

Master's thesis

Foreign-Language Effect?: The influence of language choice and L2 proficiency on message persuasiveness.

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Abstract

This study investigated the effect of language choice and L2 proficiency on message persuasiveness. One research question and three hypotheses were formulated to conduct the research. The research question was: What is the influence of language choice (L1 versus L2) and L2 proficiency (low versus high) on the persuasiveness of the message (behavioral intent)? The relevance of this study is that it contributes to more knowledge about the optimization of message persuasiveness concerning language choice.

An online survey involving 114 Dutch respondents was conducted. Respondents were shown a campaign message in either the Dutch language (L1) or the English language (L2). Subsequently, they had to answer some questions about perceived emotionality and behavioral intention regarding the message. Furthermore, the L2 proficiency of all respondents was measured by means of an objective vocabulary test called LexTALE. Based on the obtained score for this test, respondents were assigned to either the low L2 proficiency group or the high L2 proficiency group. The experiment was situated in a persuasive context, as the message was part of a fictitious government campaign.

The results showed that there was no difference in perceived emotionality between respondents processing the message in L1 and respondents processing the message in L2. In other words, the Foreign-Language Effect was not present. Moreover, no difference was found in perceived emotionality between respondents with a relatively low L2 proficiency and respondents with a relatively high L2 proficiency. Additionally, perceived emotionality was not related to message persuasiveness (behavioral intent). All in all, it can be concluded that both language choice and proficiency have no effect on the perceived emotionality of a message and that perceived emotionality, in turn, does not affect the persuasiveness of the message either.

Keywords: language choice, L2 proficiency, perceived emotionality, persuasiveness

Introduction

Due to globalization and international mobility, there is increasing contact between people with different language backgrounds. The increasing international contact has led to the need for a common language that promotes mutual understanding. This need mainly applies to, for example, the European Union and confederations in which various countries and languages are present. In these situations, mainly English is utilized as the common language because many speakers use this language (Johnson, 2009). More than 380 million people speak English as their first language, more than 200 million people as their second language, and around one billion people are currently learning English (Alfarhan, 2016). Nowadays, English has grown into a global language (Alfarhan, 2016).

International public information campaigns are meaningful policy tools utilized by authorities worldwide and are likely to be published in English (Rice & Atkin, 2012, as cited in Solovei & van den Putte, 2020, p. 586). These kinds of campaigns use messages that are meant to persuade the mass public of certain attitudes and to change their behaviors (Solovei & van den Putte, 2020). In order to persuade the public, emotions play a significant role according to the Elaboration Likelihood Model (Petty & Briñol, 2015). The ELM holds that attitude and judgment changes are caused by different thought processes contingent on the extent of elaboration someone is engaging in at the time of influence. The extent of elaboration is formed by emotional and situational factors that determine someone's motivation and ability to think about the influence (Petty & Briñol, 2015). However, research shows that emotional resonances may differ between two languages because a first language (L1) and a foreign language (L2) are frequently learned in different contexts (Bond & Lai, 1986; Dewaele & Pavlenko, 2002; Schrauf, 2000). An L1 is mainly mastered in family life where one comes into contact with human emotions, including emotional extremes, at a very young age (Schrauf, 2000). An L2 is mainly used in the context of work, professional achievement, and schooling and is often learned after early childhood, resulting in fewer emotional resonances (Bond & Lai, 1986; Dewaele & Pavlenko, 2002). Additionally, Bond and Lai (1986) argued that an L2 is learned in more emotionally neutral settings (e.g. school or work) causing less emotional arousal attributed to L2 words.

Research has been done on the difference in perceived emotionality evoked by L1 and L2 language use in different contexts, including taboo and swear words (e.g. Dewaele, 2004; Harris et al., 2003), decision-making (Keysar et al., 2012), and moral dilemmas (Brouwer, 2021). All of the studies found that the perceived emotionality is lower in the L2 than in the

L1. This phenomenon is known as the Foreign-Language Effect (FLE), in which fewer memories and associated emotions are evoked with a certain stimulus in someone's L2 than in someone's L1 (Hintzman, 1986, 1988).

However, the role of language choice (L1/L2) has only rarely been investigated in the context of persuasive communication. One exception is Puntoni et al. (2009) who investigated the FLE in advertising and found that L1 marketing messages were rated as more emotionally intense than L2 marketing messages. According to them, the thought processes when seeing a persuasive message in the L1 and L2 can be different, evoking different degrees of emotionality. These different degrees of emotionality are important in determining the type of decision (utilitarian/deontological) people make (Puntoni et al., 2009). Utilitarian decisions comprise judgments that favor the essential rights and duties of an individual. Deontological decisions comprise judgments that favor the greater good by maximizing gains and minimizing detriments across affected individuals (Brouwer, 2021). Someone's type of decision/behavioral intention will eventually determine the degree of persuasiveness of the message. The effect of language choice has not yet been explored in the context of international campaigns however. Therefore, this study aimed to investigate the influence of language choice (and a potential FLE) on the persuasiveness of an international public information campaign message.

Moreover, several studies have shown that proficiency in an L2 can influence the perceived emotionality and/or the FLE (e.g. Brouwer, 2019; Ćavar & Tytus, 2018; Dewaele, 2004). All these studies concluded that a higher L2 proficiency can lead to a higher perceived emotionality and diminish the FLE. However, this finding has not yet been confirmed by scientific research in the context of persuasive communication. The influence of L2 proficiency on perceived emotionality has only been examined as non-contrastive, different degrees of L2 proficiency have not been taken into account. Therefore, this study also investigated the influence of L2 proficiency (low/high) on the perceived emotionality and persuasiveness of an international public information campaign.

Theoretical framework

Research on the FLE

Studies have shown that there is a difference in perceived emotionality evoked by L1 versus L2 language use (Brouwer, 2021; Puntoni et al., 2009). The study of Brouwer (2021) investigated the influence of emotion and modality (reading/listening) on moral decision-

making and found that bilinguals experienced weaker emotional activation in their foreign language (L2) than in their first language (L1) in personal dilemmas and reading tasks. As mentioned before, this is referred to as the so-called Foreign-Language Effect (FLE) (Keysar et al., 2012). The FLE can be explained by the Episodic Trace Theory (Raaijmakers & Shiffrin, 1992). This theory assumes that a distinct episodic trace is left in the mind after every experience. Once an experience is activated, all connected traces in the mind are triggered. These traces also contain previously experienced emotions. In other words, when a certain experience is activated, it will be connected to certain past emotional experiences (Hintzman, 1986, 1988). The recall that occurs when an experience is activated would seem to be language-dependent because memories originally experienced in the L1 are more available when they are evoked by L1 words (Marian & Neisser, 2000; Marian & Kaushanskaya, 2004). This means that textual messages could operate as memory probes that result in the activation of previously experienced emotions. Words in a textual message that are encountered more often should belong to a larger number of episodic traces, leading to a stronger echo of previously experienced emotions. In the context of persuasive communication, the number of experiences encountered by someone in simultaneity with an L1 language context exceeds the number of experiences encountered in an L2 language context (Puntoni et al., 2009). Therefore, it can be concluded that the finding that higher emotionality is experienced in the L1 than in the L2 is plausible (Brouwer, 2021; Puntoni et al., 2009).

The difference in emotionality evoked by language choice (L1 versus L2) has already been researched in various contexts. Firstly, the context of taboo and swear words has been investigated. Dewaele (2004) conducted research into the perception of emotional force of taboo and swear words among multilinguals and found that taboo and swear words were perceived as more emotionally intense in the L1 than in the L2. The perceived emotional force of taboo and swear words in the L1 weakened when the L1 was no longer the dominant language of the individual. These results were mainly determined by the individual's linguistic history. Harris et al. (2003) investigated the degree of reactivity of taboo words and reprimands in different languages. Participants read and listened to Turkish (L1) and English (L2) words that they then rated on pleasantness while their skin conductance was monitored. The results showed different response patterns for L1 and L2, and higher emotional reactivity for taboo words and childhood reprimands in the L1 compared to the L2. This finding corresponds with the finding of Dewaele (2004) that taboo words elicit greater emotionality in the L1 than the L2.

