes to the expectation that older people have a significantly higher purchase intention. However, interestingly this expected difference in age was not found for the combination of a factual message tone and a negative emotional image. This unexpected finding challenges previous research and suggests that the consumer landscape is evolving where age differences are becoming less noticeable.

Although no significant differences were found in income for a factual message tone and a negative emotional image separately or combined, the research by Kim and Ferguson (2014) does suggest that consumers with a higher income prefer a factual message tone more than consumers with a lower income. Additionally, recent other research found that the higher consumers' income is, the higher their willingness to pay is (Narayanan & Singh, 2023) and that growth in income leads to increased socially responsible consumption (Bartling, Valero, and Weber, 2022). It is, therefore, interesting and somewhat unclear why this study did not find a significant difference in income. Once more, it can therefore be suggested that the consumer landscape is evolving, and differences in income are becoming less evident.

Furthermore, the absence of gender differences for the preferred CSR communication elements combination in this study is in contrast with previous research stating females value a higher quality of CSR more than men (Hatch & Stephen, 2015). It also does not match recent research by Jian (2022) who found that "female customers are more susceptible to CSR, while male customers have less confidence in brands' CSR initiatives" (p. 100). Again, it is interesting that no significant differences were found. However, this discrepancy between the findings and previous research on gender differences does underscore the suggestion of an evolving consumer landscape, indicating a shift in gender-based patterns.

While the preferred combination of a factual message tone and a negative emotional did not result in significant differences across various demographic factors, previous research did find significant differences for age, income, and gender. An explanation suggested for these discrepancies is that the consumer landscape is evolving, and differences in demographics are

becoming less evident when it comes to consumer responses to CSR communication. However, to confirm this evolving consumer landscape, more research is needed.

5.3. Theoretical and practical implications

This study provides a significant contribution to existing research on message tone in CSR communication by confirming consumers' preference for companies with honest motives rather than perceived self-serving ones in supporting social causes (Kim & Ferguson, 2018). Consequently, the findings highlight the importance for companies utilizing CSR communication to adopt a factual message tone. Suggesting to, for example, include quantifiable metrics of the company's CSR efforts in their communication, such as the amount of plastic removed from the ocean or the numbers of trees planted, to gain favourable consumer responses. On the other hand, this study warns companies against the use of a self-promotional tone, as it is associated with feelings of suspicion and scepticism.

Next, the study also makes a significant contribution to existing research on image choice in CSR communication by verifying that consumers prefer being presented the current negative situation over being presented the ideal situation, triggering goal-oriented behaviour (Kim et al., 2021; Chung & Lee, 2017). Based on this, it is advised to companies to integrate negative emotional images in their CSR communication to gather higher consumer purchase intention. For instance, companies can use images of water or land pollution.

Moreover, this study extends prior CSR communication research by testing combinations of message tone and image choice, showing that a factual message tone with a negative emotional image leads to significantly higher purchase intention. This indicates that these CSR communication elements also work well together. The preferred combination of elements caters to consumers following either of the two routes to persuasion as outlined by the Elaboration Likelihood Model – the central route and the peripheral route – along with those who may fall somewhere in between. Given that the fusion of these routes leads to increased persuasion, it is suggested to companies to use this combination of CSR communication elements to maximize their consumers' purchase intention.

Once more, this study extends prior CSR communication research by examining the influence of CSR interest on the effect of message tone and image choice on consumers' purchase intention. It was found that an interest in CSR could lead to having a critical attitude towards companies'

CSR communication, where consumers tend to question its authenticity and sincerity. It is, therefore, critical for companies to be careful how they communicate about their CSR efforts. Hence, transparency and honesty are key. This underlines that social media is a powerful and successful tool for CSR communication as social media is considered a trustworthy mean of communication for CSR (Ali et al., 2015). Nonetheless, companies must be careful to not purposely (or unintentionally) withhold key information.

As this study suggests that the consumer landscape is evolving when it comes to consumer responses to CSR communication, this study provides new insights into the CSR communication research field. While future research is necessary to comprehensively understand this changing landscape, companies are advised to keep an eye on the dynamics of consumer responses to CSR communication on social media to ensure their communication strategy remains up to date.

5.4. Limitations and suggestions for future research

In this section, the possible shortcomings and factors that may have impacted the findings of this study are presented. In addition, suggestions for future research are made.

First of all, the study made use of a fictional company for the Instagram post to mitigate the influence of previous experiences, impressions, or opinions that consumers hold of known companies on the outcomes of this study. However, it is unclear how applicable these findings are to companies that are widely known (e.g., Nike or Apple). Therefore, it is suggested that such companies interested in understanding the effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention, conduct their own research using their brand as a case study. This will make sure the previous experiences, impressions, or opinions that consumers hold of the established brand will be taken into account.

Sampling bias could be considered another limitation of this study. Despite a simple random sampling approach was used and the demographics and social media use frequency tables demonstrate equal distribution among the groups, the participants who chose to respond to the online survey may not be representative of the broader population. Future studies must explore other sampling techniques, such as stratified sampling, to ensure representation of all parts of the population and safeguard the reliability of the results (Rahman, Tabash, Salamzadeh, Abduli & Rahaman, 2022).

Thirdly, the study was conducted in the Netherlands, resulting in a predominantly Dutch participant pool. While the study aimed to capture insights from consumers across different backgrounds, the impact of nationality on consumer responses to CSR communication could not be explored. To address this gap, future research should be conducted in various countries to examine if nationality influences the effect of message tone and image choice in CSR communication on Instagram on consumers' purchase intention.

Lastly, this study identified some unexpected or unexplainable results regarding the influence of demographic factors on the effect of message tone and image choice in CSR communication on consumers' purchase intention. Future research should delve deeper into the underlying reasons behind these findings and explore discrepancies with existing research. This will help understand why some demographic factors did (or did not) show a significant difference in consumer responses. To get hold of these underlying reasons, future research must build upon the quantitative findings of this study by integrating qualitative research methods. By, for example, holding interviews with open-ended questions (Roberts, 2020) with people from various demographic groups, future researchers can uncover nuances in how these different groups understand and respond to message tone and image choice in CSR communication on Instagram.

5.5. Conclusion

To conclude, in the current post-pandemic world, there is a pressing demand for companies to participate in CSR. Moreover, effective communication about these CSR efforts, especially on social media, is considered pivotal to gathering favourable consumer responses. This study, therefore, contributes to the literature by delving into the relationship between message tone and image choice in CSR communication on Instagram and consumers' purchase intention. The study highlighted the importance of using the right combination of CSR communication elements, combining a factual message tone with a negative emotional image, to attain favourable consumer responses. In addition, the study highlights how crucial it is to communicate about CSR efforts in a transparent and honest matter to address the critical attitude consumers with high CSR interest hold. The findings also suggest an evolving consumer landscape in responses to CSR communication, pointing out the need for further research into demographic differences.

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Appendix

Appendix A – Dutch Instagram posts survey

Group 1:   *Group 2:*
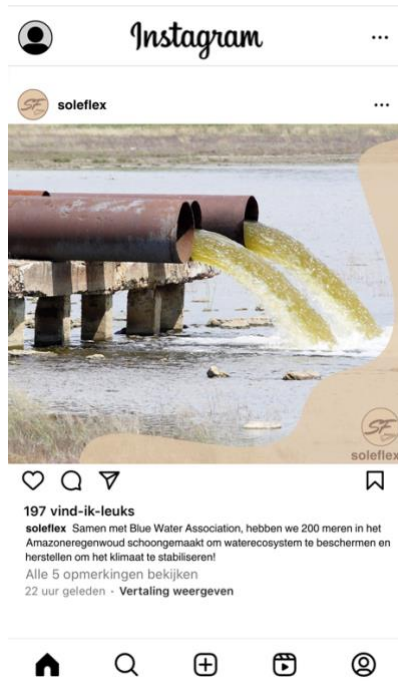
Group 3:   *Group 4:*
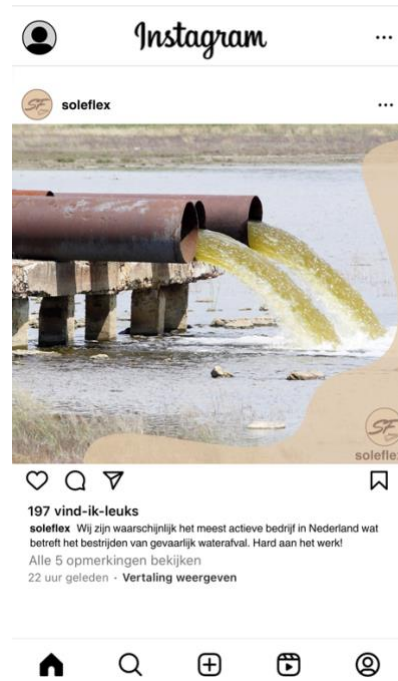
Appendix B – Used items

List of popular social media platforms from Szeto et al. (2021)

- Facebook

- Twitter

- Instagram

- TikTok

- YouTube

- Snapchat

- Others

Social media use frequency items from Ahmed (2019)

- Never (not used)

- A few times a month

- A few times a week

- About once a day

- Several times a day

- Every hour of the day

CSR interest items from Olajide (2014)

Appendix Table 1

CSR interest items (Olajide, 2014)

Original item	Adapted item
Economic responsibility	
Business should be committed to being profitable as possible	Companies should be committed to being as profitable as possible.
Business should maintain a strong competitive position.	Companies should maintain a strong competitive position.
Business should maintain a high level of operating efficiency.	Companies should maintain a high level of operating efficiency.
Legal responsibility	
Business should perform in a manner consistent with expectations of government and law.	Companies should perform in a manner consistent with expectation of government and law.
Business should be a law-abiding corporate citizen.	Companies should be law-abiding corporate citizens.
Business should provide goods and services that meet minimal legal requirements.	Companies should provide goods and services that meet minimal legal requirements.
Ethical responsibility	
Business should perform in a manner consistent with societal expectations and ethical norms	Companies should perform in a manner consistent with societal expectations and ethical norms.
Business should recognise and respect new or evolving ethical/moral norms adopted by society.	Companies should recognize and respect new or evolving ethical/moral norms adopted by society.
Business should prevent ethical norms from being compromised in order to achieve corporate goals.	Companies should prevent ethical norms from being compromised in order to achieve corporate goals.
Philanthropic responsibility	
Business should contribute resources to the community.	Companies should contribute resources to the community.
Business should perform in a manner consistent with the philanthropic and charitable expectations of society.	Companies should perform in a manner consistent with the philanthropic and charitable expectations of society.
Business should voluntarily support projects that enhance the community's quality of life.	Companies should voluntarily support projects that enhance the community's quality of life.

