

Foreign language effect on emotional persuasive communication



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Abstract

As English has become the primary tool for global communication and with the growing number of bilingual speakers, advertising content is presented in either the lingua franca English or the target audience's native language. However, little is known about how the foreign language effect influences Dutch-English bilinguals on an emotional level and how it affects attitude change and behavioral intention regarding climate change. Therefore, this study aimed to examine whether emotional appeals on persuasive communication would be more effective in L1 (Dutch) than in L2 (English). In a between-subject design, Dutch-English bilinguals viewed an emotional message regarding climate change either in English or Dutch. Subsequently, through a questionnaire, they rated the perceived emotionality of the message, their attitude towards climate change, and their behavioral intention. The statistical analysis showed that neither Dutch nor English messages differed significantly in terms of emotionality, attitude towards climate change, and behavioral intention. The reason the foreign language effect was not found could be explained by the high proficiency of English of the participants. For marketers, the results suggest that advertisement content can be standardized due to the high proficiency and usage of English in the Netherlands.

Keywords: Emotionality, Dutch, English, climate change, persuasiveness, attitude, behavioral intention.

Introduction

Communication has evolved rapidly due to the globalization of the world. Globalization, which refers to the increased interconnection between countries and individuals at the economic, political, and cultural levels, has made a living in a culturally diverse society no longer a choice but a compelling fact (Liu et al., 2019). There is a pressing need for a common language of communication in the globalized world's information society, which would allow nations to overcome interlingual and intercultural barriers to integrating into a common economic and cultural zone (Smokotin et al., 2014). According to Tietze (2004), English is unquestionably the worldwide lingua franca and serves as the communication medium of many intercultural encounters. The English language has been well documented to be often used in television and print advertising (Piller, 2000). In international advertising, businesses commonly use English to communicate with their customers.

As English has become the primary tool for global communication, advertising content is presented in the lingua franca English rather than the target audience's native language. With the growing number of bilingual speakers, organizations need to decide whether to develop advertising content in the target audience's first language (L1) or second language (L2), as bilinguals may react differently to advertisements in their first language vs. their second language (Caldwell-Harris & Aycicegi-Dinn, 2016). Moreover, in persuasive communication, organizations need to decide which type of message appeal will be used in the advertising content. According to Jorgensen (1996), emotion can be an effective and powerful means of persuasion.

There is numerous research about the effect of language in persuasive communication in commercial advertising; however, little is known in the context of a societal issue. The present study will focus on the use of L1 and L2 in a climate change communication context. The aim is to provide insight into the foreign language effect in persuasive communication about climate change using emotional appeals.

Theoretical Background

Persuasion

One way to change people's knowledge, attitudes, and behavior to protect the planet is through persuasive communication campaigns (Tellis, 1950). Persuasion has been a part of people's daily communication. Persuasion usually entails an attempt to persuade someone to alter their attitudes after receiving information on a topic (Petty & Briñol, 2014). The philosopher Aristotle (400-301/2001) introduced the art of rhetoric, which was related to verbal communication. He defined three types of persuasion or appeals: ethos (credibility), pathos

(emotion), and logos (logic), which are all utilized when attempting to influence the audience's beliefs, thinking, or behavior. However, in contrast to the classic Aristotelian viewpoint that views persuasion as verbal communication, Stiff and Mongeau (2003) suggest that all communicative actions can be persuasive. They define persuasive communication as any message designed to shape, reinforce, or influence the responses of another or others. In persuasive communication, affect can be examined as further information for evaluation or change of attitude. Persuasion efforts rely significantly on emotional appeals to achieve persuasive aims, and emotion is a valuable resource in achieving these goals (Jorgensen, 1996; Petty et al., 2001).

The use of emotional appeals has been studied over the years and has been shown to influence attitude and behavior. Jorgensen (1996) defines *emotional appeal* as a conscious and strategic option, where the target feels the same feelings as the source, or a more diffuse sense of empathic concern, in which the message recipient feels a nonparallel affective reaction, such as sympathy in response to an emotional request for help. The emotional appeal is purposely incorporated into the persuasive message to influence or strengthen the receiver's attitudes. Furthermore, an emotional appeal may be the complete message or interlaced with other logical or heuristic appeals as a message component. Emotional appeals can be verbal or nonverbal. They can include images, movies, objects, and more traditional language-based appeals, including verbal fear appeals or intense language (Jorgensen, 1996). Non-governmental organization (NGO) advertisements, in particular, rely primarily on emotional messages to persuade and change public opinion about a particular issue (Noble et al., 2014). Positive emotional appeals are thought to be appealing and elicit satisfaction in people. They also stress the advantages and rewards of adopting a socially desirable behavior. Negative appeals draw attention to the negative repercussions of a particular activity. These appeals aim to induce stress and concern related to a sense of morality (Noble et al., 2014). However, the links between emotional appeals and persuasion are complex, with emotions increasing or hindering message efficacy depending on the message's key attributes or audience characteristics.

The effectiveness of emotional appeals can be explained by the Elaboration Likelihood Model (ELM). The ELM posits that attitudes may be affected by processes that include relatively high or low levels of issue-relevant thinking and emotions, which can impact attitude and other judgments in different ways depending on the total degree of elaboration (Petty & Cacioppo, 1986). The model presents two cognitive routes: the central and peripheral routes. The central route requires a higher cognitive effort and is relatively detailed, whereas the peripheral route requires a low effort of thought. The central processing route refers to a

relatively active engagement with the presented information. Individuals with a high level of involvement are driven to process information that leads to message elaboration. Arguments concerning the attitude object should significantly impact these people's decisions more than emotional appeals. In contrast, the peripheral route is characterized by the subject paying less attention to the message itself but instead to the context and the peripheral cues, which in turn may build their judgments based on heuristic cues such as emotions or feelings (Petty & Cacioppo, 1986). Emotional appeals, as predicted by the ELM, will be more effective in persuading someone who lacks motivation or cognitive ability to process a message (Petty & Cacioppo, 1986).