Secondly, the FLE has been investigated in the context of decision-making. Keysar et al. (2012) researched the effect of a foreign language on decision-making regarding the framing effect (gain frame/loss frame). The study found that the use of a foreign language diminishes decision-making biases. When the choices were presented in the L1, participants tended to show risk aversion in the domain of gains and risk seeking in the domain of losses. However, this so-called framing effect disappeared when the choices were presented in the L2. Keysar et al. (2012) suggest that this result could be explained by the fact that people felt greater cognitive and emotional distance in their L2. As a result, they went through a more rational and less emotional reasoning process when the choices were presented in the L2 than in the L1, leading to more rational choices in the L2.

The FLE was also investigated in the context of decision-making in relation to moral dilemmas. Brouwer (2021) examined the influence of the type of dilemma (personal/impersonal) and modality (reading/listening) on the FLE. The results of the study showed that participants showed stronger emotional responses in the written condition, regardless of the language. However, the FLE was not dependent on modality. Language choice did partly affect decision-making, as participants made more utilitarian decisions when personal dilemmas were presented in the L2 than in the L1. However, this finding did not apply to impersonal dilemmas.

A context in which language choice and emotionality have only rarely been investigated is that of persuasive communication. To date, the only persuasive context in which the FLE has been researched is advertising. Puntoni et al. (2009) investigated bilingualism and the emotional intensity of advertising language. The results showed that marketing slogans were experienced as more emotional in a first language than in a foreign language. They suggest that the extent of emotional experiences is important in decision-making, which may exert an influence on the behavioral intention of consumers. This result was attributed to the Episodic Trace Theory (see also above) because a certain marketing slogan in one language is likely to trigger certain previously experienced emotions when the words of the slogan were experienced before in that language (Puntoni et al., 2009). As suggested in the study of Puntoni et al. (2009), emotionality may have an important influence on the behavioral intention of a person. In the context of persuasive communication, someone's behavioral intention to act on the message can be translated into the persuasiveness of the message. The ELM has been developed to determine how attitudes can be formed or changed to make them lead to more persuasion. The model distinguishes two routes that can lead to persuasion. Firstly, the central route is the route through which

processes run that require a great deal of cognitive attention. This is because the focus is on the main content and arguments of the message (e.g. an ad). Secondly, the peripheral route is the route through which processes run that require little cognitive attention because only the superficial information of the messages is assessed (e.g. the source of an ad) (Petty & Cacioppo, 1986).

The influence of language choice and differences in emotionality on the persuasiveness of communication can be explained using the ELM as well. As mentioned before, bilinguals experience weaker emotionality in their L2 than in their L1 (Brouwer, 2019). The research of Brouwer (2021) examined the influence of the FLE on personal dilemmas. The study found for the L2 an increase in utilitarian decisions due to emotional distance that is caused by controlled processes with rational knowledge. In the case of L2, the central route of the ELM is taken because the dilemmas are processed with more cognitive attention, but with less emotionality than in the L1. Emotionality is an important determinant in decision-making, which subsequently influences someone's behavioral intention regarding a message in the L2. Furthermore, the study of Brouwer (2021) found for the L1 a decrease in utilitarian decisions and an increase in deontological decisions due to highly developed emotionality caused by the emotional reasoning system. In the case of L1, the peripheral route of the ELM is taken because the dilemmas are processed with more emotionality, but with less cognitive attention. This higher amount of emotionality affects decision-making in another way than in the L2, and subsequently also influences someone's behavioral intention regarding a message differently in the L1.

Foreign language proficiency

Research has found that several factors may influence the FLE, namely language proficiency, context of acquisition, frequency of language use, and age of acquisition (Degner et al., 2011; Dewaele, 2004; Dewaele, 2010; Pavlenko, 2012). The influence of proficiency in the foreign language (L2) on the FLE has already been researched several times in different contexts. Marian and Neisser (2000) studied the language-dependent recall of autobiographical memories and found that when a language has been learned to a high proficiency, the language has been extensively experienced in numerous social contexts. Experiences become emotionally grounded, causing autobiographical memories in that language. When the language is used, these past experiences and emotions are retrieved. As a result, emotionality can also be experienced when processing L2 messages, which can diminish or disappear the

FLE.

The study of Dewaele (2004) investigated the emotional weight of taboo and swear words in the speech of multilinguals. The participants were given a questionnaire on which they had to assess the emotional weight of words in their first language and a foreign language. In terms of language proficiency, the study found that participants who were more proficient in the L2 showed higher scores of emotional force for taboo and swear words in their L2. So, based on this study, it can be stated that L2 proficiency leads to a diminished FLE.

Regarding the decision-making and dilemma context, the research of Brouwer (2019) looked at the development of the FLE in highly skilled bilinguals of a closely related language pair. The participants read or listened to moral dilemmas in Dutch (L1) or English (L2), after which they were asked to decide on the appropriateness of the proposed action. The results showed that the FLE completely disappeared with language proficiency. Participants who were highly proficient in the L2 made the same decision for the dilemma in the L1 or L2. This finding is in line with the previous work of Ćavar and Tytus (2018) who investigated the FLE in the context of moral judgments. Their study proved that when a foreign language becomes a second language, the FLE could be dissolved. In other words, the FLE could disappear for bilinguals that are highly proficient in their L2.

In conclusion, previous studies have generally found that the FLE is influenced by language proficiency. This applies to studies of FLE in different contexts. The FLE diminishes or even dissolves by a high proficiency in an L2. The present study focused on L2 proficiency as a factor, distinguishing between low and high L2 proficiency. Based on the previous literature, it was expected that the FLE will diminish more with high proficiency speakers than with low proficiency speakers. This was expected because high proficiency speakers will have more emotional experiences in their L2 than low proficiency people, which may lead to a greater diminution of the FLE (Marian & Neisser, 2000).

Another factor that may influence the FLE is the context of acquisition. Dewaele (2010) investigated how multilinguals' feel about their languages and utilize them to communicate emotions. The investigation showed that the context of acquisition is an important factor. A foreign language learned via immersion (naturalistic context) generates more intense emotional resonances than a foreign language learned in the classroom (instructed context). Furthermore, Degner et al. (2011) found that frequency of language use can affect the FLE. The study examined the affective connotations of first and second language words and found that a high usage frequency causes a higher amount of affective

connotations. Moreover, according to Pavlenko (2012), who investigated the affective processing in bilingual speakers, the age of acquisition can be an influential factor. The study showed that acquiring language at a later age leads to semantical processing rather than affective processing. Finally, a naturalistic context of acquisition, a high frequency of use, and a young age of acquisition of the L2 are all factors that may cause the FLE to diminish or dissolve.

The present study

Some research has already been done on emotionality differences evoked by language choice and the FLE in several contexts (Brouwer, 2021; Puntoni et al., 2009). In general, all investigations confirmed that perceived emotionality evoked by L1 versus L2 language use can differ. Several studies showed the presence of the FLE. In other words, they found that perceived emotionality was lower in someone's L2 than in someone's L1 (Brouwer, 2021; Keysar et al., 2012). The study of Puntoni et al. (2009) also showed the important influence of emotionality on someone's behavioral intention. Additionally, the FLE has been investigated in combination with foreign language proficiency as a potential factor (Brouwer, 2019; Ćavar & Tytus, 2018; Dewaele, 2004). These studies showed that the FLE diminishes or even disappears once the proficiency in the L2 is high.

However, there is still a research gap concerning the FLE and L2 proficiency. The factor 'L2 proficiency' has only been studied on the basis of one level, but no distinction has yet been made between different levels of proficiency, such as low and high L2 proficiency. It is not only essential to know whether the FLE is influenced by proficiency, but also whether different levels of proficiency influence the presence of the FLE. It is expected that a higher level of proficiency will lead to a greater diminution of the FLE than a lower level of proficiency. High proficiency speakers will react more emotionally to a message because they have developed more emotional experiences in the L2. Regarding the persuasive context, there is also a research gap, as the FLE has only been investigated in advertising and marketing messages (Puntoni et al., 2009), but not yet in international public information campaigns. It remains unclear to what extent the FLE is present in messages of this type of persuasive context. Advertising is mainly about the consumer purchase intent which can be influenced by the emotionality of a message in a particular language (Puntoni et al., 2009). On the other hand, campaigns are not about the purchase intent, but about the degree of behavioral change in a person caused by the emotionality of a message in a certain language.