Purchase intention items from Coyle and Thorsten (2001)

Appendix Table 2

Purchase intention items (Coyle & Thorsten, 2001)

Original item	Adapted item
It is very likely that I will buy the product/service.	
I will purchase the product/service next time I need the product/service.	I will purchase from this company the next time I need a product/service.
I will definitely try the product/service.	I will definitely try a product/service from this company.
I will recommend the product/service to my friends.	I will recommend this company to my friends.

Message tone items from Kim (2019)

Appendix Table 3

Message tone items (Kim, 2019)

Original item	Adapted item	Intended message tone
The company's CSR messages have been based on facts.	The company's message is based on facts.	Factual
The company's CSR messages have been focusing factual information.	The company's message is focusing on factual information.	Factual
The company's CSR messages have been low-key.	Left out. Considered too difficult to comprehend for respondents.	Factual
The company's CSR messages have been too promotional.	The company's message is too promotional.	Self-promotional
The company's CSR messages have been too self-congratulatory.	The company's message is too self-congratulatory.	Self-promotional

Emotional content image items from Kim et al. (2012)

Appendix Table 4

Emotional content image items (Kim et al., 2012)

Original item	Adapted item
Positive emotions	
This ad makes me feel good.	The image makes me feel good.
This ad makes me feel happy.	The image makes me feel happy.
This ad makes me feel calm.	The image makes me feel calm.
This ad makes me feel satisfied.	The image makes me feel satisfied.
Negative emotions	
This ad makes me feel bad.	The image makes me feel bad.
This ad makes me feel sad.	The image makes me feel sad.
This ad makes me feel angry.	The image makes me feel angry.
This ad makes me feel irritated.	The image makes me feel irritated.

Appendix C – Pre-test

Introduction

Dear participant,

Thank you for participating in the pre-test for my survey! My name is Merte Lems, and I am a Master's student in Business Administration and Communication Science at the University of Twente. This pre-test is for my survey that is part of my master thesis in which I am researching how an organization communicates to its audience about Corporate Social Responsibility (CSR). It is important to read all given information carefully. This pre-test will take about 6 minutes to complete.

All retrieved data will be processed confidentially. No names will be asked to ensure anonymity. The data will be used for academic purposes only and cannot be accessed by third parties. At any point in this pre-test, you are free to withdraw from participating.

I have read the information above and understand that my data will be anonymously used for academic purposes.

- o   Yes, I consent
- o   No, I do not consent

Part 1: CSR statements

You will now first see some statements of a company about its Corporate Social Responsibility activities. After each statement, some questions will be asked about the statement. Please choose an option that best describes your opinion.

We probably are the most active company in the Netherlands when it comes down to cleaning up the nature. Working hard!

1.   The company's message is based on facts.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

2. The company's message is focusing on factual information.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The company's message is too promotional.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The company's message is too self-congratulatory.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

As a company we often look after those who are less fortunate. Always looking out for each other!

1. The company's message is based on facts.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The company's message is focusing on factual information.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The company's message is too promotional.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The company's message is too self-congratulatory.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

For World Cleanup Day, we collected 15 kilos of waste yesterday!

1. The company's message is based on facts.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The company's message is focusing on factual information.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The company's message is too promotional.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

4. The company's message is too self-congratulatory.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

We must be one of the most sustainable companies in the region. Acting sustainable is key!

1. The company's message is based on facts.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

2. The company's message is focusing on factual information.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

3. The company's message is too promotional.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

4. The company's message is too self-congratulatory.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

To limit our plastic waste, we have cut down our single-use plastic usage by 50% compared to last year!

1. The company's message is based on facts.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

2. The company's message is focusing on factual information.

◯ ◯ ◯ ◯ ◯ ◯ ◯
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

3. The company's message is too promotional.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The company's message is too self-congratulatory.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

Together with The Water Project, we have placed 5 water pumps in central Africa to give more people access to clean water!

1. The company's message is based on facts.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The company's message is focusing on factual information.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The company's message is too promotional.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The company's message is too self-congratulatory.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

Part 2: CSR images

You will now see some images of Corporate Social Responsibility activities. After each image, some questions will be asked about the image. Please choose an option that best describes your opinion.

1. The image makes me feel good.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

2. The image makes me feel happy.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

3. The image makes me feel calm.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

4. The image makes me feel satisfied.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

5. The image makes me feel bad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

6. The image makes me feel sad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

7. The image makes me feel angry.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

8. The image makes me feel irritated.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

1. The image makes me feel good.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The image makes me feel happy.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The image makes me feel calm.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The image makes me feel satisfied.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

5. The image makes me feel bad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

6. The image makes me feel sad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

7. The image makes me feel angry.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

8. The image makes me feel irritated.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

1. The image makes me feel good.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The image makes me feel happy.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The image makes me feel calm.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The image makes me feel satisfied.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

5. The image makes me feel bad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

6. The image makes me feel sad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

7. The image makes me feel angry.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

8. The image makes me feel irritated.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

1. The image makes me feel good.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

2. The image makes me feel happy.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

3. The image makes me feel calm.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

4. The image makes me feel satisfied.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

5. The image makes me feel bad.

○ Strongly disagree ○ Disagree ○ Somewhat disagree ○ Neutral ○ Somewhat agree ○ Agree ○ Strongly agree

6. The image makes me feel sad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

7. The image makes me feel angry.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

8. The image makes me feel irritated.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

1. The image makes me feel good.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The image makes me feel happy.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The image makes me feel calm.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The image makes me feel satisfied.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

5. The image makes me feel bad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

6. The image makes me feel sad.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

7. The image makes me feel angry.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

8. The image makes me feel irritated.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

1. The image makes me feel good.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

2. The image makes me feel happy.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

3. The image makes me feel calm.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

4. The image makes me feel satisfied.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

5. The image makes me feel bad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

6. The image makes me feel sad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

7. The image makes me feel angry.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

8. The image makes me feel irritated.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

Intended message tone and image choice

(Not in the actual pre-test)

Statement 1: self-promotional

Statement 2: self-promotional

Statement 3: factual

Statement 4: self-promotional

Statement 5: factual

Statement 6: factual

Picture 1: positive emotional

Picture 2: negative emotional

Picture 3: negative emotional

Picture 4: positive emotional

Picture 5: positive emotional

Picture 6: negative emotional

Appendix D – Survey

<u>**English survey**</u>

Introduction

Dear participant,

Thank you for participating in my survey! My name is Merte Lems, and I am a Master's student in Business Administration and Communication Science at the University of Twente. This survey is part of my master thesis in which I am researching Corporate Social Responsibility (CSR).

This survey consists of four (small) parts in which you are asked to indicate your agreement with several statements and answer some demographic questions. The survey will take about 5 minutes to complete. It is important to read all the given information carefully.

All retrieved data will be processed and analysed confidentially. No names will be asked to ensure anonymity. The data will be used for academic purposes only and cannot be accessed by third parties. At any point in this survey, you are free to withdraw from participating.

I have read the information above and understand that my data will be anonymously used for academic purposes.

- o   Yes, I consent
- o   No, I do not consent

Get started!

I use social media.

- o   Yes
- o   No

If answered yes, continue with the next two questions. If answered no, continue with Part 1: CSR interest.

What social media platforms do you use?

You can select multiple.

- o Facebook
- o X (Twitter)
- o Instagram
- o TikTok
- o YouTube
- o Snapchat
- o Other

How often do you use these social media platforms?

- o A few times a month
- o A few times a week
- o About once a day
- o Several times a day
- o Every hour of the day

Part 1: CSR interest

You will now first see some statements that will assess your interest in Corporate Social Responsibility (CSR). Please choose an option that best describes your opinion.

1. Companies should be committed to being as profitable as possible.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

2. Companies should maintain a strong competitive position.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

3. Companies should maintain a high level of operating efficiency.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

4. Companies should perform in a manner consistent with expectations of government and law.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

5. Companies should be law-abiding corporate citizens.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

6. Companies should provide goods and services that meet minimal legal requirements.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

7. Companies should perform in a manner consistent with societal expectations and ethical norms.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

8. Companies should recognize and respect new or evolving ethical/moral norms adopted by society.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

9. Companies should prevent ethical norms from being compromised in order to achieve corporate goals.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

10. Companies should contribute resources to the community.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

11. Companies should perform in a manner consistent with the philanthropic and charitable expectations of society.

  ○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

12. Companies should voluntarily support projects that enhance the community's quality of life.

○ Strongly disagree   ○ Disagree   ○ Somewhat disagree   ○ Neutral   ○ Somewhat agree   ○ Agree   ○ Strongly agree

Part 2: Instagram post

You will now see an Instagram post of Sole Flex. Sole Flex is a company that produces all kinds of shoes for various occasions. After the post, some questions will be asked. Please choose an option that best describes your opinion.

The participants are randomly assigned to see one of these four Instagram posts.