To elaborate more on the peripheral route, Jorgensen (1996) argues that two types of models explain the impact of affect on the persuasion process: models of message-relevant effects and models of message-irrelevant effects. The message-relevant approach looks at how affect might act as a peripheral cue or shape the valence of our cognitive responses, influencing the persuasion process further. On the other hand, message-irrelevant effect models look at how a perceiver's emotional state influences his or her motivation or ability to comprehend information. When individuals lack the motivation or ability to understand a persuasive message, emotion has been shown to work as a peripheral cue and to have an influence on attitudes in a way consistent with its valence (Petty et al., 2001)

Using the elaboration likelihood model (ELM) as a guide, Petty and Briñol (2014) provide more insight into how emotions might influence attitudes and persuasion. Depending on the degree of elaboration and the timing of the feeling, emotions work in different ways. Emotions tend to impact how much thinking happens when thinking is unconstrained. When emotions come after careful message processing, they are more likely to validate thinking, but when they come before, they are more likely to bias thinking, assuming motivation and ability to think are high, and the arguments are not so clearly strong or weak that differential argument construal is difficult. If not much thought goes into the process, emotions can function as simple affective cues, whether they come before or after the information. As an example of the use of ELM, Manca et al. (2020) focused on the persuasive effect of argument quality, source expertise, and emotions on the implicit attitudes toward sustainable travel choices using ELM as a theoretical framework. It was found that if individuals are interested in sustainable transport, they will be more convinced by a message with arguments that support the travel change (Central route). People who are uninterested in sustainable mobility issues, on the other hand, will be more affected by messages delivered by an expert source, such as a scientist (Peripheral route).

Moreover, on the role of emotionality in persuasion, Petty et al. (2001) reviewed some of the ways in which affect can influence attitude change. Emotions may play a variety of functions, and their impacts appear relatively varied. Emotions can impact attitudes through peripheral mechanisms, serve as issue-relevant information, bias message processing, and alter the degree to which messages are evaluated. Furthermore, a match between a person's emotional state and the emotional context of the information can increase persuasion. The emotion-based expectation theory, proposed by DeSteno et al. (2004), shows a positive effect on message persuasion when the message's emotions match the emotions a person expects regarding a given topic. The Elaboration Likelihood Model underpins this idea. DeSteno et al. (2004) find that emotions used when persuading a person should match the emotions that are expected in relation to the subject of the message. For example, with climate change, people might feel fear or sadness about the consequences of global warming. The persuasiveness of messaging supporting climate change mitigation strategies thus hinges on whether they are emotionally consistent with the primary emotion individuals feel about the issue.

Another essential aspect of an individual's ability to process the message is the language in which the message is presented. Within the context of the Elaboration Likelihood Model, the persuasiveness of variations in language use may be dependent on the route by which the message is processed. Since emotions seem significant in human decision-making processes, it needs to be taken into account that different languages might elicit different emotional responses when communicating with bilinguals.

Emotionality in L1 and L2

Bilinguals can be targeted by messages in either the bilingual's native or second language. Pavlenko (2012) defined bilingual and multilingual as "speakers who use two or more languages or dialects in everyday lives, regardless of their proficiency levels in the respective languages." This study focused only on bilinguals, thus bilinguals' L1 and L2. Pavlenko (2012) defined first language (L1) as "a language or languages learned from birth, regardless of the speaker's current proficiency," and second language (L2) as "a language learned after early childhood (ages 1–3 years) following the L1". However, there are different aspects to consider when defining bilinguals, such as proficiency, the context of learning, age of acquisition, order of acquisition, and language dominance (Pavlenko, 2012; Caldwell-Harris & Aycicegi-Dinn, 2016). This study considered participants' second language proficiency and age of acquisition.

Research suggests that bilinguals' emotional access may differ depending on whether they use their first and native language (L1) or their second and foreign language (L2) (Pavlenko, 2012; Caldwell-Harris & Aycicegi-Dinn, 2016). It has been suggested that language

learning at various phases of life and with varying proficiency levels may differ regarding the degree and depth of affective integration. Individual words' meanings may be endowed with personal relevance, or communicative salience, in response to situational, social, or emotional contexts, and therefore their processing may be modified (Pavlenko, 2012).

The differences in perceived emotionality between L1 and L2 can be explained by the Episodic Trace Theory (Puntoni et al., 2009). Episodic Trace Theory is based on the assumption that each experience leaves a distinct episodic trace in memory. Experiences' perceptual and contextual details are stored in memory and are crucial to later perception. All memory traces are triggered in proportion to their similarity to the probing stimulus when a stimulus is detected. Long-term memory sends an aggregate of all active traces to working memory. The echo may contain information not present in the stimulus, such as previously experienced emotions, allowing the stimulus to be associated with earlier emotional experiences. As a result, depending on the language in which the event was first experienced, it is possible that these episodic traces also contain L1 or L2 lexical representations. This episodic memory feature can help explain why the difference between L1 and L2 is essential. This feature of episodic memory may explain language-dependent recall, which is the discovery that memories first experienced in L1 (L2) are more accessible when prompted by L1 (L2) words (Puntoni et al., 2009).

According to Caldwell-Harris and Aycicegi-Dinn (2016), bilinguals experienced emotional phrases in their L1 more strongly than in their L2. However, the age of language learning influenced the outcome. The authors discovered that L2 might be viewed as emotional as L1 if learned early in life, regardless of proficiency level. The emotionality perception is also reasonably high if the foreign language was learned later in life but at a high proficiency level. As a result, the speaker's proficiency level or the time of language learning may affect the emotionality of a foreign language. Similarly, according to Ayçiçeği and Harris (2004), emotional words, particularly swear words, have processing advantages in the second language as well. First and second language swear words are better remembered and recognized than neutral words. This shows that second language words have emotional connotations, similar to the first language.

However, it is not always the case that emotions are similarly experienced in the first language and second language. Previous research on the effects of emotionality in bilinguals discovered that swear words and taboo words were perceived as significantly more emotional in their L1 than in their L2 (Pavlenko, 2012). Opitz and Degner (2012) investigated the impact of emotional words among French-German speakers, including positive and negative emotional

words. Even though their proficiency levels in both languages are high, individuals speaking an L2 that was not learned simultaneously with their L1 from birth but at a later age intuitively feel that their L1 has a stronger emotional value than their L2. This is because words in that language require more processing and are not instantly linked to emotional context. Similarly, Puntoni et al. (2009) aimed to investigate if there were any differences in how emotional textual material in advertisements was interpreted in L1 vs. L2. Half of the participants in their research were native Dutch speakers who learned to speak French, whereas the other half were native French speakers who learned to speak Dutch. Many advertisement slogans in French or Dutch were employed as stimuli as textual information. Participants were asked to score six different slogans from various products or services. It was found that participants perceived a stronger sensitivity to emotional information in L1 than in L2 (regardless of whether the L1 was Dutch or French). Thus, even while comprehending the language, the emotional impact of the message may be reduced, depending on how often words in the foreign language have been experienced.