Therefore, different effects are expected in the context of international public information campaigns than in advertising.

In this study, Dutch and English were used as the first language (Dutch) and the foreign language (English). The English language was chosen as the L2 because English is spoken as a second language by 93 percent of the Dutch population (Edwards, 2014, p. 316). Concerning the persuasive context, a message from an international public information campaign was featured in the experiment. All in all, one research question and three hypotheses were formulated.

RQ: What is the influence of language choice (L1 versus L2) and L2 proficiency on the persuasiveness of the message (behavioral intent)?

H.1: Perceived emotionality will be lower when the message is processed in L2 than when the message is processed in L1.

H.2: Perceived emotionality in the L2 will be lower when respondents have a relatively low L2 proficiency than when respondents have a relatively high L2 proficiency.

H.3: Perceived emotionality is positively related to message persuasiveness.

The findings from this study were regarded as relevant for international organizations to determine how to make their campaign messages as persuasive as possible regarding language choice. For example, if an international campaign message for the European Union needs to be launched in different countries with different languages, it is essential to know whether, and if so how language choice plays a role in persuasiveness. In addition, it is relevant to know whether language proficiency plays a role in persuasiveness among the target audience. International organizations can choose to address their target audience in their mother tongue or a foreign language based on their proficiency. Bilinguals having a higher L2 proficiency may react emotionally differently to a campaign message than bilinguals having a lower L2 proficiency.

Method

Materials

The two independent variables were ‘language choice’ (two levels: L1 Dutch/L2 English) and ‘L2 proficiency’ (two levels: low/high). The independent variable ‘language choice’ was operationalized as two different versions (Dutch/English) of a message from a fictitious international public information campaign. The campaign contained a message created by the European Union (EU) about saving on energy bills. In the message, the European Union tried to persuade households, companies, and governments in the member states to use less energy because energy prices are rising. Several measures were mentioned that could contribute to saving energy. The aim was to become less dependent on Russian gas and to combat climate change. The EU distributed the campaign message in English to the member states. The Dutch government decided to spread the message based on this international public information campaign. See Appendix A for the materials.

The chosen theme for the campaign message was regarded to be relevant to a wide range of people (adults of all ages) because the consequences of climate change will become increasingly noticeable to everyone in the future. Furthermore, adults in their own households have to reckon with the rising energy prices due to the Russia-Ukraine war. The message was based on the campaign ‘Also make the switch’ set up by the Dutch government to persuade Dutch households and companies to use less energy. Appendix A includes the original campaign message.

The text of the original campaign message was modified for this experiment. More emphasis was placed on the very serious consequences of climate change in the future to make the text potentially more emotional, so that the difference in a message’s perceived emotionality in different languages could be better compared. To manipulate language choice, the Dutch version of the experimental text was translated into English by the researcher and a professor at the university, both native speakers of Dutch and highly competent L2 English speakers. After that, the translation was checked by a third evaluator to ensure the accuracy and equivalence of the two versions of messages. The content and layout of the message were kept the same for both versions so that no other factors than language choice and/or L2 proficiency could influence the assessment of the message. Moreover, no organization was named as a source so this could not affect respondents’ assessment of the message either. In the Dutch condition, respondents were exposed to the message in Dutch.

In the English condition, respondents were presented with the message in English. Both message versions used in this experiment can be found in Appendix A.

Respondents

To participate in this study, respondents had to give consent for their data to be used and have the Dutch language as their mother tongue (L1). Respondents who also had the English language as their mother tongue were sent directly to the end of the survey and excluded from the experiment. In total, 116 respondents completed the survey of which two were excluded because they had both Dutch and English as their native language or did not have Dutch as their native language respectively. This resulted in a sample of 114 participants (age: $M = 42.44$, $SD = 16.49$, range = 18 - 83). The sample consisted of 59 women (51.8%), 54 men (47.4%), and 1 nonbinary person (0.9%). Thirty-nine participants (34.2%) reported Higher Vocational Education as their highest level of education, 26 Senior Secondary Vocational Education (22.8%), 25 Master's Degree University (21.9%), 14 High School (12.3%), and 10 Bachelor's Degree University (8.8%). To test if these three demographic characteristics were equally distributed across the two language choice conditions, one one-way ANOVA and two Chi-square tests were performed. There was no significant effect of language choice on age ($F(1, 112) = 1.99$, $p = .161$). Additionally, no significant relation was found between language choice and gender ($\chi^2(2) = 3.27$, $p = .195$). However, more than 20% of the cells had an expected count of less than five. Therefore, Fisher-Freeman-Halton's Exact test ($p = .159$) was performed alternatively. Neither was there a significant relation between language choice and educational level ($\chi^2(4) = 3.73$, $p = .445$).

The respondents were asked to complete two tests to measure their proficiency in their L1 and L2. The proficiency of the respondents was tested using self-assessment and LexTALE (see further below). To test if there was a difference between the two language groups (Dutch/English) with regard to their self-reported test scores and LexTALE test scores, four independent samples t-tests were performed. No significant differences were found between the language groups with regard to their Dutch self-reported scores ($t(90.05) = 1.76$, $p = .082$) or their Dutch LexTALE scores ($t(89.20) = 1.44$, $p = .154$). Neither were significant differences found between the language groups with regard to their English self-reported scores ($t(101.14) = 1.12$, $p = .267$) and their English LexTALE scores ($t(104.68) = .06$, $p = .955$).

The independent variable 'L2 proficiency' was operationalized by assigning the respondents to

two groups: a group with a relatively low foreign language proficiency and a group with a relatively high foreign language proficiency (see further below). To test if there was a difference between the two L2 proficiency groups with regard to their English LexTALE scores, an independent samples t-test was performed. It showed a significant difference between the two groups ($t(111.18) = 16.69, p < .001$). The respondents in the high proficiency group ($M = 82.08, SD = 6.99$) were shown to have higher English LexTale scores than the respondents in the low proficiency group ($M = 60.75, SD = 6.64$). Moreover, to test if there was an equal distribution of the three demographic characteristics across the two L2 proficiency conditions, one one-way ANOVA and two Chi-square tests were performed. There was no significant effect of L2 proficiency on age ($F(1, 112) = 2.82, p = .096$). Additionally, no significant relation was found between L2 proficiency and gender ($\chi^2(2) = 1.92, p = .551$). However, more than 20% of the cells had an expected count of less than five. Therefore, Fisher-Freeman-Halton's Exact test ($p = .715$) was performed alternatively. There was a significant relation between L2 proficiency and educational level ($\chi^2(4) = 24.24, p < .001$). Participants with a University Master's Degree had a relatively higher L2 proficiency (84.0%) than participants with a High School Degree (21.4%). Vice versa, participants with a High School Degree had a relatively lower L2 proficiency (78.6%) than participants with a University Master's Degree (16.0%). The educational levels Senior Secondary Vocational Education, Higher Vocational Education, and University Bachelor's Degree did not contribute to the significant relation between L2 proficiency and educational level. The observed counts and column percentages are presented in Table 1.

Table 1. Number of participants and column percentages (between brackets) for the L2 proficiency conditions and educational levels

L2 proficiency:	Low L2 proficiency	High L2 proficiency
Educational level:		
High school	11 (79%)	3 (21%)
Senior Secondary Vocational Education	17 (65%)	9 (35%)
Higher Vocational Education	24 (62%)	15 (39%)
University Bachelor's Degree	2 (20%)	8 (80%)
University Master's Degree	4 (16%)	21 (84%)

Concerning context of acquisition of the English language, 65 respondents reported learning English in both an instructed and a natural context (57%), 45 in an instructed context (39.5%), and 4 in a natural context (3.5%). Thus, the majority of respondents reported having learned English in both contexts. However, as this is an unexpectedly high percentage, the meaning of “natural context” in the question was probably misinterpreted by the respondents. As far as the researcher was concerned, the natural context entailed a foreign language learned through immersion, in a naturalistic (non-school) context. Many respondents likely considered the natural context to be anything outside of school, such as being exposed to English on holidays or by watching Netflix. Regarding frequency of exposure to the English language, 58 respondents reported being exposed to English every day (50.9%), 27 every week (23.7%), 12 a few hours per day (10.5%), 7 every month (6.1%), 7 every year (6.1%), and 3 never (2.6%).