Instagram · soleflex — 197 likes — soleflex Together with Blue Water Association, we have cleaned 200 lakes in the Amazon Rainforest to protect and restore water ecosystems to stabilize the climate! View all 5 comments · 22 hours ago · See Translation

Instagram · soleflex — 197 likes — soleflex We probably are the most active company in the Netherlands when it comes down to battling hazardous waste. Working hard! View all 5 comments · 22 hours ago · See Translation

1. It is very likely that I will buy from this company.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

2. I will purchase from this company the next time I need a product/service.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

3. I will definitely try a product/service from this company.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

4. I will recommend this company to my friends.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

Part 3: Evaluation of the Instagram post

You will now see some statements that will assess how you perceived the Instagram post you were shown. Please choose an option that best describes your opinion.

How did you perceive the text (caption) below the image in the Instagram post?

1. The company's message is based on facts.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

2. The company's message is focusing on factual information.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

3. The company's message is too promotional.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

4. The company's message is too self-congratulatory.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

How did you perceive the image in the Instagram post?

1. The image makes me feel good.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

2. The image makes me feel happy.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

3. The image makes me feel calm.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

4. The image makes me feel satisfied.

○	○	○	○	○	○	○
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

5. The image makes me feel bad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

6. The image makes me feel sad.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

7. The image makes me feel angry.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

8. The image makes me feel irritated.

○   ○   ○   ○   ○   ○   ○
Strongly disagree   Disagree   Somewhat disagree   Neutral   Somewhat agree   Agree   Strongly agree

Part 4: Demographic questions

To complete the survey, please answer the following demographic questions.

1. What is your age?

   Open answer

2. What is your gender?

   o Male

   o Female

   o Non-binary

   o Other

   o Prefer not to say

3. What is your nationality?

   Open answer

4. What is the highest level of education you have completed?

   o Elementary school

   o High school

   o MBO (Dutch Vocational Education)

   o University of Applied Sciences (HBO)

- Bachelor's degree at University (WO)
- Master's degree at University (WO)
- Doctorate degree (e.g., PhD)

5. What is your employment status?
- Student, no side-job
- Student with side-job
- Student with part-time job
- Student with full-time job
- Part-time job
- Full-time job
- Unemployed
- Retired

6. What is your annual gross income level?
- Less than €25.000
- €25.000 – €49.999
- €50.000 – €74.999
- €75.000 – €99.999
- €100.000 – €124.999
- More than €125.000
- Prefer not to say

<u>Dutch survey</u>

Introductie

Beste deelnemer,

Bedankt voor het deelnemen aan mijn vragenlijst. Mijn naam is Merte Lems en ik ben een Master student in Business Administration en Communicatiewetenschappen aan de Universiteit Twente. Deze vragenlijst is onderdeel van mijn master scriptie waarin ik onderzoek doe naar Maatschappelijk Verantwoord Ondernemen (MVO) (ook wel bekend als Corporate Social Responsibility (CSR) in het Engels).

Deze vragenlijst bestaat uit vier (kleine) delen waarin u wordt gevraagd aan te geven in hoeverre u het eens bent met een aantal statements en een aantal demografische vragen te beantwoorden. Het duurt ongeveer 5 minuten om de vragenlijst in te vullen. Het is belangrijk dat u alle gegeven informatie aandachtig leest.

Alle ontvangen data zullen vertrouwelijk worden verwerkt en geanalyseerd. Er worden geen namen gevraagd om anonimiteit te waarborgen. De data zullen alleen worden gebruikt voor academische doeleinden en zijn niet toegankelijk voor derden. Op elk moment in deze vragenlijst bent u vrij zich terug te trekken uit deelname.

Ik heb de informatie hierboven gelezen en begrijp dat mijn data anoniem zal worden gebruikt voor academische doeleinden.
- o   Ja, ik geef toestemming
- o   Nee, ik geef geen toestemming

Om te beginnen!

Ik gebruik sociale media.
- o   Ja
- o   Nee

Als het antwoord ja is, beantwoord dan de volgende twee vragen. Als het antwoord nee is, ga dan verder met Deel 1: MVO-interesse.

Welke sociale media platformen gebruikt u?
U kunt meerdere selecteren.

- o Facebook
- o X (Twitter)
- o Instagram
- o TikTok
- o YouTube
- o Snapchat
- o Anders

Hoe vaak maakt u gebruik van deze sociale media platformen?

- o Een paar keer per maand
- o Een paar keer per week
- o Ongeveer één keer per dag
- o Meerdere keren per dag
- o Elk uur van de dag

Deel 1: MVO-interesse

U ziet nu eerst een aantal statements die uw interesse in Maatschappelijk Verantwoord Ondernemen (MVO) beoordelen. Kies alstublieft een optie die het beste bij uw mening past.

1. Bedrijven moeten zich inzetten om zo winstgevend mogelijk te zijn.

Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens
○	○	○	○	○	○	○

2. Bedrijven moeten een sterke concurrentiepositie nastreven.

Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens
○	○	○	○	○	○	○

3. Bedrijven moeten een hoog efficiency niveau nastreven.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

4. Bedrijven moeten opereren op een manier die consistent is met de verwachtingen van de overheid en wet.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

5. Bedrijven moeten gezagsgetrouwe burgers zijn.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

6. Bedrijven moeten goederen en service leveren die aan de minimale wettelijke eisen voldoen.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

7. Bedrijven moeten opereren op een manier die consistent is met verwachtingen van de maatschappij en ethische normen.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

8. Bedrijven moeten door de maatschappij geaccepteerde nieuwe of veranderende ethische/morele normen respecteren.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

9. Bedrijven moeten voorkomen dat ethische normen in gevaar worden gebracht om bedrijfsdoelstellingen na te streven.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

10. Bedrijven moeten bijdragen aan het verschaffen van middelen aan de gemeenschap.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

11. Bedrijven moeten opereren op een manier die consistent is met de verwachtingen van de maatschappij als het gaat om filantropie of liefdadigheid.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

12. Bedrijven moeten vrijwillig projecten ondersteunen die de levenskwaliteit van de gemeenschap verbeteren.

○ Volledig oneens   ○ Oneens   ○ Enigzins oneens   ○ Neutraal   ○ Enigzins eens   ○ Eens   ○ Volledig eens

Deel 2: Instagram post

U ziet nu een Instagram post van Sole Flex. Sole Flex is een bedrijf dat allerlei soorten schoenen produceert voor verschillende gelegenheden. Na deze post zullen er enkele vragen gesteld worden. Kies alstublieft een optie die het beste bij uw mening past.

De respondenten krijgen willekeurig een van de volgende vier Instagram post toegewezen.
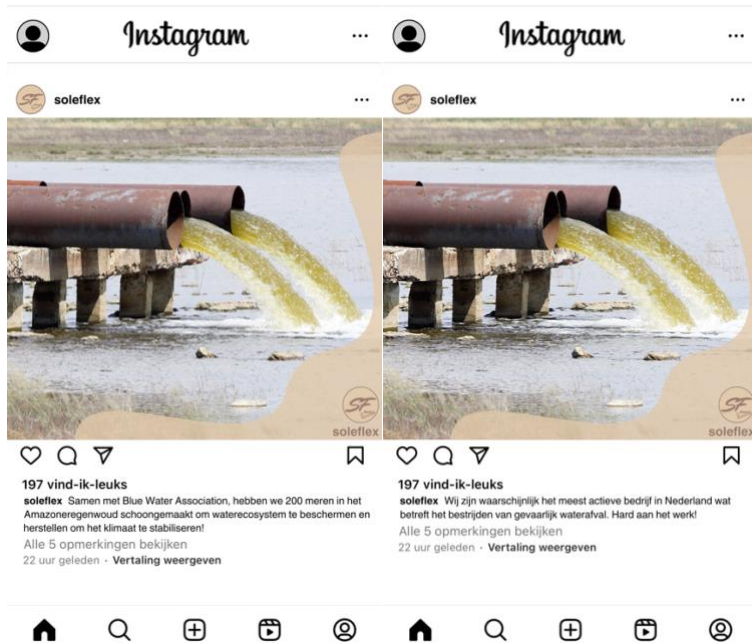
1. Het is zeer waarschijnlijk dat ik bij dit bedrijf zal kopen.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

2. Ik ga van dit bedrijf kopen de volgende keer dat ik een product/service nodig heb.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

3. Ik ga zeker een product/service van dit bedrijf proberen.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

4. Ik zal dit bedrijf aanraden aan mijn vrienden.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

Deel 3: Evaluatie van de Instagram post

U ziet nu een aantal statements die gaan over de Instagram die u zojuist heeft gezien. Kies alstublieft een optie die het beste bij uw mening past.

Hoe heeft u de tekst (caption) onder het plaatje ervaren?

1. Het bericht van het bedrijf is gebaseerd op feiten.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

2. Het bericht van het bedrijf focust op feitelijke informatie.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

3. Het bericht van het bedrijf is te veel gericht op promotie.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

4. In het bericht hemelt het bedrijf zichzelf te veel op.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

Hoe heeft u de afbeelding van Instagram post ervaren?

1. De afbeelding geeft mij een goed gevoel.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

2. De afbeelding geeft mij een blij gevoel.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

3. De afbeelding geeft mij een kalm gevoel.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

4. De afbeelding geeft mij een tevreden gevoel.

○	○	○	○	○	○	○
Volledig oneens	Oneens	Enigzins oneens	Neutraal	Enigzins eens	Eens	Volledig eens

5. De afbeelding geeft mij een slecht gevoel.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

6. De afbeelding geeft mij een verdrietig gevoel.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

7. De afbeelding geeft mij een boos gevoel.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

8. De afbeelding geeft mij een geïrriteerd gevoel.

○   ○   ○   ○   ○   ○   ○
Volledig oneens   Oneens   Enigzins oneens   Neutraal   Enigzins eens   Eens   Volledig eens

Deel 4: Demografische vragen

Tot slot vraag ik u om een aantal demografische vragen te beantwoorden.