When bilinguals face decision-making situations, it has been found that certain cognitive biases are reduced when presented with decision-making situations in their foreign language compared with their native language. This effect, referred to as the foreign language effect, can affect decision-making biases and diminish emotional effects on individuals (Keysar et al., 2012). This can be seen in a study done by Costa et al. (2014), where participants were presented with a fictional scenario of five persons tied to a train track that is about to be killed by a coming trolley. The only option to save them is to push a large passerby over the rails, killing him but stopping the train. When the situation was presented in the bilingual's native language, just 18% of participants were prepared to sacrifice the giant man; however, 44% were willing to do so when the problem was presented in their foreign language. This means that when the emotionality of the L2 decreases, people may depend more on logical processing (Keysar et al., 2012). If linked to the Elaboration Likelihood Model (Petty & Cacioppo, 1986), it can be argued that the central route of processing which is more rational thinking, will be taken when making a decision in a foreign language. On the contrary, the peripheral route of processing, based more on heuristic cues, will be taken when making a decision in the native language. Costa et al. (2014) suggested that this foreign language effect was caused by a decrease in the emotional reaction produced by the foreign language, which decreases the influence of intuitive emotional concerns.

Following this line of reasoning, judgments of risk and benefit of a message, such as a climate change message on tackling perceived threats, may vary as a function of the language

in which the message is presented. It could be that a switch from a native to a second language might trigger a switch from emotional to rational processing.

Current study

Whether to standardize or localize advertisements for consumers with various linguistic backgrounds and skill levels plays an essential role. With the growing number of bilingual speakers and the widespread use of English, organizations have a choice of utilizing either English or the native language of a country in their ad. Hornikx et al. (2010) define using the English language for promoting in non-anglophone countries as “a strategic choice between standardization and localization of their advertisements .” When communicating with customers of diverse countries, standardization means advertising in a single language, such as a global or regional lingua franca. Advertisements, on the other hand, are translated to the local language when using the localization strategy. Considering this, it is not clear how foreign language influences Dutch-English bilinguals on an emotional level and how it affects attitude change and intent in regards to climate change.

Climate change may be an emotional subject, given the significant consequences it will have now and in the future. As the effects of climate change become more widely felt throughout the world, unsustainable lifestyle patterns and behaviors have prompted urgent action (Gifford, 2008). People’s emotions can be influenced by their environmental worldviews, which can lead to a change in behavior. Interventions to change behavior, on the other hand, necessitate not only a thorough understanding of how to motivate people to take action on climate change, but also a keen understanding of how emotions can reinforce environmental beliefs and acceptance of personal responsibility for climate change (Ramkissoon & Smith, 2014). Studies on communicating climate change information with emotions are still in the works, and more research is needed to understand better how people communicate about climate change and the implications of taking action (Bloodhart et al., 2019). However, no studies have investigated the effectiveness of climate change advertising appeals on bilinguals. Therefore, this study aims to close this research gap and shed light on the domain of language use methods to raise awareness of the severe impacts of climate change.

The results of this study will provide important knowledge for psycholinguistic studies, marketers, and NGOs to learn about the effects of emotional climate change message appeals on bilinguals. This newly gained insight will help organizations make better decisions about whether or not to use a foreign language in their ads.

For this reason, the following research question is proposed for further investigation:

RQ: To what extent is the foreign language effect present in persuasive communication about climate change using emotional message appeals?

In line with prior research that supports the assumption that L1 is more emotional than L2 (Pavlenko, 2012; Caldwell-Harris & Aycicegi-Dinn, 2016; Puntoni et al., 2019), the research question will be investigated using the following hypotheses:

H1: Emotional appeals in persuasive communication about climate change will be more effective in L1 compared to L2.

Method

Materials

The purpose of this study was to explore to what extent the foreign language effect can impact the message emotionality regarding climate change. L1 represented the first language of the participants, which was Dutch, and L2 represented the second language of the participant, which was English. The material for this experiment consisted of an emotional message regarding climate change. Affective responses can result in a change in attitude. The emotions elicited by an attitude object may result in a certain attitude toward that object (Hoeken et al., 2017). Because affect plays a significant role in the process of opinion change (Jorgensen, 1996), an emotional appeal was chosen as a persuasive strategy.

There were two versions of the emotional message, one in English and one in Dutch. The text contained a story about a man who tells his emotional experience regarding how the consequences of climate change has impacted his life. Moreover, the text includes tips on how others can help reduce the negative impact of climate change. To ensure emotionality of message, vocabulary of emotional words were obtained from Warriner et al. (2013) dataset of affective norms. Warriner et al. (2013) created a crowdsourced lexicon with valence, arousal, and dominance annotations for 13,915 terms. In order to ensure accuracy and equivalence, a native English speaker with linguistics expertise checked the English version and a native Dutch speaker with high English proficiency translated the English version to Dutch.

For the English version, the following text was used (Dutch version can be found in questionnaire in appendix 1):

My name is Daan. I am 37 years old, and I am the father of two joyful boys. My wife Tessa and I own a potato farm in beautiful South Limburg in the Netherlands. We inherited the farm in early 2018 after my father died. Ever since, we have had to face terrible weather challenges. In the summer of 2018, it was incredibly hot and sunny, and it rained less than ever before – a horrible time to grow potatoes. Because of that, our family's farm severely suffered. The severe drought killed most of the harvest, and

with awfully little rain, groundwater was scarce. Watering the plants was hopeless. We lost half of our harvest and thus our most important income source. We could not pay our bills. As we slowly recovered, the next tragedy hit in 2021. Monstrous rainfalls in Limburg, Belgium, and Germany led to disastrous floods. We feared for our lives and evacuated the farm to stay with Tessa's mother in Utrecht. The flood destroyed the fields, causing massive losses in the harvest. Our dearly loved home and cherished belongings are ruined forever. A few days later, a sad message from Germany hit me. My childhood friend Luuk, who had moved to Western Germany, was overwhelmed by the flood. His house was swept away by the forceful stream of a usually peaceful creek, drowning his wife and daughter. These catastrophes are the result of global warming. Our lifestyle activities release enormous amounts of CO₂ which disturbs the usual balance between sunshine and rain. This leads to higher global temperatures, melting polar ice caps, and rising sea levels. More dreadful droughts, storms, and floods will cause families like mine or Luuk's to lose our homes, income, and loved ones. This is how you can help:

1) Instead of flying to your next beach vacation, consider travelling by train. Trains are much more environmentally friendly. Or start small by taking the bike or bus to university or work rather than driving by car.