This study also took into account respondents' attitudes towards their native language (Dutch) and foreign language (English) as background variables. A paired samples t-test did

not show a significant difference between attitude towards Dutch language and attitude towards English language ($t(113) = .91, p = .366$). To test if there was a difference between the two L2 proficiency groups with regard to their attitude towards the native language, an independent samples t-test was performed. It did not show a significant difference between low proficiency and high proficiency English speakers with regard to their attitude towards the Dutch language ($t(111.87) = 1.14, p = .258$). Moreover, to test if there was a difference between the two L2 proficiency groups with regard to their attitude towards the foreign language, another independent samples t-test was performed. It did not show a significant difference between low proficiency and high proficiency English speakers with regard to their attitude towards the English language ($t(110.19) = 1.65, p = .101$).

Design

The experiment aimed to investigate the effects of two independent variables: language choice (Dutch/English) and L2 proficiency (low/high). Therefore, a 2 x 2 between-subjects design was used. This effectively resulted in four experimental conditions. Each respondent was exposed to either the campaign message in Dutch or English and assigned to one of the two L2 proficiency groups (low/high). The distribution of respondents across the four conditions is presented in Table 2.

Concerning the independent variable L2 proficiency, participants, based on their LexTALE score, were assigned to one of two L2 proficiency groups (low/high). Respondents who achieved a score of 70 percent or higher were assigned to the high proficiency group and respondents who achieved a score of lower than 70 percent were assigned to the low proficiency group, following Lemhöfer and Broersma (2012). The self-assessed L2 proficiency scores were not used for grouping because these scores have shown to be less consistent predictors of general proficiency than LexTALE scores (Lemhöfer & Broersma, 2012). In this study, the self-assessed scores were used merely as an extra check of L2 proficiency. No significant differences were found between the LexTALE and self-reported scores (see under Respondents).

Table 2. Distribution of respondents ($n = 114$) across the conditions

L2 proficiency:	Low L2 proficiency	High L2 proficiency
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Language choice:		
L1/Dutch	$n = 27$	$n = 26$
L2/English	$n = 31$	$n = 30$

Instruments

The dependent variables of this experimental study were ‘perceived emotionality’ and ‘behavioral intention’. Participants were asked to rate the perceived emotionality of the message they were exposed to (in L1 or L2). The perceived emotionality was measured using a seven-point Likert scale with the following statement “I perceived this message as emotional.” (‘1 strongly disagree’ - ‘7 strongly agree’) based on Puntoni et al. (2009). Moreover, respondents were asked to rate the persuasiveness of the message they were exposed to (in L1 or L2). The persuasiveness of the message was measured in terms of behavioral intention. The behavioral intention was measured using a seven-point Likert scale with the following two statements “I am prepared to take measures to save energy in the future.” and “It is probable that I will take measures to save energy in the future.” (1 ‘strongly disagree’ - 7 ‘strongly agree’) based on Brijs et al. (2011). The reliability of ‘behavioral intention’ comprising two items was acceptable: $\alpha = .79$.

Besides these two dependent variables, the following background variables were measured: ‘mother tongue’, ‘age’, ‘gender’, ‘educational level’, ‘current energy-saving measures’, ‘attitude towards Dutch language’, ‘attitude towards English language’, ‘self-reported proficiency’, ‘LexTALE’, ‘frequency of language use’, and ‘context of acquisition’.

The variable mother tongue was measured through the following questions: ‘Is Dutch your native language?’ and ‘Is English your native language?’. The answer options were: yes

or no. The variable age was measured through an open-ended question: ‘What is your age (in years)?’. The variable gender was measured through a multiple-choice question: ‘What is your gender?’. The answer options were: man, woman, others (please state), or rather not say. The variable educational level was measured through a multiple-choice question: ‘What is your highest level of education?’. The answer options were: no education, High School, Senior Secondary Vocational Education, Higher Vocational Education, Bachelor’s Degree University, Master’s Degree University, or PhD.

The variable current energy-saving measures was measured through the following question: ‘Are you already taking energy-saving measures? If so, can you give examples?’. The answer options were: yes (please state) or no.

The variable attitude towards Dutch language was measured using a seven-point Likert scale with the following statements: ‘The Dutch language is...’ (‘1 strongly disagree’ - ‘7 strongly agree’) based on Karahan (2007). The variable comprised three items: ‘beautiful’, ‘important’, and ‘interesting’. The reliability of ‘attitude towards Dutch language’ comprising three items was acceptable: $\alpha = .79$.

The variable attitude towards English language was measured using a seven-point Likert scale with the following statements: ‘The English language is...’ (‘1 strongly disagree’ - ‘7 strongly agree’) based on Karahan (2007). The variable comprised three items: ‘beautiful’, ‘important’, and ‘interesting’. The reliability of ‘attitude towards English language’ comprising three items was good: $\alpha = .80$.

The variable self-reported proficiency was measured using the ‘general proficiency scale’ developed by Flaitz (1988). This is a seven-point Likert scale ranging from ‘1 poor’ to ‘7 excellent’. The variable comprised four items: speaking, listening, reading, and writing. Participants had to self-assess their proficiency per item for both the Dutch and English language. The reliability of ‘self-reported proficiency’ comprising four items was good: $\alpha = .94$.

The variable LexTALE was measured using the LexTALE test developed by Lemhöfer and Broersma (2012). The LexTALE is a quick vocabulary test consisting of 60 items. The result of the test is expressed in a percentage from ‘0 low’ to ‘100 high’. Participants had to complete this test for both the Dutch and English language. For each item, they had to decide whether or not the item existed in the language.

The variable frequency of language use was measured through the following question: ‘How frequently do you speak/listen/read/write in English?’ based on Dewaele and Pavlenko (2001). The answer options were: never, every year, every month, every week, every day, or

a few hours a day.

The variable context of acquisition was measured through the following question: ‘In which context did you acquire the English language?’ based on Dewaele and Pavlenko (2001). The answer options were: a natural context (outside of school), an instructed context (at school), or both.

Procedure

In this study, an online experiment using ‘Qualtrics’ was conducted. The recruitment of respondents was done through different social media channels (WhatsApp, LinkedIn, Instagram) and snowball sampling. Respondents did not receive any incentive for their participation. In Qualtrics, participants first received a brief introduction of what the questionnaire consisted of and what was expected of them. In this introduction, they were also notified that participation and answers remained anonymous after which consent for partaking could be given. The aim of the experiment was not disclosed to the participants. Thereafter, respondents were directed to the questionnaire that they had to conduct on an individual basis. The questionnaire was in the mother tongue of the respondents (Dutch) in order to avoid the Anchor Contraction Effect (ACE). The ACE is the systematic tendency to report answers on rating scales more emotionally intensely in the L2 than L1 (De Langhe et al., 2011).

The first part of the survey consisted of some questions to check whether the respondents met the requirements. The questions checked whether they had the Dutch and/or English language as their mother tongue. Subsequently, participants had to answer some demographical questions with regard to their age, gender, and educational level. Then, the respondents were exposed to either the Dutch or English message that they should read carefully. Thereafter, some questions were asked about the message concerning perceived emotionality, behavioral intention, and current energy-saving measures. The questionnaire followed with questions about proficiency in the Dutch language (attitude towards Dutch language, self-reported proficiency, and LexTALE test). Subsequently, these questions about proficiency (attitude towards English language, self-reported proficiency, and LexTALE test) were also asked for the English language. In addition, questions were asked about the frequency of use and context of acquisition of the English language. Finally, participants were thanked for their partaking. The procedure was the same for all respondents regardless

of the language of the message. The experiment took about 10 minutes. The complete survey can be found in Appendix B.