1. Wat is uw leeftijd?

    Open antwoord

2. Wat is uw geslacht?

    o   Man

    o   Vrouw

    o   Non-binair

    o   Anders

    o   Zeg ik liever niet

3. Wat is uw nationaliteit?

    Open antwoord

4. Wat is het hoogste opleidingsniveau dat u heeft afgerond?

    o   Basisschool

    o   Middelbare school

    o   MBO

    o   HBO

    o   Bachelor diploma op de universiteit (WO)

- o Masterdiploma op de universiteit (WO)
- o Doctoraat (bv. PhD)

5. Wat is uw arbeidsstatus?
   - o Student, geen bijbaan
   - o Student met bijbaan
   - o Student met parttimebaan
   - o Student met fulltimebaan
   - o Parttimebaan
   - o Fulltimebaan
   - o Werkloos
   - o Gepensioneerd

6. Wat is uw bruto jaarinkomen?
   - o Minder dan €25,000
   - o €25,000 – €49,999
   - o €50,000 – €74,999
   - o €75,000 – €99,999
   - o €100,000 – €124,999
   - o Meer dan €125,000
   - o Zeg ik liever niet

Appendix E – Outlier analysis

Outlier analysis type 1

Appendix Figure 1

Outliers group 1

	Profitable	Competitive	Operating_efficiency	Law_expectations	Law-abiding_citizens	Minimal_legal_requirements
19	5	5	5	7	6	7
85	2	5	5	6	6	2
157	2	6	7	6	6	2
167	2	5	6	6	5	2

	Societal_expectations_ethical_norms	New_evolving_ethical_moral_norms	Compromised_ethical_norms	Contribute_resources
19	5	5	2	5
85	2	4	5	2
157	7	6	6	4
167	7	6	7	6

	Philantrophic_charitable_expectations	Quality_of_life_projects	Group1_likelihood_buying	Group1_purchase_next_time	Group1_try
19	5	6	3	3	5
85	4	2	2	2	2
157	4	2	6	4	4
167	5	5	5	5	4

	Group1_recommend	Statement_facts	Statement_factual_information	Statement_promotional_rev	Statement_selfcongratulatory_rev
19	4	6	6	6	6
85	2	2	3	2	3
157	6	6	4	6	6
167	4	5	5	2	4

	Image_good	Image_happy	Image_calm	Image_satisfied	Image_bad_rev	Image_sad_rev	Image_angry_rev	Image_irritated_rev
19	4	5	3	6	7	7	7	7
85	2	2	2	2	4	6	4	3
157	6	6	4	4	6	6	6	6
167	5	4	3	5	4	4	5	6

Appendix Figure 2

Outlier group 2

	Profitable	Competitive	Operating_efficiency	Law_expectations	Law-abiding_citizens	Minimal_legal_requirements
105	7	6	6	2	1	5
125	3	4	5	5	4	2
166	5	6	3	2	5	7
174	3	3	2	2	2	2
191	2	6	6	7	5	6

	Societal_expectations_ethical_norms	New_evolving_ethical_moral_norms	Compromised_ethical_norms	Contribute_resources
105	6	7	4	6
125	4	3	5	5
166	3	2	3	2
174	6	2	2	2
191	2	6	6	6

	Philantrophic_charitable_expectations	Quality_of_life_projects	Group2_likelihood_buying	Group2_purchase_next_time	Group2_try
105	4	6	4	4	4
125	2	2	2	2	3
166	1	2	4	2	2
174	2	2	2	2	2
191	6	7	2	3	3

	Group2_recommend	Statement_facts	Statement_factual_information	Statement_promotional_rev	Statement_selfcongratulatory_rev
105	4	4	4	2	7
125	4	4	4	3	2
166	2	4	4	3	2
174	2	2	2	2	2
191	4	2	2	2	5

	Image_good	Image_happy	Image_calm	Image_satisfied	Image_bad_rev	Image_sad_rev	Image_angry_rev	Image_irritated_rev
105	4	4	4	1	3	4	4	3
125	4	5	4	5	4	5	4	3
166	2	2	2	1	3	6	6	1
174	6	2	2	6	6	6	6	6
191	5	3	6	6	7	7	7	7

Appendix Figure 3

Outliers group 3

	Profitable	Competitive	Operating_efficiency	Law_expectations	Law-abiding_citizens	Minimal_legal_requirements
56	2	5	6	7	7	2

	Societal_expectations_ethical_norms	New_evolving_ethical_moral_norms	Compromised_ethical_norms	Contribute_resources
56	7	7	7	7

	Philantrophic_charitable_expectations	Quality_of_life_projects	Group3_likelihood_buying	Group3_purchase_next_time	Group3_try
56	6	7	6	6	6

	Group3_recommend	Statement_facts	Statement_factual_information	Statement_promotional_rev	Statement_selfcongratulatory_rev
56	4	6	6	1	2

	Image_good	Image_happy	Image_calm	Image_satisfied	Image_bad_rev	Image_sad_rev	Image_angry_rev	Image_irritated_rev
56	6	6	6	6	6	6	6	7

Appendix Figure 4

Outliers group 4

	Profitable	Competitive	Operating_efficiency	Law_expectations	Law-abiding_citizens	Minimal_legal_requirements
18	6	6	6	6	6	6
75	1	7	1	7	7	7
104	3	3	5	5	5	5
160	4	5	3	2	2	1
163	5	5	6	6	6	7

	Societal_expectations_ethical_norms	New_evolving_ethical_moral_norms	Compromised_ethical_norms	Contribute_resources
18	6	6	7	6
75	7	7	5	1
104	4	3	6	5
160	6	5	4	5
163	2	4	5	2

	Philantrophic_charitable_expectations	Quality_of_life_projects	Group4_likelihood_buying	Group4_purchase_next_time	Group4_try
18	5	7	6	6	6
75	5	1	1	1	1
104	7	5	6	6	6
160	2	3	3	3	4
163	2	2	2	2	2

	Group4_recommend	Statement_facts	Statement_factual_information	Statement_promotional_rev	Statement_selfcongratulatory_rev
18	5	7	5	4	4
75	1	1	1	7	2
104	3	5	4	6	5
160	4	4	3	4	4
163	2	2	3	3	2

	Image_good	Image_happy	Image_calm	Image_satisfied	Image_bad_rev	Image_sad_rev	Image_angry_rev	Image_irritated_rev
18	6	4	5	5	6	4	6	6
75	1	1	1	1	7	7	7	7
104	3	7	2	5	6	4	4	3
160	4	4	3	3	4	4	4	5
163	1	1	1	1	2	2	2	2

The outlier analyses in Appendix Figure 1 to 4 focuses on whether a respondent is considered an outlier compared to the other respondents based on a threshold of 3. Hereby was chosen for a threshold of 3 as this is commonly used. Although all groups show some outliers, these respondents do show giving different responses to different questions. This indicates that they thought about what to fill in rather than just providing a random answer.

Outlier analysis type 2

Appendix Figure 5

Number of respondents who provide the same answers for each question

```
 [1] Language                             Consent                                Social_media_use
 [4] Social_media_platforms              Social_media_use_frequency             Profitable
 [7] Competitive                         Operating_efficiency                    CSR_economic
[10] Law_expectations                    Law-abiding_citizens                   Minimal_legal_requirements
[13] CSR_legal                           Societal_expectations_ethical_norms    New_evolving_ethical_moral_norms
[16] Compromised_ethical_norms           CSR_ethical                            Contribute_resources
[19] Philantrophic_charitable_expectations Quality_of_life_projects             CSR_philantrophic
[22] CSR_interest_mean                   Group1_likelihood_buying               Group1_purchase_next_time
[25] Group1_try                          Group1_recommend                       Group2_likelihood_buying
[28] Group2_purchase_next_time           Group2_try                             Group2_recommend
[31] Group3_likelihood_buying            Group3_purchase_next_time              Group3_try
[34] Group3_recommend                    Group4_likelihood_buying               Group4_purchase_next_time
[37] Group4_try                          Group4_recommend                       Statement_facts
[40] Statement_factual_information       Statement_promotional_rev              Statement_selfcongratulatory_rev
[43] Statement_mean                      Image_good                             Image_happy
[46] Image_calm                          Image_satisfied                        Image_bad_rev
[49] Image_sad_rev                       Image_angry_rev                        Image_irritated_rev
[52] Image_mean                          Age                                    Age_cat
[55] Gender                              Nationality                            Education
[58] Employment_status                   Income
<0 rows> (or 0-length row.names)
```

The outlier analysis in Appendix Figure 5 focuses on whether a respondent chose the same answer for the different questions. The data shows that there are not any respondents that consistently chose the same answer. Meaning no outliers can be identified.

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Appendix F – Influence of demographic factors for purchase intention of different message tones

Gender

Appendix Table 9

Purchase intention for the different message tones, categorized by gender

	Factual message tone	Self-promotional message tone
Mean (SD) male	3.55 (1.34)	2.88 (1.16)
Mean (SD) female	3.64 (1.28)	3.21 (1.29)

Appendix Table 10

Difference in mean purchase intention for the different message tones, categorized by gender

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Male – Female	0.09	0.74	0.33	0.17

Appendix Table 9 shows the mean purchase intention of respondents who were presented with a factual message tone versus a self-promotional message tone, categorized by gender. Appendix Table 10 shows the difference in mean for gender. For both a factual message tone as well as a self-promotional message tone, no significant differences between the genders can be found as the p-values are greater than the conventional significance level of 0.05.