2) Next time you go shopping at the supermarket, consider buying local and seasonal foods. Eating fresh food coming right from your neighborhood is very environmentally friendly. The strawberries and tomatoes don't have to travel from far away, exotic countries and, therefore, fewer harmful gases are released.

3) Lastly, try to eat less meat and drink less milk. You can help the environment by not eating animals like cows, pigs, and chickens, or by not drinking cow milk and eating animal products like eggs and cheese. Raising animals for food releases immense amounts of CO₂ that harm our beautiful earth. Eating more vegetarian and vegan meals helps with this.

Subject

A total of 144 participants took part in the experiment. Out of the 144, only 67 participants (age: $M = 23.84$, $SD = 6.72$; range 19– 58) passed the four screening questions, comprehensibility check, and completed the questionnaire. First of all, participants had to give consent for their answer to be used. Secondly, participants had to be older than 18. Thirdly, participants needed to have Dutch as their only mother tongue. And lastly, they had to speak English as a second language. Of the 67 participants, 20 were male (29.9%), and 47 were female

(70.1%). The current and highest education level of participants were high school (4.5%), MBO (4.5%), HBO (19.4%) and WO (71.6%). On average participants started learning English at 10 years old ($M = 10.24$, $SD = 2.5$) with a range of 4 to 18 years old. For the participants' English proficiency, measured with the Lextale Test, the mean score was $M = 80.35$ ($SD = 11.96$), with a minimum score of 51.25 and a maximum score of 97.50. Scores between 60 and 80 is equivalent to a B2 CEFR level (Lemhöfer & Broersma, 2012). Participants were randomly assigned to either a group with the emotional message in English or emotional message in Dutch. The group with the English emotional message consisted of 31 participants, while the group with Dutch emotional message consisted of 36 participants.

Age ($t(62.85) = 0.04$, $p = .969$), age English learned ($t(59.54) = 0.05$, $p = .960$), gender ($\chi^2(1) = 0.02$, $p = .892$), and education ($\chi^2(3) = 1.33$, $p = .723$) were distributed evenly across the two conditions of the emotional message. English proficiency ($t(60.94) = 2.17$, $p = .034$) was not evenly distributed across the two conditions of the emotional message. Participants who were randomly assigned the English version ($M = 83.59$, $SD = 8.90$) were shown to have a higher English proficiency than participants who were randomly assigned the Dutch version ($M = 77.57$, $SD = 13.58$).

Design

The design of this study was a between-subject experiment with one factor –language– with two levels, L1 (Dutch) and L2 (English). All participants were randomly assigned the emotional message in either English or Dutch.

Instrument

Participants filled in an online questionnaire (see appendix 1) in which they evaluated the emotional message on climate change. The participants were asked to indicate if they understood the message as a comprehensibility check. On 7-point Likert scales, the participants were asked to what extent they agree (1 = Helemaal mee oneens, 7 = Helemaal mee eens) with the following statement: “Ik begreep de boodschap die de tekst probeert over te brengen volledig”. Furthermore, the dependent variables attitude, behavioral intention, and emotionality was measured.

Attitude was measured based on Dijkstra and Goedhart (2012). This was measured using a 7-point Likert scales displaying the following items: “Mensen zouden zich meer moeten bekommeren om klimaatverandering”, “Klimaatverandering moet de hoogste prioriteit krijgen”, “Mensen maken zich te veel zorgen over klimaatverandering” (reverse coded), “Klimaatverandering is een bedreiging voor de wereld”, “De ernst van klimaatverandering is overdreven” (reverse coded), and “Het is vervelend om te zien dat mensen niets doen voor het

probleem van klimaatverandering” anchored by “Helemaal mee oneens– Helemaal mee eens”. With a Cronbach’s alpha, the reliability was measured and found to be good ($\alpha = .82$). Consequently, the mean of all six items was used to calculate the compound variable attitude, which was used in the further analyses.

Behavioral intention was measured based on Fishbein and Azjen (2010). On 7-point Likert scales, the participants were asked to what extent they agree (1 = Helemaal mee oneens, 7 = Helemaal mee eens) with the following statements: “Ik heb de intentie om het in de boodschap beschreven gedrag te volgen”, “Ik zal het in de boodschap beschreven gedrag volgen”, “Ik ben bereid het in de boodschap beschreven gedrag te volgen”, “Ik ben van plan het in de boodschap beschreven gedrag te volgen”, “Ik ben niet bereid mijn levensstijl te veranderen om de opwarming van de aarde en de klimaatverandering tegen te gaan” (reverse coded), and “Ik zal alles doen wat ik kan om de nadelige effecten jegens het klimaat te verkleinen”. With a Cronbach’s alpha, the reliability was measured and found to be good ($\alpha = .90$). Consequently, the mean of all six items was used to calculate the compound variable behavioral intention, which was used in the further analyses.

Emotionality was measured based on Puntoni et al. (2009). On 7-point Likert scale, the participants were asked to rate the emotionality of the message with the following statement: “Deze boodschap is...” anchored by “Niet emotioneel – emotioneel”.

Furthermore, proficiency level of English was measured with the Lemhöfer and Broersma’s (2012) LexTALE test. In this test, listeners are shown a list of 60 English words and are asked to indicate for each word whether it is an existing word or not. The test was scored based on the instructions in Lemhöfer and Broersma’s (2012) paper.

Lastly, the questionnaire contained demographic questions. These questions considered the age, gender, educational level, and age English was learned.

Procedure

The questionnaire was conducted using Qualtrics, which was distributed via multiple channels, such as Facebook, Instagram, Whatsapp, and email. Participants were randomly assigned to either the Dutch or English condition. The questionnaire started with a brief introduction by thanking the participants for their contribution, informing them about their rights, and asking them to give consent for partaking in the study. The introduction was followed by a text that addressed climate change in either English or Dutch. After reading the text participants had to fill in the questionnaire. The median time it took to finish the questionnaire was 8 minutes ($Mdn = 8.05$, range = 1.87 – 7846).

Statistical Analysis

IBM SPSS Statistics 27 was used to analyse the data received from the online questionnaire. Several independent t-test was conducted to identify whether there was an impact of Dutch and English language on the persuasive message.

Results

The aim of the study was to examine whether emotional appeals on persuasive communication would be more effective in L1 (Dutch) compared to L2 (English), evaluated through the participants' attitude towards climate change, behavioral intention, and perceived emotionality of message.

A series of independent samples t-test showed no significant difference between the message in English and Dutch with regard to attitude ($t(64.33) = 1.77, p = .081$), behavioral intention ($t(63.56) = 1.74, p = .086$), and emotionality ($t(64.43) = 1.16, p = .249$). See Table 1 for the means (M) and standard deviations (SD).

Although not found to be statistically significant, it can be seen in Table 1 that the patterns of means shows the opposite of the expected result. The means of English (L2) were higher than Dutch (L1).

Table 1. Means and standard deviations for the attitude towards climate change (1 = helemaal mee oneens, 7 = helemaal mee eens), the behavioral intention (1 = helemaal mee oneens, 7 = helemaal mee eens) and emotionality of message (1 = niet emotioneel, 7 = emotioneel).

	Dutch (L1) n = 36 <i>M (SD)</i>	English (L2) n = 31 <i>M (SD)</i>
Attitude towards climate change	5.49 (0.91)	5.88 (0.87)
Behavioral intention	4.63 (1.05)	5.07 (1.05)
Emotionality	5.50 (1.11)	5.81 (1.05)

Conclusion & Discussion

The purpose of this study was to determine the perceived emotionality and effectiveness of Dutch and English persuasive communication about climate change amongst bilinguals. Therefore, the research question was to what extent is the foreign language effect present in persuasive communication about climate change using emotional message appeals?

The results showed that neither Dutch nor English messages differed significantly from each other in terms of the attitude towards climate change, behavioral intention, and emotionality. Hypothesis 1, which hypothesised that emotional appeals in persuasive communication about climate change would be more effective in L1 (Dutch) compared to L2 (English), was not confirmed. It was expected that the Dutch message would be deemed more emotional than the English message, which in turn would lead to attitude and behavioral change. This has been demonstrated in previous research that relatively emotional words are more salient in the native language (Opitz and Degner, 2012; Pavlenko, 2012; Puntoni et al., 2009) and how emotion is a significant factor that influences individuals attitude and behavior (Petty et al., 2001; Petty and Briñol, 2014). However, it is interesting to point out that even though the findings were not statistically significant, the opposite of the expected effect can be seen. The result cautiously raises an outcome that emotional appeals was more effective in L2 (English) than L1 (Dutch). As a result more research may be needed to reconcile these differences.

An explanation of lack of significant differences in the results of this study probably could be the subject that was chosen to analyse the persuasive effect. Climate change may be limited for research in emotional persuasion because even among the most concerned members of the public, it seems that climate change is a topic that generates low engagement (Leiserowitz et al., 2013). Moreover, it can be argued that participants could have been well informed and have established opinions about climate change. There are many pro-environmental behavioral campaigns about climate change directed to the public, that the emotional message whether in Dutch or in English used in this study might not have an effect on participants. Moreover, it is difficult to persuade people to change their behavior or intentions, especially when it comes to climate change mitigation, because many do not believe they can make a difference (Soliman et al., 2018). Individuals must engage in pro-environmental actions to mitigate climate change, but psychological distance and the assumption that individual efforts do not make a difference reduce motivation to engage in these behaviors (Soliman et al., 2018).

Furthermore, the message utilized in this study could have lacked persuasive effect. According to DeSteno et al. (2004), in the case of emotional persuasion, an individual's emotional needs must be addressed in order for the message to have a greater persuasive effect. The message addressing climate change in this study may just be insufficient to address the emotional demands of climate change mitigation, which in turn may lead to no foreign language effect in English and Dutch.

Another explanation for this study results could be the high level of English proficiency among participants. Perhaps, the respondents' high English proficiency may have diminished the

normally prevalent foreign language effect on perceived emotionality. As stated in the introduction, higher foreign language proficiency enhances perceived language emotionality (Caldwell-Harris & Aycicegi-Dinn, 2016; Pavlenko, 2007). This can also be seen from the results, even though not statistically significant, English message was rated as more emotional than the Dutch message. Moreover, Caldwell-Harris et al. (2012) and Degner et al. (2012) state that the emotional processing of a language is influenced by the frequency of language use. Because of the increased use of English in the Netherlands, Dutch consumers are now more frequently exposed with English in various commercials and advertising . (Gerritsen, 2007). Since they are more exposed by the English language and also speaks English the best as a second language (Statista, 2020), this can lead to enhanced perceived emotionality in English (L2) which in turn would diminish the strength of the foreign language effect.

Limitation and future research

There are some limitations that this study encountered. First of all, the convenience sampling method can be argued. Most of the respondents were young IBC students who are following their degree in English. Thus, it is arguable to what extent the results are generalizable to the Dutch population. Another sample-related limitation could be the high English proficiency of participants. As discussed earlier greater foreign language proficiency, also increases perceived language emotionality. For future research it would be interesting to look at a more diverse group of participants with different degrees of English proficiency. In this regard, more study might be conducted in other countries where the population has lower but sufficient English proficiency to further investigate the impact of the foreign language effect.

Another limitation of this study is that it is unknown to what extent participants could empathize with the character of the story. According to Stiff et al. (1988), emotional contagion is an overtly affective component of empathy that happens when one person has an emotional response as a result of seeing another person's real or expected expression of emotion. Empathy was found to have a significant influence on three major empathy outcomes: communicative responsiveness, comforting behavior, and volunteering. In regards to this study, participants' ability to empathize with the story could have had an effect on perceived emotionality of the message, attitude and behavioral change. Future research could address empathy in the questionnaire to further investigate the link between empathy and emotionality of message.

Moreover, this study used a written text message, for future research an audio could be used instead where speaker tells his story in an emotional way. Participants will then hear the actual emotions the speaker wants to transmit. It would be interesting to see if the foreign language effect is greater in auditory messages compared to textual messages.

Implications of Research

Despite the large number of research dedicated to foreign language effect in advertising, the majority focused on promoting a commercial product or service, and not on a societal subject such as climate change. This study adds to the body of knowledge by showing that even though the foreign language effect on emotionality towards products and services was present in previous studies (Pavlenko, 2012; Puntoni et al., 2009), these are not affected with very high-proficiency L2 readers. Thus, the presented study gives nuance to studies about foreign language effect. More research is needed to investigate how far foreign language effect is applicable.

Moreover, the present study indicated no difference between Dutch (L1) and English (L2) in terms of emotionality. The majority of the participants reported learning English at a young age and also reported having a high proficiency in English. Therefore, this contributes to the theory that by mastering a language, one is also able to master the emotionality of the language (Caldwell-Harris & Aycicegi-Dinn, 2016; Pavlenko, 2007). The authors discovered that regardless of one's proficiency level, L2 might be viewed as emotional as L1 if learned early in life. The emotionality perception is also fairly high if the foreign language was learned later in life but at a high proficiency level. As a result, the emotionality of a foreign language may be determined by the speaker's proficiency level or the age of language acquisition.

Regarding the standardization or localization of an advertising campaign, NGO's can keep their campaign standardized and not be concerned about translating their message from English to Dutch. Due to high proficiency and usage of English in the Netherlands (Statista, 2020), they do not need to limit themselves to the Dutch language when advertising. Seemingly the language of the advertisement does not matter to Dutch people with a high proficiency in English in terms of emotionality, attitude and behavioral intention.

Marketers can also learn from these findings that when the target audience has a high level of foreign language proficiency, the foreign language effect may be minimized.

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Appendix 1

Introduction

Beste deelnemer,

Op deze pagina nodigen wij u uit tot het deelnemen aan een vragenlijst met betrekking tot klimaatverandering. Het meedoen en invullen van de vragenlijst zal ongeveer 10 minuten duren. Bij deze willen wij u garanderen dat uw ingevulde antwoorden anoniem zullen zijn en ook zo behandeld zullen worden. Uw antwoorden zullen binnen het departement Taal en Communicatie van de Radboud Universiteit vertrouwelijk gebruikt worden ten behoeve van het beantwoorden van de onderzoeksvragen van onze bachelorscriptie.

Deelname

Deelname is vrijwillig en het is dan ook te allen tijde mogelijk om de vragenlijst af te breken en te stoppen met het invullen. Hiermee beloven wij u ook dat uw data gewist zal worden en niet gebruikt zal worden in het onderzoek. Als u besluit om de vragenlijst wel naar voltooidheid in te vullen, zal de data na afronding van de scriptie alsnog ook gewist worden uit het systeem.

Instructies

In de vragenlijst zal eerst aan u gevraagd worden om nauwkeurig een tekst te bestuderen met betrekking tot klimaatverandering. Hierna volgen enige vragen ter evaluatie van de tekst, gevolgd door een korte evaluatie met betrekking tot uw Engels niveau. Afsluitend vragen wij nog enige demografische informatie. Op iedere pagina zal nogmaals de gevraagde opdracht/informatie staan ter verduidelijking.

Contact

Voor nu willen we u hartelijk bedanken voor het lezen van de benodigde informatie en het deelnemen aan onze vragenlijst. Bij vragen en/of opmerkingen over het doel, de data of andere zaken kunt u een email sturen naar Teun.Kemmerling@ru.nl.

FOREIGN LANGUAGE EFFECT ON EMOTIONAL PERSUASIVE COMMUNICATION

Hartelijk dank,

Nina van Loosen
Mynorka Daza Quintero
Iris de Boer
Imke Swinkels
Jelle van Dongen
Moritz Hofstede
Teun Kemmerling

Ik geef toestemming tot het gebruiken van mijn antwoorden.

Ja
Nee

Om ervoor te zorgen dat wij de correcte doelgroep bereiken volgen hier drie korte vragen ter evaluatie daarvan:

Hoe oud bent u?

Onder 18
18 of ouder

Wat is uw moedertaal?

Nederlands
Nederlands plus een andere taal
Anders

Spreekt u Engels?

Ja
Nee

Introduction to messages

U wordt nu gevraagd een korte tekst over klimaatverandering te lezen en deze te beoordelen. Dit duurt ongeveer 2-3 minuten, dus neem de tijd en lees de tekst grondig door. Nadat u de tekst hebt gelezen, wordt u gevraagd een aantal vragen in te vullen. Dit zal

ongeveer 3 minuten duren.

Message 1: emotional - English

My name is Daan. I am 37 years old, and I am the father of two joyful boys. My wife Tessa and I own a potato farm in beautiful South Limburg in the Netherlands. We inherited the farm in early 2018 after my father died. Ever since, we have had to face terrible weather challenges.

In the summer of 2018, it was incredibly hot and sunny, and it rained less than ever before – a horrible time to grow potatoes. Because of that, our family's farm severely suffered. The severe drought killed most of the harvest, and with awfully little rain, groundwater was scarce. Watering the plants was hopeless. We lost half of our harvest and thus our most important income source. We could not pay our bills.

As we slowly recovered, the next tragedy hit in 2021. Monstrous rainfalls in Limburg, Belgium, and Germany led to disastrous floods. We feared for our lives and evacuated the farm to stay with Tessa's mother in Utrecht. The flood destroyed the fields, causing massive losses in the harvest. Our dearly loved home and cherished belongings are ruined forever. A few days later, a sad message from Germany hit me. My childhood friend Luuk, who had moved to Western Germany, was overwhelmed by the flood. His house was swept away by the forceful stream of a usually peaceful creek, drowning his wife and daughter.

These catastrophes are the result of global warming. Our lifestyle activities release enormous amounts of CO₂ which disturbs the usual balance between sunshine and rain. This leads to higher global temperatures, melting polar ice caps, and rising sea levels. More dreadful droughts, storms, and floods will cause families like mine or Luuk's to lose our homes, income, and loved ones.

This is how you can help:

1) Instead of flying to your next beach vacation, consider travelling by train. Trains are much more environmentally friendly. Or start small by taking the bike or bus to university or work rather than driving by car.

2) Next time you go shopping at the supermarket, consider buying local and seasonal foods. Eating fresh food coming right from your neighborhood is very environmentally friendly. The strawberries and tomatoes don't have to travel from far away, exotic countries and, therefore, fewer harmful gases are released.

3) Lastly, try to eat less meat and drink less milk. You can help the environment by not eating animals like cows, pigs, and chickens, or by not drinking cow milk and eating animal products like eggs and cheese. Raising animals for food releases immense amounts of CO₂ that harm our beautiful earth. Eating more vegetarian and vegan meals helps with this.

Message 3: emotional - Dutch

Mijn naam is Daan. Ik ben 37 jaar oud en vader van twee vrolijke jongens. Mijn vrouw Tessa en ik zijn eigenaar van een aardappelboerderij in het mooie Zuid-Limburg in Nederland. Wij hebben de boerderij begin 2018 geërfd na het overlijden van mijn vader. Sindsdien hebben we te maken gehad met verschrikkelijke uitdagingen door het weer.

In de zomer van 2018 was het ongelooflijk heet en zonnig, en het heeft nog nooit zo weinig geregend - een verschrikkelijke tijd om aardappelen te verbouwen. Daardoor heeft de boerderij van onze familie zwaar geleden. De ernstige droogte doodde het grootste deel van de oogst, en met akelig weinig regen was grondwater schaars. Water geven aan de planten was hopeloos. We verloren de helft van onze oogst en dus onze belangrijkste inkomstenbron, waardoor we onze rekeningen niet konden betalen.

Terwijl we langzaam herstelden, sloeg in 2021 de volgende tragedie toe: monsterlijke regenval in Limburg, België en Duitsland leidde tot rampzalige overstromingen. We vreesden voor ons leven en evacueerden de boerderij om bij Tessa's moeder in Utrecht te gaan logeren. De overstroming heeft de velden verwoest, waardoor enorme delen van de oogst verloren zijn gegaan. Ons geliefde huis en onze dierbare bezittingen zijn voor altijd geruïneerd. Een paar dagen later kreeg ik een triest bericht uit Duitsland: het huis van mijn jeugdvriend Luuk, die naar West-Duitsland is verhuisd, was overspoeld door de overstroming. Zijn huis werd weggevaagd door de krachtige stroom van een gewoonlijk rustige beek, waardoor zijn vrouw en dochter verdronken.

Deze catastrofes zijn het gevolg van de opwarming van de aarde. Door onze levensstijl komen enorme hoeveelheden CO₂ vrij, waardoor het gebruikelijke evenwicht tussen zonneschijn en regen wordt verstoord. Dit leidt tot hogere temperaturen op aarde, smeltende ijskappen en een stijgende zeespiegel. Meer vreselijke droogtes, stormen en overstromingen zullen ervoor zorgen dat gezinnen zoals het mijne of dat van Luuk hun huis, inkomen en geliefden verliezen.

Dit is hoe je kunt helpen:

1) In plaats van vliegen naar je volgende strandvakantie, kun je overwegen met de trein te

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reizen. Treinen zijn veel milieuvriendelijker. Of begin klein en neem de fiets of de bus naar de universiteit of het werk in plaats van rijden met de auto.

2) Als je de volgende keer boodschappen gaat doen in de supermarkt, overweeg dan om lokaal en seizoensgebonden voedsel te kopen. Het eten van vers voedsel dat rechtstreeks uit je buurt komt is zeer milieuvriendelijk. De aardbeien en tomaten hoeven niet uit verre, exotische landen te komen en daardoor komen er minder schadelijke gassen vrij.

3) Tot slot, probeer minder vlees te eten en minder melk te drinken. Je kunt het milieu helpen door geen dieren te eten zoals koeien, varkens en kippen, of door geen koemelk te drinken en geen eieren en kaas te eten. Het houden van dieren voor voedsel produceert immense hoeveelheden CO₂ die onze mooie aarde schaden. Meer vegetarische en veganistische maaltijden eten helpt daarbij.

comprehensibility check

Beantwoord de vraag door het bolletje aan te kruisen dat uw mening het beste weergeeft. Aangezien we geïnteresseerd zijn in uw eerste indruk, zijn er geen foute antwoorden.

	Helemaal mee oneens	Mee oneens	Enigszins mee oneens	Neutraal	Enigszins mee eens	Mee eens	Helemaal mee eens
Ik begreep de boodschap die de tekst probeert over te brengen volledig.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dependent Variables

Gelieve er rekening mee te houden dat u tijdens het invullen van de vragenlijst niet kunt terugkeren naar de tekst.

Deel 1: Houding

Beantwoord de vragen door het bolletje aan te kruisen dat uw mening het beste weergeeft. Aangezien we geïnteresseerd zijn in uw eerste indruk, zijn er geen foute antwoorden.

Helemaal mee oneens	Mee oneens	Enigszins mee oneens	Neutraal	Enigszins mee eens	Mee eens	Helemaal mee eens
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	Helemaal mee oneens	Mee oneens	Enigszins mee oneens	Neutraal	Enigszins mee eens	Mee eens	Helemaal mee eens
Mensen zouden zich meer moeten bekommeren om klimaatverandering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Klimaatverandering moet de hoogste prioriteit krijgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mensen maken zich te veel zorgen over klimaatverandering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Klimaatverandering is een bedreiging voor de wereld.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De ernst van klimaatverandering is overdreven.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is vervelend om te zien dat mensen niets doen voor het probleem van klimaatverandering.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Deel 2: Gedragsintentie

Beantwoord de vragen door het bolletje aan te kruisen die uw mening het beste weergeeft. Aangezien we geïnteresseerd zijn in uw eerste indruk, zijn er geen foute antwoorden.

	Helemaal mee oneens	Mee oneens	Enigszins mee oneens	Neutraal	Enigszins mee eens	Mee eens	Helemaal mee eens
Ik heb de intentie om het in de boodschap beschreven gedrag te volgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zal het in de boodschap beschreven gedrag volgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben bereid het in de boodschap beschreven gedrag te volgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben van plan het in de boodschap beschreven gedrag te volgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FOREIGN LANGUAGE EFFECT ON EMOTIONAL PERSUASIVE COMMUNICATION

	Helemaal mee oneens	Mee oneens	Enigszins mee oneens	Neutraal	Enigszins mee eens	Mee eens	Helemaal mee eens
Ik ben niet bereid mijn levensstijl te veranderen om de opwarming van de aarde en de klimaatverandering tegen te gaan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zal alles doen wat ik kan om de nadelige effecten jegens het klimaat te verkleinen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Deel 3: Waargenomen emotionaliteit

Deze boodschap is:

niet-emotioneel ☐ ☐ ☐ ☐ ☐ ☐ ☐ emotioneel

LexTALE

This test consists of about 60 trials, in each of which you will see a string of letters. Your task is to decide whether this is an existing English word or not. If you think it is an existing English word, you click on "yes", and if you think it is not an existing English word, you click on "no".

If you are sure that the word exists, even though you don't know its exact meaning, you may still respond "yes". But if you are not sure if it is an existing word, you should respond "no".

In this experiment, we use British English rather than American English spelling. For example: "realise" instead of "realize"; "colour" instead of "color", and so on. Please don't let this confuse you. This experiment is not about detecting such subtle spelling differences anyway.

You have as much time as you like for each decision. This part of the experiment will take about 5 minutes.

	No	Yes
Platery	<input type="radio"/>	<input type="radio"/>
Denial	<input type="radio"/>	<input type="radio"/>
Generic	<input type="radio"/>	<input type="radio"/>
Mensible	<input type="radio"/>	<input type="radio"/>

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	No	Yes
Scornful	<input type="radio"/>	<input type="radio"/>
Stoutly	<input type="radio"/>	<input type="radio"/>
Ablaze	<input type="radio"/>	<input type="radio"/>
Kermshaw	<input type="radio"/>	<input type="radio"/>
	No	Yes
Moonlit	<input type="radio"/>	<input type="radio"/>
Lofty	<input type="radio"/>	<input type="radio"/>
Hurricane	<input type="radio"/>	<input type="radio"/>
Flaw	<input type="radio"/>	<input type="radio"/>
Alberation	<input type="radio"/>	<input type="radio"/>
Unkempt	<input type="radio"/>	<input type="radio"/>
Breeding	<input type="radio"/>	<input type="radio"/>
Festivity	<input type="radio"/>	<input type="radio"/>
	No	Yes
Screech	<input type="radio"/>	<input type="radio"/>
Savoury	<input type="radio"/>	<input type="radio"/>
Plaudate	<input type="radio"/>	<input type="radio"/>
Shin	<input type="radio"/>	<input type="radio"/>
Fluid	<input type="radio"/>	<input type="radio"/>
Spaunch	<input type="radio"/>	<input type="radio"/>
Allied	<input type="radio"/>	<input type="radio"/>
Slain	<input type="radio"/>	<input type="radio"/>
	No	Yes
Recipient	<input type="radio"/>	<input type="radio"/>
Exprate	<input type="radio"/>	<input type="radio"/>
Eloquence	<input type="radio"/>	<input type="radio"/>
Cleanliness	<input type="radio"/>	<input type="radio"/>
Dispatch	<input type="radio"/>	<input type="radio"/>
Rebondicate	<input type="radio"/>	<input type="radio"/>
Ingenious	<input type="radio"/>	<input type="radio"/>
Bewitch	<input type="radio"/>	<input type="radio"/>
	No	Yes

FOREIGN LANGUAGE EFFECT ON EMOTIONAL PERSUASIVE COMMUNICATION

	No	Yes
Skave	<input type="radio"/>	<input type="radio"/>
Plaintively	<input type="radio"/>	<input type="radio"/>
Kilp	<input type="radio"/>	<input type="radio"/>
Interfate	<input type="radio"/>	<input type="radio"/>
Hasty	<input type="radio"/>	<input type="radio"/>
Lengthy	<input type="radio"/>	<input type="radio"/>
Fray	<input type="radio"/>	<input type="radio"/>
Crumper	<input type="radio"/>	<input type="radio"/>
	No	Yes
Upkeep	<input type="radio"/>	<input type="radio"/>
Majestic	<input type="radio"/>	<input type="radio"/>
Magrity	<input type="radio"/>	<input type="radio"/>
Nourishment	<input type="radio"/>	<input type="radio"/>
Abergry	<input type="radio"/>	<input type="radio"/>
Proom	<input type="radio"/>	<input type="radio"/>
Turmoil	<input type="radio"/>	<input type="radio"/>
Carbohydrate	<input type="radio"/>	<input type="radio"/>
	No	Yes
Scholar	<input type="radio"/>	<input type="radio"/>
Turtle	<input type="radio"/>	<input type="radio"/>
Fellick	<input type="radio"/>	<input type="radio"/>
Destription	<input type="radio"/>	<input type="radio"/>
Cylinder	<input type="radio"/>	<input type="radio"/>
Censorship	<input type="radio"/>	<input type="radio"/>
Celestial	<input type="radio"/>	<input type="radio"/>
Rascal	<input type="radio"/>	<input type="radio"/>
	No	Yes
Purrage	<input type="radio"/>	<input type="radio"/>
Pulsh	<input type="radio"/>	<input type="radio"/>
Muddy	<input type="radio"/>	<input type="radio"/>
Quirty	<input type="radio"/>	<input type="radio"/>
Pudour	<input type="radio"/>	<input type="radio"/>

FOREIGN LANGUAGE EFFECT ON EMOTIONAL PERSUASIVE COMMUNICATION

	No	Yes
Listless	<input type="radio"/>	<input type="radio"/>
Wrought	<input type="radio"/>	<input type="radio"/>

Demographics

Wat is uw leeftijd?

Wat is uw geslacht?

Mannelijk

Vrouwelijk

Niet-binair / derde geslacht

Zeg ik liever niet

Wat is uw huidige of hoogst behaalde opleidingsniveau?

Middelbare school

MBO

HBO

WO

Vanaf welke leeftijd bent u (ongeveer) begonnen met het leren van Engels?

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