Statistical treatment

In order to investigate the research question and hypotheses, two two-way ANOVAs (with between-subjects factors only) and one correlation were conducted. Furthermore, several t-tests, Chi-squares, and one-way ANOVAs were performed to get additional information concerning the distribution of the demographic characteristics, the proficiency tests scores, and the attitude towards the languages. Cronbach's alphas were calculated for variables measured with multiple items to indicate the reliability of the scale.

Results

Two two-way ANOVAs and one correlation were conducted to test the hypotheses. Moreover, an independent samples t-test concerning behavioral intention was performed. This test did not have to be performed to answer the research question, but was done to obtain more information as regards the dependent variable ‘behavioral intention’.

Perceived emotionality

To test the first hypothesis that perceived emotionality will be lower when the message is processed in L2 than when the message is processed in L1 and the second hypothesis that perceived emotionality in the L2 will be lower when respondents have a relatively low L2 proficiency than when respondents have a relatively high L2 proficiency, a two-way analysis of variance with factors language choice and proficiency was conducted. It did not show a significant main effect of language choice on perceived emotionality ($F(1, 110) = 1.52, p = .221$). Proficiency was also not found to have a significant main effect on perceived emotionality ($F(1, 110) = 2.89, p = .092$). The interaction effect between language choice and proficiency was also not statistically significant ($F(1, 110) = 2.33, p = .130$). Table 3 presents the means and standard deviations of the perceived emotionality of the message.

Table 3. Means and standard deviations (between brackets) for the perceived emotionality of the message (1 = low emotionality, 7 = high emotionality)

	Language choice	L2 proficiency	<i>M (SD)</i>
<i>Perceived emotionality</i>	L1/Dutch	Low proficiency (<i>n</i> = 27)	4.30 (1.20)
		High proficiency (<i>n</i> = 26)	3.35 (1.67)
		Total (<i>n</i> = 53)	3.83 (1.53)
	L2/English	Low L2 proficiency (<i>n</i> = 31)	3.48 (1.65)
		High L2 proficiency (<i>n</i> = 30)	3.43 (1.68)
		Total (<i>n</i> = 61)	3.46 (1.65)
	Total	Low L2 proficiency (<i>n</i> = 58)	3.86 (1.50)
		High L2 proficiency (<i>n</i> = 56)	3.39 (1.66)

Behavioral intention

A two-way analysis of variance with language choice and proficiency as factors did not show a significant main effect of language choice on behavioral intention ($F(1, 110) < 1$). Proficiency was also not found to have a significant main effect on behavioral intention ($F(1, 110) < 1$). The interaction effect between language choice and proficiency was also not statistically significant ($F(1, 110) = 2.03, p = .158$). Table 4 presents the means and standard deviations of the behavioral intention.

Table 4. Means and standard deviations (between brackets) for the behavioral intention (1 = low behavioral intention, 7 = high behavioral intention)

	Language choice	L2 proficiency	<i>M (SD)</i>
<i>Behavioral intention</i>	L1/Dutch	Low proficiency (<i>n</i> = 27)	5.65 (1.00)
		High proficiency (<i>n</i> = 26)	5.92 (1.01)
		Total (<i>n</i> = 53)	5.78 (1.01)
	L2/English	Low L2 proficiency (<i>n</i> = 31)	5.79 (.70)
		High L2 proficiency (<i>n</i> = 30)	5.52 (1.31)
		Total (<i>n</i> = 61)	5.66 (1.05)
	Total	Low L2 proficiency (<i>n</i> = 58)	5.72 (.85)
		High L2 proficiency (<i>n</i> = 56)	5.71 (1.19)

Interestingly, an independent samples t-test showed a significant difference between people already taking energy-saving measures and people not yet taking energy-saving measures with regard to behavioral intention ($t(17.99) = 3.02, p = .007$). People already taking energy-saving measures ($M = 5.88, SD = 0.85$) were shown to have higher behavioral intentions than people not yet taking energy-saving measures ($M = 4.79, SD = 1.44$).

Correlation

To test the hypothesis that perceived emotionality is positively related to message persuasiveness, a Spearman's Rank Correlation test was conducted. It did not show a significant correlation between perceived emotionality and behavioral intention ($r_s(114) = .08, p = .381$).

Conclusion & discussion

Conclusion

This study aimed to examine the influence of language choice (L1/L2) and L2 proficiency (low/high) on the persuasiveness of a message (behavioral intent). In other words, whether the language (L1/L2) in which a message is presented and people's level of L2 proficiency (low/high) affect the perceived emotionality of the message. And whether a higher perceived emotionality of a message leads to a higher behavioral intention to act upon the message.

In terms of perceived emotionality, the results showed that perceived emotionality is not influenced by language choice. Perceived emotionality was not lower when the message was processed in L2 than when the message was processed in L1. Therefore, the FLE and hypothesis 1 were rejected. Furthermore, the results showed that perceived emotionality was also not influenced by L2 proficiency. Perceived emotionality in the L2 was not lower when respondents had a relatively low L2 proficiency than when respondents had a relatively high L2 proficiency. Therefore, hypothesis 2 was rejected. Regarding behavioral intention, the results showed that behavioral intention was neither influenced by language choice nor by L2 proficiency. Moreover, behavioral intention (message persuasiveness) was not related to perceived emotionality. Therefore, hypothesis 3 was rejected.

Discussion

The first hypothesis proposing that perceived emotionality will be lower when the message is processed in L2 than when the message is processed in L1 was rejected. These findings are in contrast with a number of previous studies that showed a higher experienced emotionality of words and phrases in the L1 than L2 (Dewaele, 2004; Harris, 2003; Puntoni et al., 2009). The present findings are also not in line with research executed in the context of decision-making regarding the FLE, which showed that decisions were affected by language choice. As people tended to make more emotion-based decisions in the L1 than L2 (e.g. Brouwer, 2021; Keyar et al., 2012). A plausible explanation for the findings in the present study might be that the vast majority of participants in the present study had a high level of exposure to the L2 (English). Of the total of 114 participants, 50.9% reported being exposed to the English language every day, 23.7% every week, and 10.5% a few hours per day. Degner et al. (2011) showed that frequency of language use is a factor that may affect the FLE. A high usage frequency of a certain language caused a higher amount of affective connotations. Therefore,

this may have caused a large proportion of participants to perceive the message in the L2 in an emotionally similar way to the message in the L1.

The second hypothesis proposing that perceived emotionality in the L2 will be lower when respondents have a relatively low L2 proficiency than when respondents have a relatively high L2 proficiency was also rejected. These findings cannot be directly compared to previous research because the influence of different levels of proficiency (low/high) on perceived emotionality has not been examined before. However, a previous study by Dewaele (2004) showed that language proficiency, as a single concept, is a factor that may influence the FLE as a result of differences in the extent of emotionality. Participants who were highly proficient in the L2 showed higher emotional experience of words and phrases in the L2 (Dewaele, 2004). In other words, a high L2 proficiency could diminish the FLE, which is inconsistent with the present findings. The present findings do also not correspond with research into the FLE executed in the decision-making context, which showed that high proficiency speakers made the same decisions in the L1 and L2 due to their high emotional experience in the L2 (Brouwer, 2019; Çavar & Tytus, 2018). A possible explanation might be that the mean proficiency score (LexTALE English) of the low L2 proficiency group was not very low ($M = 60.75$ on a scale of 100%). According to Lemhöfer and Broersma (2012), scores between 60% - 80% are considered as an upper intermediate level.

The third hypothesis proposing that perceived emotionality is positively related to message persuasiveness was also rejected. These findings are in contrast with a previous study by Puntoni et al. (2009) that suggested that emotionality may have an important influence on a person's behavioral intention, which was measured in terms of message persuasiveness in the present study. The present findings are also not in line with the study of Brouwer (2021) executed in the decision-making context, which showed that people made different types of decisions (utilitarian/deontological) in their L1 than in their L2 due to differences in the degree of emotional processing. Emotionality appeared to be an important determinant in decision-making, which subsequently influenced a person's behavioral intention. Moreover, Petty and Briñol (2015) found that emotions are regarded to play a significant role in persuasion according to the Elaboration Likelihood Model. Petty and Briñol (2015) noted that changes in attitudes and judgments are thought to be caused by different thought processes dependent on the amount of elaboration a person is engaged in at the time of impact. The amount of elaboration is determined by emotional factors that determine a person's motivation to reflect on the impact. However, the average perceived emotionality of the message was fairly low in the present study ($M = 3.63$ on a seven-point

Likert scale). Therefore, it is plausible that the message's low perceived emotionality caused it to be unrelated to the message's persuasiveness.