Age

Appendix Table 11

Purchase intention for the different message tones, categorized by age

	Factual message tone	Self-promotional message tone
Mean (SD) 15-29	3.35 (1.38)	2.76 (1.23)
Mean (SD) 30-45	3.69 (1.02)	3.10 (1.24)
Mean (SD) 46-64	3.63 (1.36)	3.32 (1.17)
Mean (SD) 65-99	5.75 (0.35)	3.88 (2.65)

Appendix Table 12

Difference in mean purchase intention for the different message tones, categorized by age

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
30-45 – 15-29	0.35	0.71	0.34	0.74
46-64 – 15-29	0.28	0.78	0.56	0.13
65-99 – 15-29	2.40	0.05*	1.11	0.57
46-64 – 30-45	-0.07	1.00	0.22	0.92
65-99 – 30-45	2.06	0.12	0.77	0.82
65-99 – 46-64	2.12	0.10	0.55	0.92

* $p \leq 0.05$

Appendix Table 111 shows the mean purchase intention of respondents who were presented with a factual message tone versus a self-promotional message tone, categorized by age. Appendix Table 12 shows the difference in mean for age. A significant difference in purchase intention for a factual message tone can be found between respondents with an age of 15-29 and respondents with an age of 65-99 as the p-value is equal to the conventional significance level of 0.05. Appendix Figure 6 shows a visualization of the categorization by age for a factual message tone. For a self-promotional message tone, no significant difference between ages can be found.

Appendix Figure 6

Bar graph of the categorization of age for a factual message tone

Mean Factual Purchase Intention by Age

Educational level

Appendix Table 13

Purchase intention for the different message tones, categorized by educational level

	Factual message tone	Self-promotional message tone
Mean (SD) elementary school	/	/
Mean (SD) high school	3.75 (1.54)	3.18 (1.63)
Mean (SD) MBO (Dutch Vocational Education)	3.61 (1.14)	3.34 (1.34)
Mean (SD) University of Applied Sciences (HBO)	3.62 (1.29)	3.13 (1.11)
Mean (SD) Bachelor's degree at University (WO)	3.36 (1.81)	2.93 (1.45)
Mean (SD) Master's degree at University (WO)	3.47 (1.16)	2.52 (0.98)
Mean (SD) Doctorate degree (e.g., PhD)	4.33 (1.04)	/

Appendix Table 14

Difference in mean purchase intention for the different message tones, categorized by education level

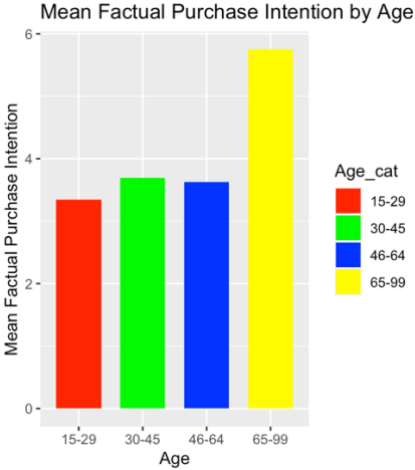|	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
MBO (Dutch Vocational Education) – High school	-0.14	1.00	0.17	1.00
University of Applied Sciences (HBO) – High school	-0.13	1.00	-0.05	1.00
Bachelor's degree at University (WO) – High school	-0.39	0.99	-0.25	0.99
Master's degree at University (WO) – High school	-0.28	1.00	-0.66	0.70

Appendix Table 14 (continued)

Difference in mean purchase intention for the different message tones, categorized by educational level (continued)

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Doctorate degree (e.g., PhD) – High school	0.58	0.99	/	/
University of Applied Sciences (HBO) – MBO (Dutch Vocational Education)	0.01	1.00	-0.21	0.96
Bachelor's degree at University (WO) – MBO (Dutch Vocational Education)	-0.25	1.00	-0.41	0.86
Master's degree at University (WO) – MBO (Dutch Vocational Education)	-0.14	1.00	-0.82	0.29
Doctorate degree (e.g., PhD) – MBO (Dutch Vocational Education)	0.72	0.95	/	/
Bachelor's degree at University (WO) – University of Applied Sciences (HBO)	-0.26	0.99	-0.20	0.98
Master's degree at University (WO) – University of Applied Sciences (HBO)	-0.15	1.00	-0.61	0.48
Doctorate degree (e.g., PhD) – University of Applied Sciences (HBO)	0.71	0.94	/	/

Appendix Table 14 (continued)

Difference in mean purchase intention for the different message tones, categorized by educational level (continued)

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Master's degree at University (WO) – Bachelor's degree at University (WO)	0.11	1.00	-0.41	0.90
Doctorate degree (e.g., PhD) – Bachelor's degree at University (WO)	0.97	0.86	/	/
Doctorate degree at (e.g., PhD) – Master's degree at University (WO)	0.86	0.90	/	/

Appendix Table 13 shows the mean purchase intention of respondents who were presented with a factual message tone versus a self-promotional message tone, categorized by educational level. Appendix Table 14 shows the difference in mean for educational level. For both a factual message tone as well as a self-promotional message tone, no significant differences between educational levels can be found as the p-values are greater than the conventional significance level of 0.05.

Employment status

Appendix Table 15

Purchase intention for the different message tones, categorized by employment status

	Factual message tone	Self-promotional message tone
Mean (SD) student, no side-job	2.88 (0.88)	2.15 (0.99)
Mean (SD) student with side-job	3.21 (1.29)	2.75 (1.38)
Mean (SD) student with part-time job	3.16 (1.35)	3.14 (1.11)
Mean (SD) student with full-time job	/	2.38 (0.18)
Mean (SD) part-time job	3.66 (1.37)	3.46 (1.28)
Mean (SD) full-time job	3.68 (1.29)	2.96 (1.12)
Mean (SD) unemployed	3.75 (0.35)	4.17 (2.10)
Mean (SD) retired	5.00 (1.32)	3.88 (2.65)

Appendix Table 16

Difference in mean purchase intention for the different message tones, categorized by employment status

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Student with side-job – Student, no side-job	0.34	1.00	0.60	0.98
Student with part-time job – Student, no side-job	0.28	1.00	0.99	0.84
Student with full-time job – Student, no side-job	/	/	0.23	1.00
Part-time job – Student, no side-job	0.78	0.98	1.31	0.33
Full-time job – Student, no side-job	0.80	0.97	0.81	0.82
Unemployed – Student, no side-job	0.88	0.99	2.02	0.29
Retired – Student, no side-job	2.13	0.52	1.73	0.66

Appendix Table 16 (continued)

Difference in mean purchase intention for the different message tones, categorized by employment status (continued)

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Student with part-time job – Student with side-job	-0.06	1.00	0.39	1.00
Student with full-time job – Student with side-job	/	/	-0.38	1.00
Part-time job – Student with side-job	0.45	0.95	0.71	0.78
Full-time job – Student with side-job	0.46	0.90	0.21	1.00
Unemployed – Student with side-job	0.54	1.00	1.42	0.62
Retired – Student with side-job	1.79	0.30	1.13	0.92
Student with full-time job – Student with part-time job	/	/	-0.77	0.99
Part-time job – Student with part-time job	0.50	0.96	0.32	1.00
Full-time job – student with part-time job	0.52	0.93	-0.18	1.00
Unemployed – Student with part-time job	0.59	1.00	1.02	0.91
Retired – Student with part-time job	1.84	0.33	0.73	0.99
Part-time job – Student with full-time job	/	/	1.09	0.91
Full-time job – Student with full-time job	/	/	0.58	1.00

Appendix Table 16 (continued)

Difference in mean purchase intention for the different message tones, categorized by employment status (continued)

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
Unemployed – Student with full-time job	/	/	1.79	0.71
Retired – Student with full-time job	/	/	1.50	0.91
Full-time job – Part-time job	0.02	1.00	-0.50	0.65
Unemployed – Part-time job	0.09	1.00	0.71	0.98
Retired – Part-time job	1.34	0.60	0.42	1.00
Unemployed – Full-time job	0.07	1.00	1.21	0.67
Retired – Full-time job	1.32	0.57	0.92	0.96
Retired – Unemployed	1.25	0.93	-0.29	1.00

Appendix Table 16 shows the mean purchase intention of respondents who were presented with a factual message tone versus a self-promotional message tone, categorized by employment status. Appendix Table 14 shows the difference in mean for employment status. For both a factual message tone as well as a self-promotional message tone, no significant differences between employment status can be found as the p-values are greater than the conventional significance level of 0.05.

Income

Appendix Table 17

Purchase intention for the different message tones, categorized by income

	Factual message tone	Self-promotional message tone
Mean (SD) less than €25.000	3.27 (1.29)	2.83 (1.30)
Mean (SD) €25.000-€49.999	3.70 (1.33)	3.14 (1.30)
Mean (SD) €50.000-€74.999	4.29 (1.46)	3.03 (1.22)
Mean (SD) €75.000-€99.999	3.50 (1.29)	3.67 (1.23)
Mean (SD) €100.00-€124.999	3.50 (1.87)	2.56 (0.43)
Mean (SD) more than €125.000	3.34 (1.00)	3.25 (1.13)
Mean (SD) prefer not to say	3.77 (1.11)	3.28 (1.31)

Appendix Table 18

Difference in mean purchase intention for the different message tones, categorized by income

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
€25.000-€49.999 – Less than €25.00	0.44	0.90	0.32	0.96
€50.000-€74.999 – Less than €25.000	1.02	0.20	0.20	1.00
€75.000-€99.999 – Less than €25.000	0.23	1.00	0.84	0.55
€100.000-€124.999 – Less than €25.000	0.23	1.00	-0.27	1.00
More than €125.000 – Less than €25.000	0.07	1.00	0.42	0.98
Prefer not to say – Less than €25.000	0.51	0.92	0.45	0.95
€50.000-€74.999 – €25.000-€49.999	0.58	0.84	-0.12	1.00
€75.000-€99.999 – €25.000-€49.999	-0.20	1.00	0.52	0.93
€100.000-€124.999 – €25.000-€49.999	-0.20	1.00	-0.58	0.97