Limitations and suggestions for research

The present study had some limitations. One of the limitations was that the dependent variable perceived emotionality was only measured subjectively. Respondents had to assess for themselves how emotionally they perceived the message. Future research should include an objective measurement of emotionality in addition to this subjective measurement to check whether a person's perceived emotionality and emotional arousal correspond. The objective measurement could be executed through Skin Conductance Response (SCR) where a person's actual emotional arousal is measured (Harris et al., 2003). If the perceived emotionality and emotional arousal do not correspond, people may perceive the message as more emotional than that they are emotionally triggered by it or people may subconsciously become more emotionally aroused by the message than they perceive it. By examining this, future studies would be able to investigate whether behavioral intention is actually influenced by emotionality or by other possible factors and to gain a more in-depth understanding of the influence of language choice and proficiency on behavioral intention.

The reasonably high L2 proficiency score (on LexTALE) of the low L2 proficiency group was also a limitation of this study. The relatively high score for the low proficiency group (see above) may have caused the absence of a difference in perceived emotionality between the low and the high L2 proficiency groups. Future studies should involve a low proficiency group with an actual low L2 proficiency so that research can be done on whether there is a difference in perceived emotionality between respondents with a low L2 proficiency and respondents with a high L2 proficiency. A suggestion would be to conduct this study with participants from another country with a low English proficiency, such as Mexico or Thailand. The research of Education First (2022) showed that the populations of these countries have some of the lowest English proficiency scores in the world. On the other hand, the Dutch population has the highest English proficiency score worldwide.

Alternatively, this study could be conducted with Dutch participants, but with a foreign language (L2) other than English. For example, 90% of the Dutch population speaks English, but only 29% speaks French (Special Eurobarometer 386, 2012). Because a considerably lower number of people speaks French, it is likely that there will be a larger group with a low proficiency in this foreign language (L2).

Another limitation was that the respondents did not perceive the message as particularly emotional ($M = 3.63$ on a seven-point Likert scale, for both languages). The low perceived emotionality could have had an influence on the results of this study. Future researchers should make the stimuli more emotional in their study to examine if this generates different results. It is suggested to include words with high (positive/negative) valence and arousal values acquired from an affective word list (Bradley & Lang, 1999; Warriner et al., 2013). A high valence refers to the high un-/pleasantness of the emotions invoked by a word. A high arousal refers to the high intensity of the emotions evoked by a word (Warriner et al., 2013). An example of an affective word list for English words can be found in the study of Bradley and Lang (1999). To ensure a high enough level of emotionality of the stimuli, it is suggested to do a pre-test before conducting the experiment.

To conclude, the present study has contributed to new insights into research about the influence of language choice (L1/L2) and L2 proficiency (low/high) on the persuasiveness of a message (behavioral intent) in a new persuasive context, namely international public information campaigns. Additionally, the study is distinctive from previous studies in that it explored the effect of two different levels of L2 proficiency, not just L2 proficiency as a single concept. The findings showed that, contrary to previous research, neither language choice nor L2 proficiency are factors that could influence the perceived emotionality. Moreover, a higher level of perceived emotionality did not contribute to a higher level of message persuasiveness. For international organizations, the outcomes of this study are relevant to consider in order to make their campaign messages as persuasive as possible regarding language choice. Within the limited context of this study, organizations can now exclude the influence of language choice on message persuasiveness. The findings illustrate that, for Dutch people, it does not matter whether the campaign message is published in Dutch (L1) or English (L2). They do not perceive the message as more emotional or persuasive in one language than in the other. Furthermore, the findings contribute to knowledge, relevant to international organizations, about optimizing campaign messages through language choice based on the language proficiency of the target group. Within the limited context of this study, organizations can also exclude the influence of language proficiency on message persuasiveness. The findings illustrate that Dutch people with a high English (L2) proficiency do not perceive a message published in English as more emotional or persuasive than Dutch people with a low English (L2) proficiency. All in all, future studies could build on these findings by examining other factors that do influence the perceived emotionality and persuasiveness of a message. For example, the source from the campaign

message (e.g. government or non-profit organization) and its layout (e.g. lots of text or big font). The research question would be: What is the influence of source and layout on message persuasiveness?

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Appendix A: campaign message

Original campaign message



Rijksoverheid

Zet ook de knop om

Onze energierekening stijgt, we moeten nú minder afhankelijk worden van gas uit Rusland en we willen klimaatverandering tegengaan. Daarom gaan we meer en sneller energie besparen. Bij de overheid, in bedrijven en kantoren en thuis.

Als Rijksoverheid besparen we meer op energiegebruik, bijvoorbeeld door in onze kantoorpanden de verwarming lager te zetten. En minder te koelen op warme dagen.

We moeten samen die knop omzetten. Veel Nederlanders zijn al goed bezig. Zij besparen energie. Om ons op de komende winter voor te bereiden, zijn extra stappen nodig. Zo kunnen overheden, grote en kleine bedrijven en organisaties direct nog meer energie besparen op de verwarming en verlichting van hun gebouwen. Of door efficiënter te werken en te produceren.

Ook thuis kun je de knop omzetten. Je kunt bijvoorbeeld de thermostaat op maximaal 19 graden zetten. Met elke graad lager bespaar je aardgas en geld. Je kunt ook energie besparen door maximaal 5 minuten te douchen.

Kun je je huis (nog verder) isoleren, begin er dan meteen mee. Vanuit het Nationaal Isolatieprogramma gaan we iedereen daarbij helpen. Dat doen we onder meer met subsidies en aantrekkelijke leningen.

Deze stappen verlagen jouw energierekening, verminderen onze afhankelijkheid van gas uit Rusland én zijn beter voor ons klimaat.

We vragen daar de komende tijd aandacht voor. Ook geven we praktische tips over hoe je energie kunt besparen en hoe we samen onze huizen en gebouwen beter kunnen isoleren. Hierin werken we samen met brancheorganisaties, organisaties op het gebied van klimaat en milieu en de verduurzamingscoalitie.

zet ook de knop om

Hoeveel ga jij besparen? Kijk voor meer informatie en praktische tips op

zetookdeknopom.nl

Zet ook de knop om

Onze energierekening stijgt, we moeten minder afhankelijk worden van gas uit Rusland en we willen klimaatverandering tegengaan. Nu en in de toekomst. Daarom moeten we meer en sneller energie besparen. Bij de overheid, in bedrijven en kantoren en thuis.

Als Rijksoverheid besparen we al op energiegebruik, bijvoorbeeld door in onze kantoorpanden de verwarming lager te zetten. En minder te koelen op warme dagen. Maar we moeten nog meer doen.

We zullen samen die knop om moeten zetten. Veel Nederlanders zijn al goed bezig. Zij besparen energie. Maar om ons op de toekomst voor te bereiden, zijn extra stappen nodig. Zo kunnen overheden, grote en kleine bedrijven en organisaties direct nog meer energie besparen op de verwarming en verlichting van hun gebouwen. Of door efficiënter te werken en te produceren.

Ook thuis kun je de knop omzetten. Je kunt bijvoorbeeld de thermostaat nog lager dan 19 graden zetten. Met elke graad lager bespaar je aardgas en geld. Je kunt ook energie besparen door maximaal 5 minuten te douchen.

Kun je je huis (nog verder) isoleren, begin er dan meteen mee. Vanuit het Nationaal Isolatieprogramma gaan we iedereen daarbij helpen. Dat doen we onder meer met subsidies en aantrekkelijke leningen.

Deze stappen verlagen jouw energierekening, verminderen onze afhankelijkheid van gas uit Rusland én zijn beter voor ons klimaat. Negatieve gevolgen van klimaatverandering, zoals de stijgende zeespiegel en extreme weersomstandigheden zullen we op deze manier kunnen remmen in de toekomst.

We vragen daar de komende tijd aandacht voor. Ook geven we praktische tips over hoe je energie kunt besparen en hoe we samen onze huizen en gebouwen beter kunnen isoleren. Hierin werken we samen met brancheorganisaties, organisaties op het gebied van klimaat en milieu en de verduurzamingscoalitie.



Hoeveel ga jij besparen? Kijk voor meer informatie en praktische tips op

zetoockdeknopom.nl

Also make the switch

Our energy bill is rising, we have to become less dependent on gas from Russia and we want to combat climate change. Now and in the future. That's why we need to save more energy and we need to do so faster. In government, in the workplace and at home.

As the national government, we already limit our energy consumption, for example by lowering the heating in our office buildings. And by cooling them less on warm days. But we need to do even more.

We will have to make the switch together. Many of you are already doing well. You are saving energy. But to prepare for the future, additional steps need to be taken. So that governments, and large and small companies and organizations can immediately save more energy on heating and lighting their buildings. Or by working and manufacturing more efficiently.

At home, you can also make the switch. For example, you can set the thermostat to a temperature even lower than 19 degrees. With every degree you turn it down, you save natural gas and money. You can also save energy by showering for a maximum of only 5 minutes.

If you can insulate your house (even further), don't wait any longer. The National Isolation Program aims to help everyone with this. We do this with grants and attractive loans, for example.

These measures lower your energy bill, reduce our dependence on gas from Russia, and are better for our climate. In this way, we will slow down the negative consequences of climate change in the future, such as rising sea levels and extreme weather conditions.

We will draw attention to this in the near future. We will also give practical tips on how you can save energy and how we, together, can better insulate our houses and buildings. To do this, we work with sector organizations, organizations in the field of climate and environment, and the sustainability coalition.



How much will you save? For more information and practical tips, see

alsomaketheswitch.eu

Appendix B: survey Qualtrics

Beste deelnemer,

Bedankt voor uw deelname. In dit onderzoek wordt er gekeken naar de beoordeling van berichten van een internationale publieksvoorlichting campagne over energiebesparing. Het onderzoek wordt uitgevoerd door een masterstudent International Business Communication aan de Radboud Universiteit in Nijmegen.

De procedure van het onderzoek betreft het invullen van een online enquête. Het invullen van de enquête zal ongeveer 10 minuten duren. Er kunnen geen foute antwoorden worden gegeven.

De antwoorden zullen volledig anoniem blijven. Uw persoonsgegevens zullen discreet en en volgens de privacyrichtlijnen van de Radboud Universiteit worden behandeld. De resultaten van de enquête zullen worden gebruikt voor mijn masterscriptie.

Deelname aan dit onderzoek is vrijwillig. Dit betekent dat u op elk moment uw deelname aan deze enquête kunt beëindigen en uw toestemming kunt intrekken zonder opgaaf van reden.

Indien u verdere vragen heeft over dit onderzoek, kunt u contact opnemen met Julia Strooper.

Voor deelname aan dit onderzoek heb ik uw toestemming nodig. Door akkoord te gaan met deelname bevestigt u dat u:

- Alle bovenstaande informatie heeft gelezen en begrepen.
- Vrijwillig deelneemt aan het onderzoek.

Succes met het invullen van de enquête en nogmaals dank voor uw deelname.

Met vriendelijke groet,

Julia Strooper

- Ik ga akkoord met deelname aan dit onderzoek.
- Ik wil niet deelnemen aan dit onderzoek.

Is Nederlands uw moedertaal?

- Ja
- Nee

Is Engels uw moedertaal?

- Ja
- Nee

Wat is uw leeftijd (in jaren)?

Wat is uw geslacht?

- Man
- Vrouw
- Anders, namelijk_____
- Zeg ik liever niet

Wat is uw hoogstgenoten opleiding?

- Geen opleiding
- Middelbare school
- MBO
- HBO
- WO Bachelor
- WO Master
- PhD

Op de volgende pagina wordt een bericht van een internationale publieksvoorlichting campagne over energiebesparing getoond. Lees dit bericht alstublieft zorgvuldig door.

U gaat nu een aantal vragen beantwoorden over het bericht.

Hoe beoordeelt u het bericht?

	Helemaal niet mee eens (1)	Niet mee eens (2)	Beetje oneens (3)	Neutraal (4)	Beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik heb het bericht als emotioneel ervaren.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Hoe waarschijnlijk is het dat u extra maatregelen zult nemen om energie te besparen in de toekomst?

	Helemaal niet mee eens (1)	Niet mee eens (2)	Beetje oneens (3)	Neutraal (4)	Beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik ben bereid extra maatregelen te nemen om in de toekomst energie te besparen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is waarschijnlijk dat ik in de toekomst extra maatregelen zal nemen om	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

energie te
besparen.

Onderneemt u momenteel al energiebesparende maatregelen? Zo ja, kunt u voorbeelden geven?

- Ja, namelijk _____
- Nee

U gaat nu een aantal vragen beantwoorden wat betreft uw vaardigheid in de Nederlandse taal.

Wat is uw houding ten opzichte van de Nederlandse taal?

	Helemaal niet mee eens (1)	Niet mee eens (2)	Beetje oneens (3)	Neutraal (4)	Beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
De Nederlandse taal is mooi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De Nederlandse taal is belangrijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

De
Nederlandse
taal is
interessant.

Hoe bekwaam bent u in het Nederlands met betrekking tot de volgende vaardigheden?

	Slecht (1)	(2)	(3)	(4)	(5)	(6)	Uitstekend (7)
Spreken	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Luisteren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lezen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schrijven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

De volgende test wordt gebruikt om uw woordenschat op een snelle manier te toetsen.

De test bestaat uit ongeveer 60 items. U krijgt steeds een letterreeks te zien. Uw taak is om te beslissen of dit een bestaand Nederlands woord is of niet. Als u denkt dat het een bestaand Nederlands woord is klikt u op "ja", als u denkt dat het geen bestaand Nederlands woord is klikt u op "nee".

Als u er zeker van bent dat het woord bestaat, ook als u niet precies weet wat het betekent, mag u toch met "ja" antwoorden. Maar als u twijfelt of het wel een bestaand woord is, kies dan "nee".

U heeft zoveel tijd als u wilt voor elke beslissing. Dit deel van het experiment duurt ongeveer 5 minuten.

Als alles duidelijk is kunt u het experiment nu starten.

	Ja (1)	Nee (2)
1) Pastitie	<input type="radio"/>	<input type="radio"/>
2) Scheur	<input type="radio"/>	<input type="radio"/>
3) Fobisch	<input type="radio"/>	<input type="radio"/>
4) Markatief	<input type="radio"/>	<input type="radio"/>
5) Laakbaar	<input type="radio"/>	<input type="radio"/>
6) Slaags	<input type="radio"/>	<input type="radio"/>
7) Riant	<input type="radio"/>	<input type="radio"/>
8) Joutbaag	<input type="radio"/>	<input type="radio"/>
9) Doornat	<input type="radio"/>	<input type="radio"/>
10) Woelig	<input type="radio"/>	<input type="radio"/>
11) Paviljoen	<input type="radio"/>	<input type="radio"/>

12) Doop	<input type="radio"/>	<input type="radio"/>
13) Starkatie	<input type="radio"/>	<input type="radio"/>
14) Onledig	<input type="radio"/>	<input type="radio"/>
15) Toetsing	<input type="radio"/>	<input type="radio"/>
16) Affiniteit	<input type="radio"/>	<input type="radio"/>
17) Mikken	<input type="radio"/>	<input type="radio"/>
18) Knullig	<input type="radio"/>	<input type="radio"/>
19) Streuren	<input type="radio"/>	<input type="radio"/>
20) Rups	<input type="radio"/>	<input type="radio"/>
21) Paars	<input type="radio"/>	<input type="radio"/>
22) Speven	<input type="radio"/>	<input type="radio"/>
23) Geraakt	<input type="radio"/>	<input type="radio"/>
24) Martelaar	<input type="radio"/>	<input type="radio"/>