Appendix Table 18 (continued)

Difference in mean purchase intention for the different message tones, categorized by income (continued)

	Factual message tone	P-value factual message tone	Self-promotional message tone	P-value self-promotional message tone
More than €125.000 – €25.000-€49.999	-0.36	0.99	0.11	1.00
Prefer not to say – €25.000-€49.999	0.07	1.00	0.13	1.00
€75.000-€99.999 – €50.000-€74.999	-0.79	0.73	0.64	0.85
€100.000-€124.999 – €50.000-€74.999	-0.79	0.93	-0.46	0.99
More than €125.000 – €50.000-€74.999	-0.94	0.54	0.23	1.00
Prefer not to say – €50.000-€74.999	-0.51	0.96	0.25	1.00
€100.000-€124.999 – €75.000-€99.999	<0.01	1.00	-1.10	0.75
More than €125.000 – €75.000-€99.999	-0.16	1.00	-0.42	0.99
Prefer not to say – €75.000-€99.999	0.27	1.00	-0.39	0.99
More than €125.000 – €100.000-124.999	-0.16	1.00	0.69	0.97
Prefer not to say – €100.000-€124.999	0.27	1.00	0.71	0.96
Prefer not to say – More than €125.00	0.43	0.99	0.03	1.00

Appendix Table 18 shows the mean purchase intention of respondents who were presented with a factual message tone versus a self-promotional message tone, categorized by income. Appendix Table 14 shows the difference in mean for income. For both a factual message tone as well as a self-promotional message tone, no significant differences between income can be found as the p-values are greater than the conventional significance level of 0.05.

Appendix G – Influence of demographic factors for purchase intention of different images

<u>**Gender**</u>

Appendix Table 19

Purchase intention for the different images, categorized by gender

	Negative emotional image	Positive emotional image
Mean (SD) male	3.49 (1.41)	2.96 (1.13)
Mean (SD) female	3.60 (1.43)	3.21 (1.13)

Appendix Table 20

Difference in mean purchase intention for the different images, categorized by gender

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
Male – Female	0.11	0.70	0.26	0.25

Appendix Table 20 shows the mean purchase intention of respondents who were presented with a negative emotional image versus a positive emotional image, categorized by gender. Appendix Table 20 shows the difference in mean for gender. For both a negative emotional image as well as a positive emotional image, no significant differences between the genders can be found as the p-values are greater than the conventional significance level of 0.05.

Age

Appendix Table 21

Purchase intention for the different images, categorized by age

	Negative emotional image	Positive emotional image
Mean (SD) 15-29	3.30 (1.50)	2.77 (1.11)
Mean (SD) 30-45	3.55 (1.24)	3.40 (1.07)
Mean (SD) 46-64	3.59 (1.36)	3.30 (1.12)
Mean (SD) 65-99	5.75 (0.25)	2.00 (NA*)

* Too little data to calculate

Appendix Table 22

Difference in mean purchase intention for the different images, categorized by age

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
30-45 – 15-29	0.25	0.91	0.63	0.10
46-64 – 15-29	0.29	0.77	0.52	0.14
65-99 – 15-29	2.45	0.02*	-0.77	0.89
46-64 – 30-45	0.04	1.00	-0.10	0.98
65-99 – 30-45	2.20	0.05*	-1.40	0.57
65-99 – 46-64	2.16	0.04*	-1.30	0.63

* $p \leq 0.05$

Appendix Table 22 shows the mean purchase intention of respondents who were presented with a negative emotional image versus a positive emotional image, categorized by age. Appendix Table 22 shows the difference in mean for age. Significant differences can be found between respondents aged 15-29 and respondents aged 65-99 (p-value is 0.02), between respondents aged 30-45 and respondents aged 65-99 (p-value is 0.05), and between respondents aged 46-64 and respondents aged 65-99 (p-value is 0.04) as the p-values are lower than the conventional significant level of 0.05. Appendix Figure 7 shows a visualization of the categorization by age for a negative emotional image.

Appendix Figure 7

Bar graph of the categorization of age for a negative emotional image

Educational level

Appendix Table 23

Purchase intention for the different images, categorized by educational level

	Negative emotional image	Positive emotional image
Mean (SD) elementary school	/	/
Mean (SD) high school	3.92 (1.53)	2.94 (1.53)
Mean (SD) MBO (Dutch Vocational Education)	3.58 (1.41)	3.32 (1.07)
Mean (SD) University of Applied Sciences (HBO)	3.57 (1.33)	3.15 (1.07)
Mean (SD) Bachelor's degree at University (WO)	3.54 (1.88)	2.73 (1.23)
Mean (SD) Master's degree at University (WO)	3.02 (1.25)	3.06 (1.14)
Mean (SD) Doctorate degree (e.g., PhD)	4.75 (1.06)	3.50 (NA*)

* Too little data to calculate

Appendix Table 24

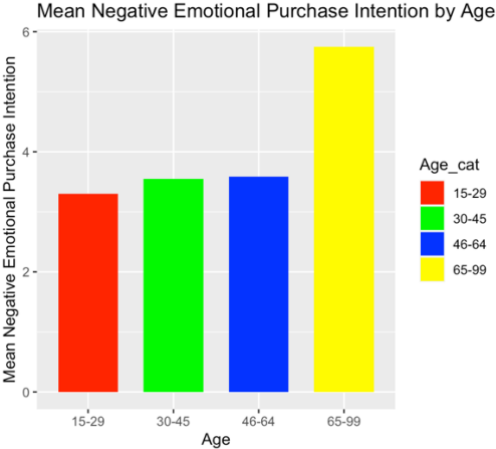*Difference in mean purchase intention for the different images, categorized by education level*

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
MBO (Dutch Vocational Education) – High school	-0.34	0.99	0.38	0.96
University of Applied Sciences (HBO) – High school	-0.34	0.98	0.21	1.00
Bachelor's degree at University (WO) – High school	-0.38	0.99	-0.21	1.00
Master's degree at University (WO) – High school	-0.90	0.65	0.11	1.00
Doctorate degree (e.g., PhD) – High school	0.83	0.97	0.56	1.00

Appendix Table 24 (continued)

Difference in mean purchase intention for the different images, categorized by education level (continued)

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
University of Applied Sciences (HBO) – MBO (Dutch Vocational Education)	-<0.01	1.00	-0.17	0.99
Bachelor's degree at University (WO) – MBO (Dutch Vocational Education)	-0.03	1.00	-0.59	0.69
Master's degree at University (WO) – MBO (Dutch Vocational Education)	-0.56	0.86	-0.26	0.98
Doctorate degree (e.g., PhD) – MBO (Dutch Vocational Education)	1.18	0.86	0.18	1.00
Bachelor's degree at University (WO) – University of Applied Sciences (HBO)	-0.03	1.00	-0.42	0.83
Master's degree at University (WO) – University of Applied Sciences (HBO)	-0.56	0.77	-0.10	1.00
Doctorate degree (e.g., PhD) – University of Applied Sciences (HBO)	1.18	0.85	0.35	1.00
Master's degree at University (WO) – Bachelor's degree at University (WO)	-0.52	0.93	0.33	0.97

Appendix Table 24 (continued)

Difference in mean purchase intention for the different images, categorized by education level (continued)

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
Doctorate degree (e.g., PhD) – Bachelor's degree at University (WO)	1.21	0.86	0.77	0.99
Doctorate degree at (e.g., PhD) – Master's degree at University (WO)	1.73	0.57	0.44	1.00

Appendix Table 23 shows the mean purchase intention of respondents who were presented with a negative emotional image versus a positive emotional image, categorized by educational level. Appendix Table 24 shows the difference in mean for educational level. For both a negative emotional image as well as a positive emotional image, no significant differences between educational levels can be found as the p-values are greater than the conventional significance level of 0.05.

Employment status

Appendix Table 25

Purchase intention for the different images, categorized by employment status

	Negative emotional image	Positive emotional image
Mean (SD) student, no side-job	2.88 (0.88)	2.15 (0.99)
Mean (SD) student with side-job	3.45 (1.63)	2.67 (0.91)
Mean (SD) student with part-time job	3.50 (1.11)	2.84 (1.26)
Mean (SD) student with full-time job	2.25 (NA*)	2.50 (NA*)
Mean (SD) part-time job	3.55 (1.49)	3.55 (1.14)
Mean (SD) full-time job	3.49 (1.39)	3.11 (1.07)
Mean (SD) unemployed	3.63 (1.45)	5.50 (NA*)
Mean (SD) retired	5.19 (1.14)	2.00 (NA*)

* Too little data to calculate

Appendix Table 26

Difference in mean purchase intention for the different images, categorized by employment status

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
Student with side-job – Student, no side-job	0.58	1.00	0.52	0.98
Student with part-time job – Student, no side-job	0.63	1.00	0.69	0.93
Student with full-time job – Student, no side-job	-0.63	1.00	0.35	1.00
Part-time job – Student, no side-job	0.68	1.00	1.40	0.13
Full-time job – Student, no side-job	0.62	1.00	0.96	0.50
Unemployed – Student, no side-job	0.75	1.00	3.35	0.08
Retired – Student, no side-job	2.31	0.52	-0.15	1.00

Appendix Table 26 (continued)

Difference in mean purchase intention for the different images, categorized by employment status (continued)

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
Student with part-time job – Student with side-job	0.05	1.00	0.18	1.00
Student with full-time job – Student with side-job	-1.20	0.99	-0.17	1.00
Part-time job – Student with side-job	0.10	1.00	0.89	0.25
Full-time job – Student with side-job	0.04	1.00	0.44	0.88
Unemployed – Student with side-job	0.18	1.00	2.83	0.17
Retired – Student with side-job	1.74	0.51	-0.67	1.00
Student with full-time job – Student with part-time job	-1.25	0.98	-0.34	1.00
Part-time job – Student with part-time job	0.05	0.99	0.71	0.70
Full-time job – student with part-time job	-0.01	0.99	0.26	1.00
Unemployed – Student with part-time job	0.13	0.54	2.66	0.25
Retired – Student with part-time job	1.69	1.00	-0.84	0.99
Part-time job – Student with full-time job	1.30	1.00	1.05	0.97
Full-time job – Student with full-time job	1.24	0.36	0.61	1.00
Unemployed – Student with full-time job	1.38	1.00	3.00	0.46

Appendix Table 26 (continued)

Difference in mean purchase intention for the different images, categorized by employment status (continued)

	Negative emotional image	P-value negative emotional image	Positive emotional image	P-value positive emotional image
Retired – Student with full-time job	2.94	0.26	-0.50	1.00
Full-time job – Part-time job	-0.06	0.74	-0.44	0.66
Unemployed – Part-time job	0.07	1.00	1.95	0.59
Retired – Part-time job	1.63	0.60	-1.55	0.82
Unemployed – Full-time job	0.13	1.00	2.39	0.31
Retired – Full-time job	1.70	0.57	-1.11	0.96
Retired – Unemployed	1.56	0.93	-3.50	0.26

Appendix Table 25 shows the mean purchase intention of respondents who were presented with a negative emotional image versus a positive emotional image, categorized by employment status. Appendix Table 26 shows the difference in mean for employment status. For both a negative emotional image as well as a positive emotional image, no significant differences between employment status can be found as the p-values are greater than the conventional significance level of 0.05.

Income

Appendix Table 27

Purchase intention for the different images, categorized by income

	Negative emotional image	Positive emotional image
Mean (SD) less than €25.000	3.39 (1.48)	2.76 (1.09)
Mean (SD) €25.000-€49.999	3.50 (1.54)	3.31 (1.15)
Mean (SD) €50.000-€74.999	4.18 (1.34)	2.83 (1.24)
Mean (SD) €75.000-€99.999	3.65 (1.49)	3.47 (0.81)
Mean (SD) €100.00-€124.999	3.04 (1.47)	3.00 (1.41)
Mean (SD) more than €125.000	3.53 (1.01)	3.06 (1.04)
Mean (SD) prefer not to say	3.18 (1.32)	3.93 (0.98)

Appendix Table 28

Difference in purchase intention for the different images, categorized by income

	Negative emotional mage	P-value negative emotional image	Positive emotional image	P-value positive emotional image
€25.000-€49.999 – Less than €25.00	0.11	1.00	0.55	0.45
€50.000-€74.999 – Less than €25.000	0.79	0.52	0.07	1.00
€75.000-€99.999 – Less than €25.000	0.26	1.00	0.71	0.63
€100.000-€124.999 – Less than €25.000	-0.35	1.00	0.24	1.00
More than €125.000 – Less than €25.000	0.14	1.00	0.30	0.99
Prefer not to say – Less than €25.000	-0.21	1.00	1.17	0.05
€50.000-€74.999 – €25.000-€49.999	0.68	0.74	-0.48	0.80
€75.000-€99.999 – €25.000-€49.999	0.15	1.00	0.16	1.00
€100.000-€124.999 – €25.000-€49.999	-0.46	0.99	-0.31	1.00
More than €125.000 – €25.000-€49.999	0.03	1.00	-0.25	1.00

Difference in purchase intention for the different images, categorized by income (continued)

Prefer not to say – €25.000-€49.999	-0.32	1.00	0.62	0.72
€75.000-€99.999 – €50.000-€74.999	-0.53	0.95	0.64	0.81
€100.000-€124.999 – €50.000-€74.999	-1.14	0.60	0.17	1.00
More than €125.000 – €50.000-€74.999	-0.66	0.90	0.23	1.00
Prefer not to say – €50.000-€74.999	-1.00	0.51	1.10	0.17
€100.000-€124.999 – €75.000-€99.999	-0.60	0.98	-0.47	1.00
More than €125.000 – €75.000-€99.999	-0.12	1.00	-0.41	0.99
Prefer not to say – €75.000-€99.999	-0.46	0.99	0.46	0.97
More than €125.000 – €100.000-124.999	0.48	0.99	0.06	1.00
Prefer not to say – €100.000-€124.999	0.14	1.00	0.93	0.92
Prefer not to say – More than €125.00	-0.34	1.00	0.87	0.58

Appendix Table 27 shows the mean purchase intention of respondents who were presented with a negative emotional image versus a positive emotional image, categorized by income. Appendix Table 28 shows the difference in mean for income. For both a negative emotional image as well as a positive emotional image, no significant differences between income can be found as the p-values are greater than the conventional significance level of 0.05.

Appendix H – Influence of demographic factors for purchase intention of the different groups (message tone X image choice)

<u>**Gender**</u>

Appendix Table 29

Purchase intention for group 1, 2, 3, and 4, categorized by gender

	Group 1	Group 2	Group 3	Group 4
Mean (SD) male	3.24 (1.09)	2.65 (1.11)	3.85 (1.51)	3.10 (1.19)
Mean (SD) female	3.13 (1.12)	3.28 (1.15)	4.15 (1.24)	3.13 (1.43)

Appendix Table 30

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by gender

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
Male – Female	-0.11	0.72	0.63	0.05*	0.30	0.44	0.03	0.93

* $p \leq 0.05$

Appendix Table 29 shows the mean purchase intention of respondents by group, categorized by gender. Appendix Table 30 shows the difference in mean for gender. Only in group 2, a significant difference between male and female respondents was found as the p-value is equal to the conventional significance level of 0.05. Appendix Figure 8 shows a visualization of the categorization by gender for group 2.

Appendix Figure 8

Bar graph of the categorization of gender for group 2

Mean Purchase Intention Group 2 by Gender

Age

Appendix Table 31

Purchase intention for group 1, 2, 3, and 4, categorized by age

	Group 1	Group 2	Group 3	Group 4
Mean (SD) 15-29	2.76 (1.10)	2.78 (1.14)	3.97 (1.41)	2.74 (1.37)
Mean (SD) 30-45	3.43 (1.01)	3.34 (1.27)	4.15 (0.91)	2.89 (1.26)
Mean (SD) 46-64	3.36 (1.12)	3.25 (1.15)	3.82 (1.50)	3.38 (1.20)
Mean (SD) 65-99	/	2.00 (NA*)	5.75 (0.35)	5.75 (NA*)

* Too little data to calculate

Appendix Table 32

Difference in mean purchase Intention for group 1, 2, 3, and 4, categorized by age

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
30-45 – 15-29	0.66	0.18	0.56	0.61	0.18	0.99	0.15	0.99
46-64 – 15-29	0.59	0.26	0.47	0.50	-0.15	0.98	0.64	0.33
65-99 – 15-29	/	/	-0.78	0.90	1.78	0.30	3.01	0.10
46-64 – 30-45	-0.07	0.98	-0.09	1.00	-0.33	0.91	0.49	0.73
65-99 – 30-45	/	/	-1.34	0.68	1.60	0.42	2.86	0.14
65-99 – 46-64	/	/	-1.25	0.70	1.93	0.22	2.37	0.25

Appendix Table 31 shows the mean purchase intention of respondents by group, categorized by age. Appendix Table 32 shows the difference in mean for age. For none of the groups, a significant difference between ages was found as the p-values are greater than the conventional significance level of 0.05.

Educational level

Appendix Table 33

Purchase intention for group 1, 2, 3, and 4, categorized by educational level

	Group 1	Group 2	Group 3	Group 4
Mean (SD) elementary school	/	/	/	/
Mean (SD) high school	3.25 (1.66)	2.70 (1.58)	4.25 (1.44)	3.65 (1.71)
Mean (SD) MBO (Dutch Vocational Education)	3.53 (1.06)	3.15 (1.10)	3.69 (1.29)	3.50 (1.54)
Mean (SD) University of Applied Sciences (HBO)	3.04 (1.06)	3.27 (1.09)	4.25 (1.25)	3.00 (1.12)
Mean (SD) Bachelor's degree at University (WO)	2.44 (0.72)	2.86 (1.42)	3.89 (2.08)	3.05 (1.66)
Mean (SD) Master's degree at University (WO)	3.50 (1.17)	2.56 (0.94)	3.44 (1.23)	2.46 (1.12)
Mean (SD) Doctorate degree (e.g., PhD)	3.50 (NA*)	/	4.75 (1.06)	/

* Too little data to calculate

Appendix Table 34

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by education level

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
MBO (Dutch Vocational Education) – High school	0.28	1.00	0.45	0.96	-0.56	0.98	-0.15	1.00
University of Applied Sciences (HBO) – High school	-0.21	1.00	0.57	0.86	-<0.01	1.00	-0.65	0.85
Bachelor's degree at University (WO) – High school	-0.81	0.89	0.16	1.00	-0.36	1.00	-0.60	0.95
Master's degree at University (WO) – High school	0.25	1.00	-0.14	1.00	-0.81	0.93	-1.19	0.57
Doctorate degree (e.g., PhD) – High school	0.25	1.00	/	/	0.50	1.00	/	/

Appendix Table 34 (continued)

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by education level (continued)

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
University of Applied Sciences (HBO) – MBO (Dutch Vocational Education)	-0.49	0.87	0.12	1.00	0.56	0.92	-0.50	0.81
Bachelor's degree at University (WO) – MBO (Dutch Vocational Education)	-1.10	0.57	-0.29	0.98	0.21	1.00	-0.45	0.97
Master's degree at University (WO) – MBO (Dutch Vocational Education)	-0.03	1.00	-0.59	0.83	-0.25	1.00	-1.04	0.51
Doctorate degree (e.g., PhD) – MBO (Dutch Vocational Education)	-0.03	1.00	/	/	1.06	0.92	/	/
Bachelor's degree at University (WO) – University of Applied Sciences (HBO)	-0.60	0.90	-0.41	0.90	-0.36	0.99	0.05	1.00
Master's degree at University (WO) – University of Applied Sciences (HBO)	0.46	0.88	-0.71	0.58	-0.81	0.71	-0.54	0.89

Appendix Table 34 (continued)

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by education level (continued)

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
Doctorate degree (e.g., PhD) – University of Applied Sciences (HBO)	0.46	1.00	/	/	0.50	1.00	/	/
Master's degree at University (WO) – Bachelor's degree at University (WO)	1.06	0.58	-0.30	0.98	-0.46	0.99	-0.59	0.94
Doctorate degree (e.g., PhD) – Bachelor's degree at University (WO)	1.06	0.95	/	/	0.86	0.97	/	/
Doctorate degree at (e.g., PhD) – Master's degree at University (WO)	<0.01	1.00	/	/	1.31	0.83	/	/

Appendix Table 33 shows the mean purchase intention of respondents by group, categorized by educational level. Appendix Table 34 shows the difference in mean for educational level. For none of the groups, a significant difference between educational levels was found as the p-values are greater than the conventional significance level of 0.05.

Employment status

Appendix Table 35

Purchase intention for group 1, 2, 3, and 4, categorized by employment status

	Group 1	Group 2	Group 3	Group 4
Mean (SD) student, no side-job	/	2.15 (0.99)	2.88 (0.88)	/
Mean (SD) student with side-job	2.61 (0.64)	2.75 (1.27)	3.92 (1.54)	2.75 (1.71)
Mean (SD) student with part-time job	2.95 (1.44)	2.67 (1.15)	3.50 (1.39)	3.50 (1.08)
Mean (SD) student with full-time job	/	2.50 (NA*)	/	2.25 (NA*)
Mean (SD) part-time job	3.33 (1.25)	3.77 (1.02)	4.05 (1.47)	3.17 (1.46)
Mean (SD) full-time job	3.31 (1.05)	2.92 (1.07)	4.06 (1.42)	3.00 (1.19)
Mean (SD) unemployed	/	5.50 (NA*)	3.75 (0.35)	3.50 (2.47)
Mean (SD) retired	/	2.00 (NA*)	5.00 (1.32)	5.75 (NA*)

* Too little data to calculate

Appendix Table 36

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by educational level

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
Student with side-job – Student, no side-job	/	/	0.60	0.98	1.04	0.97	/	/
Student with part-time job – Student, no side-job	/	/	0.52	1.00	0.63	1.00	/	/
Student with full-time job – Student, no side-job	/	/	0.35	1.00	/	/	/	/
Part-time job – Student, no side-job	/	/	1.62	0.10	1.18	0.92	/	/
Full-time job – Student, no side-job	/	/	0.77	0.79	1.19	0.90	/	/
Unemployed – Student, no side-job	/	/	3.35	0.09	0.88	1.00	/	/
Retired – Student, no side-job	/	/	-0.15	1.00	2.13	0.63	/	/

Appendix Table 36 (continued)

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by educational level (continued)

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
Student with part-time job – Student with side-job	0.34	0.95	-0.08	1.00	-0.42	1.00	0.75	0.98
Student with full-time job – Student with side-job	/	/	-0.25	1.00	/	/	-0.50	1.00
Part-time job – Student with side-job	0.73	0.50	1.02	0.59	0.13	1.00	0.42	1.00
Full-time job – Student with side-job	0.70	0.44	0.17	1.00	0.14	1.00	0.25	1.00
Unemployed – Student with side-job	/	/	2.75	0.26	-0.17	1.00	0.75	0.99
Retired – Student with side-job	/	/	-0.75	1.00	1.08	0.92	3.00	0.38
Student with full-time job – Student with part-time job	/	/	-0.17	1.00	/	/	-1.25	0.97
Part-time job – Student with part-time job	0.38	0.91	1.10	0.72	0.55	1.00	-0.33	1.00
Full-time job – Student with part-time job	0.36	0.91	0.25	1.00	0.56	0.99	-0.50	0.99
Unemployed – Student with part-time job	/	/	2.83	0.29	0.25	1.00	-<0.01	1.00
Retired – Student with part-time job	/	/	-0.67	1.00	1.50	0.83	2.25	0.70
Part-time job – Student with full-time job	/	/	1.27	0.93	/	/	0.92	0.99

Appendix Table 36 (continued)

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by educational level (continued)

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
Full-time job – Student with full-time job	/	/	0.42	1.00	/	/	0.75	1.00
Unemployed – Student with full-time job	/	/	3.00	0.47	/	/	1.25	0.98
Retired – Student with full-time job	/	/	-0.50	1.00	/	/	3.50	0.48
Full-time job – Part-time job	-0.03	1.00	-0.85	0.29	0.01	1.00	-0.17	1.00
Unemployed – Part-time job	/	/	1.73	0.75	-0.30	1.00	0.33	1.00
Retired – Part-time job	/	/	-1.77	0.73	0.95	0.94	2.58	0.47
Unemployed – Full-time job	/	/	2.58	0.25	-0.31	1.00	0.50	1.00
Retired – Full-time job	/	/	-0.92	0.99	0.94	0.92	2.75	0.37
Retired – Unemployed	/	/	-3.50	0.28	1.25	0.95	2.25	0.78

Appendix Table 35 shows the mean purchase intention of respondents by group, categorized by employment status. Appendix Table 36 shows the difference in mean for employment status. For none of the groups, a significant difference between employment status was found as the p-values are greater than the conventional significance level of 0.05.

Income

Appendix Table 37

Purchase intention for group 1, 2, 3, and 4, categorized by income

	Group 1	Group 2	Group 3	Group 4
Mean (SD) less than €25.000	2.75 (0.97)	2.76 (1.19)	3.75 (1.39)	2.94 (1.52)
Mean (SD) €25.000-€49.999	3.08 (1.22)	3.50 (1.09)	4.53 (1.02)	2.73 (1.44)
Mean (SD) €50.000-€74.999	2.75 (0.83)	2.86 (1.42)	5.14 (0.90)	3.22 (0.96)
Mean (SD) €75.000-€99.999	3.46 (0.90)	3.50 (0.71)	3.55 (1.78)	3.71 (1.39)
Mean (SD) €100.00-€124.999	4.00 (NA*)	2.00 (NA*)	3.33 (2.25)	2.75 (0.25)
Mean (SD) more than €125.000	3.30 (1.30)	2.75 (0.65)	3.38 (0.80)	3.75 (1.37)
Mean (SD) prefer not to say	4.07 (1.03)	3.58 (0.95)	3.25 (1.19)	3.14 (1.49)

* Too little data to calculate

Appendix Table 38

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by income

	Group 1	P-value group 1	Group 2	P-value group 2	Group 3	P-value group 3	Group 4	P-value group 4
€25.000-€49.999 – Less than €25.00	0.33	0.98	0.74	0.52	0.78	0.77	-0.21	1.00
€50.000-€74.999 – Less than €25.000	<0.01	1.00	0.10	1.00	1.39	0.15	0.28	1.00
€75.000-€99.999 – Less than €25.000	0.71	0.80	0.74	0.97	-0.20	1.00	0.78	0.88
€100.000-€124.999 – Less than €25.000	1.25	0.91	-0.76	0.99	-0.42	1.00	-0.19	1.00
More than €125.000 – Less than €25.000	0.55	0.95	-0.01	1.00	-0.38	1.00	0.81	0.94
Prefer not to say – Less than €25.000	1.32	0.12	0.82	0.90	-0.50	0.99	0.21	1.00
€50.000-€74.999 – €25.000-€49.999	-0.33	1.00	-0.64	0.80	0.61	0.95	0.49	0.98
€75.000-€99.999 – €25.000-€49.999	0.38	0.99	-<0.01	1.00	-0.98	0.81	0.98	0.72
€100.000-€124.999 – €25.000-€49.999	0.92	0.98	-1.50	0.86	-1.19	0.79	0.02	1.00

Appendix Table 38 (continued)

Difference in mean purchase intention for group 1, 2, 3, and 4, categorized by income (continued)

More than €125.000 – €25.000-€49.999	0.22	1.00	-0.75	0.90	-1.15	0.60	1.02	0.84
Prefer not to say – €25.000-€49.999	0.99	0.44	0.08	1.00	-1.28	0.64	0.41	1.00
€75.000-€99.999 – €50.000-€74.999	0.71	0.92	0.64	0.99	-1.59	0.30	0.49	0.99
€100.000-€124.999 – €50.000-€74.999	1.25	0.93	-0.86	0.99	-1.81	0.35	-0.47	1.00
More than €125.000 – €50.000-€74.999	0.55	0.98	-0.11	1.00	-1.76	0.14	0.53	0.99
Prefer not to say – €50.000-€74.999	1.32	0.34	0.72	0.96	-1.89	0.19	-0.08	1.00
€100.000-€124.999 – €75.000-€99.999	0.54	1.00	-1.50	0.93	-0.22	1.00	-0.96	0.94
More than €125.000 – €75.000-€99.999	-0.16	1.00	-0.75	0.99	-0.18	1.00	0.04	1.00
Prefer not to say – €75.000-€99.999	0.61	0.94	0.08	1.00	-0.30	1.00	-0.57	0.98
More than €125.000 – €100.000-124.999	-0.70	1.00	0.75	1.00	0.04	1.00	1.00	0.96
Prefer not to say – €100.000-€124.999	0.07	1.00	1.58	0.89	-0.08	1.00	0.39	1.00
Prefer not to say – More than €125.00	0.77	0.86	0.83	0.96	-0.13	1.00	-0.61	0.99

Appendix Table 37 shows the mean purchase intention of respondents by group, categorized by income. Appendix Table 38 shows the difference in mean for income. For none of the groups, a significant difference between income was found as the p-values are greater than the conventional significance level of 0.05.