25) Ontpelen	<input type="radio"/>	<input type="radio"/>
26) Stagnatie	<input type="radio"/>	<input type="radio"/>
27) Dronkenschap	<input type="radio"/>	<input type="radio"/>
28) Voornemen	<input type="radio"/>	<input type="radio"/>
29) Vertediseren	<input type="radio"/>	<input type="radio"/>
30) Normatief	<input type="radio"/>	<input type="radio"/>
31) Zetelen	<input type="radio"/>	<input type="radio"/>
32) Zolf	<input type="radio"/>	<input type="radio"/>
33) Publiekelijk	<input type="radio"/>	<input type="radio"/>
34) Vlук	<input type="radio"/>	<input type="radio"/>
35) Compromeeet	<input type="radio"/>	<input type="radio"/>
36) Romig	<input type="radio"/>	<input type="radio"/>
37) Getint	<input type="radio"/>	<input type="radio"/>

38) Gelovig	<input type="radio"/>	<input type="radio"/>
39) Nopen	<input type="radio"/>	<input type="radio"/>
40) Kluiper	<input type="radio"/>	<input type="radio"/>
41) Geloei	<input type="radio"/>	<input type="radio"/>
42) Retorisch	<input type="radio"/>	<input type="radio"/>
43) Maliteit	<input type="radio"/>	<input type="radio"/>
44) Verspilling	<input type="radio"/>	<input type="radio"/>
45) Haperie	<input type="radio"/>	<input type="radio"/>
46) Proom	<input type="radio"/>	<input type="radio"/>
47) Fornuis	<input type="radio"/>	<input type="radio"/>
48) Exploitatie	<input type="radio"/>	<input type="radio"/>
49) Acteur	<input type="radio"/>	<input type="radio"/>
50) Hengel	<input type="radio"/>	<input type="radio"/>

51) Flajoen	<input type="radio"/>	<input type="radio"/>
52) Aanhekkig	<input type="radio"/>	<input type="radio"/>
53) Kazerne	<input type="radio"/>	<input type="radio"/>
54) Avonturier	<input type="radio"/>	<input type="radio"/>
55) Leurig	<input type="radio"/>	<input type="radio"/>
56) Chagrijnig	<input type="radio"/>	<input type="radio"/>
57) Bretel	<input type="radio"/>	<input type="radio"/>
58) Klengel	<input type="radio"/>	<input type="radio"/>
59) Etaal	<input type="radio"/>	<input type="radio"/>
60) Matig	<input type="radio"/>	<input type="radio"/>
61) Futeur	<input type="radio"/>	<input type="radio"/>
62) Onbekwaam	<input type="radio"/>	<input type="radio"/>
63) Verguld	<input type="radio"/>	<input type="radio"/>

U gaat nu een aantal vragen beantwoorden wat betreft uw vaardigheid in de Engelse taal.

Wat is uw houding ten opzichte van de Engelse taal?

	Helemaal niet mee eens (1)	Niet mee eens (2)	Beetje oneens (3)	Neutraal (4)	Beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
De Engelse taal is mooi.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De Engelse taal is belangrijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De Engelse taal is interessant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Hoe bekwaam bent u in het Engels met betrekking tot de volgende vaardigheden?

	Slecht (1)	(2)	(3)	(4)	(5)	(6)	Uitstekend (7)
Spreken	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Luisteren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lezen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Hoe vaak komt u in contact met de Engelse taal (b.v. op uw werk, bij het lezen van nieuws of bij het kijken van Netflix)?

- Nooit
- Ieder jaar
- Iedere maand
- Iedere week
- Iedere dag
- Een paar uur per dag

In welke context heeft u Engels geleerd?

- In een natuurlijke context (buiten school)
- In een geïnstrueerde context (op school)
- Beiden

De volgende test wordt gebruikt om uw woordenschat op een snelle manier te toetsen.

De test bestaat uit ongeveer 60 items. U krijgt steeds een letterreeks te zien. Uw taak is om te beslissen of dit een bestaand Engels woord is of niet. Als u denkt dat het een bestaand Engels woord is klikt u op "ja", als u denkt dat het geen bestaand Engels woord is klikt u op "nee".

Als u er zeker van bent dat het woord bestaat, ook als u niet precies weet wat het betekent, mag u toch met "ja" antwoorden. Maar als u twijfelt of het wel een bestaand woord is, kies dan "nee".

U heeft zoveel tijd als u wilt voor elke beslissing. Dit deel van het experiment duurt ongeveer 5 minuten.

Als alles duidelijk is kunt u het experiment nu starten.

	Ja (1)	Nee (2)
1) Platery	<input type="radio"/>	<input type="radio"/>
2) Denial	<input type="radio"/>	<input type="radio"/>
3) Generic	<input type="radio"/>	<input type="radio"/>
4) Mensible	<input type="radio"/>	<input type="radio"/>
5) Scornful	<input type="radio"/>	<input type="radio"/>
6) Stoutly	<input type="radio"/>	<input type="radio"/>
7) Ablaze	<input type="radio"/>	<input type="radio"/>
8) Kermshaw	<input type="radio"/>	<input type="radio"/>
9) Moonlit	<input type="radio"/>	<input type="radio"/>
10) Lofty	<input type="radio"/>	<input type="radio"/>
11) Hurricane	<input type="radio"/>	<input type="radio"/>
12) Flaw	<input type="radio"/>	<input type="radio"/>

13) Allevation

14) Unkempt

15) Breeding

16) Festivity

17) Screech

18) Savoury

19) Plaudate

20) Shin

21) Fluid

22) Spaunch

23) Allied

24) Slain

25) Recipient

26) Exprate	<input type="radio"/>	<input type="radio"/>
27) Eloquence	<input type="radio"/>	<input type="radio"/>
28) Cleanliness	<input type="radio"/>	<input type="radio"/>
29) Dispatch	<input type="radio"/>	<input type="radio"/>
30) Rebondicate	<input type="radio"/>	<input type="radio"/>
31) Ingenious	<input type="radio"/>	<input type="radio"/>
32) Bewitch	<input type="radio"/>	<input type="radio"/>
33) Skave	<input type="radio"/>	<input type="radio"/>
34) Plaintively	<input type="radio"/>	<input type="radio"/>
35) Kilp	<input type="radio"/>	<input type="radio"/>
36) Interfate	<input type="radio"/>	<input type="radio"/>
37) Hasty	<input type="radio"/>	<input type="radio"/>
38) Lengthy	<input type="radio"/>	<input type="radio"/>

39) Fray	<input type="radio"/>	<input type="radio"/>
40) Crumper	<input type="radio"/>	<input type="radio"/>
41) Unkeep	<input type="radio"/>	<input type="radio"/>
42) Majestic	<input type="radio"/>	<input type="radio"/>
43) Magrity	<input type="radio"/>	<input type="radio"/>
44) Nourishment	<input type="radio"/>	<input type="radio"/>
45) Abergly	<input type="radio"/>	<input type="radio"/>
46) Proom	<input type="radio"/>	<input type="radio"/>
47) Turmoil	<input type="radio"/>	<input type="radio"/>
48) Carbohydrate	<input type="radio"/>	<input type="radio"/>
49) Scholar	<input type="radio"/>	<input type="radio"/>
50) Turtle	<input type="radio"/>	<input type="radio"/>
51) Fellick	<input type="radio"/>	<input type="radio"/>

52) Destription

53) Cylinder

54) Censorship

55) Celestial

56) Rascal

57) Purrage

58) Pulsh

59) Muddy

60) Quirly

61) Pudour

62) Listless

63) Wrought

Bedankt voor de tijd die u heeft genomen om aan deze enquête deel te nemen.

Uw antwoord is geregistreerd.

Appendix C: Declaration on plagiarism and fraud

The undersigned

Julia Strooper, S1024437,

Master's student at the Radboud University Faculty of Arts,

declares that the assessed thesis is entirely original and was written exclusively by herself.

The undersigned indicated explicitly and in detail where all the information and ideas derived from other sources can be found. The research data presented in this thesis was collected by the undersigned herself using the methods described in this thesis.

Place and date: Nijmegen, 15-05-2023

Signature: