Bachelor Thesis

The Effectiveness and Perceived Emotionality of Meat Reduction Advertising Appeals in Bilinguals

By Isi Michael Omole

E. R. Felker

IBC | Radboud University Nijmegen, Faculty of Arts

Saturday 5th June. 2021

Abstract

With the growing number of bilingual speakers and the widespread use of English in education and the media, marketers have a choice of utilising either English or the native language of a country in their advertising appeals. However, little is known about the effects of English and Dutch NGO social advertising appeals. Therefore, this study investigates the perceived emotionality and the effectiveness of social advertising appeals by utilising meat reduction appeals to observe the participants' perceived emotions, attitude towards meat reduction and the intention to reduce meat consumption. The study involved 153 native Dutch-English bilingual students who consumed meat on average three times a week. In a between-subject design, the participants viewed either an emotional (negative/positive) or an informational appeal. Subsequently, they rated the perceived emotionality of the advertising appeal, their attitude towards meat reduction and their intention to reduce their meat intake on a questionnaire. Although previous research found that the use of native language in advertising is more emotional than the second language use, the findings of this study showed that English appeals were perceived to be more emotional than Dutch appeals. In contrast, none of the advertising appeals were significantly different from each other in their effects on attitude and behavioural intention. Also, negative appeals were perceived as more emotional than informative and positive appeals. This study's finding suggests that negative emotional appeals yield a higher emotional resonance. Regarding the perceived emotionality in English appeals, this study's finding suggests that NGOs' use of English in their advertising appeals among Dutch students may be advantageous in evoking higher emotions. However, the higher emotions may not result in higher effectiveness of NGO meat reduction advertising appeals.

Introduction

The number of bilinguals around the world is rising. More than half of the world's population is bilingual (Grosjean, 2018). International trade, interracial marriages, language change, personal choice to learn a second language, political migration, and the global competition for knowledge are some factors that have led to the rise in bilingualism (Grosjean, 2018). Another factor contributing to bilingualism in the Netherlands is the increase in bilingual education (NOG, 2018).

Organisations are thus adapting to the rise in bilingualism by using foreign languages in their advertisements. Hence, advertising messages are shifting from monolingual to bilingual messages (Bhatia, 2019). Piller (2000) also found that organisations frequently use foreign languages in their advertisements. Further studies show that English is the most used foreign language in advertising messages in non-native English speaking countries. For example, English words constitute over 50% of the advertisements in the Netherlands (Gerritsen, 2007; Sella, 1993).

This use of foreign and native languages has been shown to be effective for several reasons. For example, Foreign language use has been used for evoking country of origin in advertisements, or for code-switching to attract the attention of consumers (Kelly-Holmes, 2000; Luna & Peracchio, 2005). Alternatively, the use of a native language in advertising has also been shown to be effective for native speakers since it is likely to convey thoughts of friends, family and home (Caldwell-Harris & Dinn, 2016). Furthermore, it has been found that advertising in the native language of bilinguals elicits more emotional resonance (Puntoni et al., 2008). It is further validated that bilinguals display stronger emotions in their first language (L1) than in their second language (L2) (Pavlenko, 2004).

Emotions have been found to play an important role in attitude formation (Jorgensen, 1998). In particular, non-governmental organisation (NGO) advertisements mostly utilise emotional messages to persuade and change the attitude of individuals towards an issue (Noble et al., 2014; Patil 2006). For example, negative emotional appeals, such as guilt and fear, have been shown to be effective in terms of attitude formation in NGO meat reduction messages (Rogers, 1983; Palomo-Vélez et al., 2018). However, these studies have neglected the effectiveness and emotional effects of NGO advertising appeals in bilinguals (Carfora et al., 2019; Cordts et al., 2016; Palomo-Vélez et al., 2018).

There are no studies on how the perceived emotionality of NGO advertising amongst bilinguals could influence effectiveness. Therefore, we aim to fill this gap because of the useful implications for organisations, institutions and scholars on how effective advertising can be achieved within the ever-growing multilingual society. Also, consumer research is dependent on the findings on emotionality from the field of psychology (Bhatia, 2019); thus, this study would be beneficial in marketing and psycholinguistics to improve the current understanding of the emotional effects of language and its influence on consumer response to textual NGO advertising appeals. This paper aims to investigate the effects of social advertising message appeals on bilingual speakers.

Choice of Topic (NGO Meat reduction advertising)

Meat consumption has been an essential aspect of human diet throughout history and a key constituent in meals worldwide (Seleshe et al., 2014). The high meat demand benefits the manufacturers of animal products, leading to a high level of competition in the meat industry, thus contributing to the neglection of animal welfare, biodiversity loss, and water loss (Lusk & Norwood 2011; Laestidius et al., 2013). Non-profit organisations (NGOs), such as environmental and health organisations, warn against the dangers of meat consumption. However, their advertising messages regarding the reduction of meat consumption have not been successful (Vaino et al., 2018). Based on the increasing number of bilinguals in society, marketers acknowledge this development and are thus challenged to determine which language would be most effective (Holland & Gentry 1999). However, little is known about the effects of meat reduction advertising messages on bilinguals. Thus, this study aims to close this gap by investigating the attitude, intention and emotional resonance of meat reduction messages in bilinguals by first providing background information on the emotionality in bilinguals, emotional messages in advertising, and investigating the effectiveness of different advertising message appeals.

Emotionality in Bilinguals

Bilinguals are defined as people who often use two or more languages. A broad definition is implemented due to the multifaceted features of bilinguals who differ in their proficiency, context of learning, age of acquisition, order of acquisition and language dominance (Caldwell-Harris & Dinn, 2016; Pavlenko, 2012).

In regards to the emotionality in bilinguals, Bond and Lai (1986) found that bilinguals perceived their L1 as more emotional than their L2 in that when explaining an embarrassing situation they switched to their L2, which served as a distancing process. Similarly, Previous research on the effects of emotionality in bilinguals found that swear words and taboo words were perceived as significantly more emotional in their L1 than in their L2 (Pavlenko 2012). These result seem to suggest that bilinguals undergo "emotional blunting", which is a state of

a reduced feeling of emotionality when encountered with a language in which they are less proficient, an L2, or a language that is not used frequently (Caldwell-Harris & Dinn, 2014).

Additional studies have taken several factors that affect proficiency into account, which may further influence the emotionality of languages in bilinguals, such as the context of learning, age of acquisition and frequency of language use (Caldwell-Harris et al., 2012, as cited in Caldwell et al., 2011). These studies found differing results. For example, Caldwell-Harris et al. (2011) found that late Mandarin-English bilinguals perceived their L1 as more emotional than their L2 while early bilinguals perceived both languages as similar in emotional intensity. Conversely, a further study did not find differences in language emotionality among early Russian-English bilinguals before and after the age of 10 (Caldwell-Harris et al., 2016). Alternatively, Degner and Wentura (2012) found that German-French bilinguals who learned their L2 after the age of 10, and had lived in the country of their L2, perceived their L2 to have a similar level of emotionality to their L1. The findings showed that the bilinguals who used an L2 frequently perceived the L2 to be just as emotional as their L1.

Regardless of these differing findings, there is empirical evidence that L1s have an advantage over L2s, in that there is an increase in the automaticity in affective processing (Puntoni et al., 2009; Pavlenko, 2004; Caldwell-Harris et al., 2011). This implies that verbal conditioning occurs during childhood, where certain words are linked with negative and positive associations. Thus language develops synchronously with the autobiographical memory and emotion regulation processes. This results in an L1 that is comprised of autobiographical memories and affective dimensions. Therefore, L1 words tend to be more emotional. In contrast, the L2 processing of valenced words is less automatic. This implies that the development of autobiographical memories with the L2 is absent due to the decontextualised nature of language acquisition (Pavlenko, 2004).

Studies regarding the emotional distance of the L2 have found the lack of affective processing in L2 is compensated by analytic processing (Keysar et al., 2012). Favreau and Segalowitz (1983) also found that using an L2 leads to more deliberate processing, which further engenders more systematic decision making. This implies that the decrease in the emotionality of the L2 allows individuals to rely on logical processing (Keysar et al., 2012). However, little is known on how these processes affect bilinguals in advertising messages.

Emotionality in advertising

Several studies have investigated the emotional intensity of the L1 by utilising certain words that influence emotion. For example, a study by Jaganathan et al. (2013) investigated Chinese-English bilinguals who observed positively valenced advertising messages and had to rate how emotional they were in English or Chinese. The results showed that the L1 was perceived to be more emotional than the L2. The study also found that L1 advertisements yielded a stronger emotional effect when words in the advertisement were associated with their culture, such as "prosperity". Thus, further concluding that the L1 was strongly associated with emotions in contrast to the distant emotional perception of the L2. A similar study on advertising messages by Puntoni et al. (2009) extends the theory on emotional intensity in advertising messages by presenting bilinguals with emotionally charged slogans, which comprised words that focused on native language context of use, such as "family". Participants had to rate the perceived emotionality and originality of the words. The results indicated that L1 marketing messages were perceived as more emotional than L2 marketing messages.

Both studies of Puntoni et al. (2009) and Jaganathan et al. (2013) found that the effects of higher emotions in L1 marketing messages were due to the episodic trace memory, which posits that words encountered more frequently in a specific language constitute an episodic trace, these words are thus stored in the memory. This results in a positive interaction between the encountered words and emotionality (Puntoni et al., 2009). Hence, the encountered words are perceived to be more emotional. These results show that L1 advertising messages are more emotional for bilinguals, particularly when the word is associated with culture.

Advertising message appeals

The above-mentioned studies show that the use of emotional words in emotional advertising seem to be effective in engendering higher emotions (Puntoni et al., 2009; Jaganathan et al., 2013). Similarly, studies have found that emotional advertising appeals are also effective in engendering attitude formation and behavioural intention towards an issue (Bhatia, 2019; Long Yi, 2011). Thus, Marketers utilise various advertising appeals such as informational and emotional appeals to engender effectiveness in terms of attitude formation and behavioural intention (Bhatia, 2019). For example, positive emotional appeals are conceptualised to be attractive and engender satisfaction in individuals. They also emphasise

the benefits and advantages of adopting a socially desired behaviour (Noble et al., 2014). In contrast, negative appeals emphasise the negative consequences of an action. These appeals are depicted to elicit distress and anxiety linked to the human conscience. Therefore, when individuals perceive a negative emotion to be high, they are more likely to conform to the norm (Noble et al., 2014; Scheff, 1988). Informational emphasise providing the facts and arguments of an issue. Through these provided facts, the receiver of the message is supposed to make logical decisions, leading to a change in beliefs (Hornik et al., 2017).

The effectiveness of both informational and emotional appeals can be explained by the Elaboration Likelihood Model (ELM), which posits that the manner of processing advertising messages influences the attitude towards the advertisement. This implies that when consumers encounter an informational appeal, the central route of processing will be adopted. The central route of processing can be described as a more elaborated form of processing messages based on the individual's pre-existing knowledge. Thus, individuals will actively analyse information leading to attitude formation (Petty & Ciacioppo, 1986). Conversely, when confronted with emotional information, the peripheral route of processing is adopted. During the peripheral route processing, individuals will not systematically process the information but rather utilise simple rule of thumbs to assess the message, consequently leading to attitude formation (Zheng 2020; Petty & Ciacioppo, 1986). Hence, the manner of processing or emotions stemming from an appeal can influence attitude formation (Petty & Brinol, 2014, Petty & Ciacioppo, 1986). Regardless of the effectiveness of the different message appeals, emotional appeals (positive and negative) have been found to be more effective than informational appeals in terms of attitude formation and behavioural intention towards an issue (Noble et al., 2014; Scheff, 1983).

Meat reduction message appeals

Research on advertising appeals towards meat reduction has found negative emotional appeals, such as "guilt", to be the most effective for persuasion since they attract attention and are more salient (Noble et al., 2014). Furthermore, when guilt is perceived as sufficiently high, individuals conform to social norms in order to decrease their feelings of guilt (Rogers 1983; Palomo-Vélez et al., 2018; Scheff, 1983). Further studies on the reduction of meat consumption acknowledge that negative appeals are the most effective in behaviour change. For example, a study by Palomo-Vélez et al. (2018) found that the use of an appeal conceptualised to elicit the negative emotion "disgust" was more effective than moral and

informational appeals on meat reduction. Therefore, empirical evidence shows that emotional appeals would be most effective in attitude change, especially the negative emotional appeals of meat reduction advertisements. (Noble et al., 2014; Hunter & Röös, 2016; Palomo-Vélez et al., 2018). However, there are no studies that have investigated the effectiveness of meat reduction advertising appeals on bilinguals.

This study aims to close this research gap and shed light on meaningful methods to raise awareness of the devastating effects of high meat consumption. Especially in the Netherlands, where English is being used more frequently as an advertising tool (Zenner et al., 2015), It is not clear how English influences Dutch-English bilinguals on an emotional level and how it affects attitude change and the intent to reduce meat-intake. It would thus be of importance for psycholinguistic studies, marketers and NGOs to learn about the effects of emotional and informational meat reduction message appeals on bilinguals.

Research questions and Hypothesis

In order to determine the effects of advertising appeals among bilinguals, several research questions and hypotheses are posed regarding the participant's perceived emotionality of meat reduction appeals and the effectiveness in terms of attitude towards meat reduction appeals and intention to reduce meat intake;

RQ1: What is the effect of emotional (positive and negative) and informational appeals in bilinguals on the behavioural intention and attitude towards meat reduction appeals?

H1: Based on previous research on the effectiveness of emotional appeals (Noble et al., 2014, Scheff; 1983), we hypothesise that negative emotional appeals (guilt) will be more effective (attitude and behavioural intention) than positive and informational appeals meat reduction in both L1 and L2.

RQ2: What is the effect of English and Dutch appeals in bilinguals on behavioural intention and attitude towards meat reduction appeals?

H2: Alternatively, the aforementioned decreased affective processing in L2 has been shown to allow bilinguals to rely more on analytical processes in L2 (Keysar et al., 2012; Favreau & Segalowitz, 1983). We thus hypothesise that due to the deliberate and logical processing in L2, informational appeals would be more effective (attitude and behavioural intention) in L2 than L1 informational appeals.

H2a: Based on the study by Noble et al., (2014) on the effectiveness of emotional appeals, and the studies of Pavlenko (2004) and Caldwell-Harris and Dinn (2016) that validate the notion of L1 being more emotional than L2, we further hypothesise that the meat reduction messages using emotional appeals (whether positive or negative) will be more effective (attitude and behavioural intention) in L1 than in L2.

RQ3: What is the effect of emotional (positive/negative) and informational appeals in bilinguals on the perceived emotionality?

RQ4: Are there any differences between the English and Dutch appeals (positive, negative, informational) on the perceived emotionality?

H4: Based on the studies by Pavlenko (2004) and Caldwell-Harris and Dinn (2016) that validate the notion of L1 being more emotional than L2, we hypothesise that emotional appeals whether positive or negative will be perceived as more emotional in L1 than in L2

Methodology

Materials

This study utilised a 2 (language of appeal: Dutch/English) * 3 (type of appeal: positive, negative, informational appeal) design. The first independent variable was the language of appeals which consisted of Dutch and English textual meat reduction advertisements. Native Dutch-English bilinguals translated the appeals via back-translation in order to ensure semantic equivalence between the two versions.

The second independent variable was the different types of appeal, which included informational appeals and emotional appeals. The emotional appeal consisted of negative emotional appeal (guilt) and positive emotional appeal (self-image). After the translation of the three types of appeals, this resulted in 6 conditions. All six advertising messages were edited in white text on black backgrounds. The appeals were designed similarly; therefore, there was consistency on all slogans to avoid confounding effects. All appeals had three paragraphs in order to avoid dissimilar cognitive processing in participants.

Figure 1 shows the positive emotional appeal aimed to evoke a positive self-image. Figure 2 shows the negative appeal, which was aimed to evoke negative emotions (such as guilt). Figure 3 shows the informational appeal that focused on the informational aspects of animal cruelty. The Dutch versions have identical features (see Appendix).

In the Netherlands, 1.7 million animals are consumed every day. This includes cows, chickens, and pigs.

By simply eating less meat, you can give these animals a chance to live the long and happy life they deserve. We can all play a part in stopping the constant increase of animal consumption.

Will you be a hero and save these animals?

Figure 1.0: Positive appeal (English)

In the Netherlands, 1.7 million animals are consumed every day. This includes cows, chickens, and pigs.

Your meat consumption contributes to the exploitation and slaughtering of innocent animals. The amount of death and cruelty in this industry is constantly increasing, and we are all responsible for that.

Is the taste of meat worth having blood on your hands?

Figure 2.0: negative appeal (English)

In the Netherlands, 1.7 million animals are consumed every day. This includes cows, chickens, and pigs.

The consumption of meat is associated with decreased animal welfare. The average Dutch person eats 77kg of meat per year. This consumption has steadily been on the rise, but you can help bring this number down.

Will you reduce your meat consumption or not?

Figure 3.0: Informational appeal

In order to evoke the target emotion in the negative and positive appeals and neutrality in the informational appeals, the database of Warriner et al. (2013) consisting of 140000 words and their average valence was utilised. These valenced words were derived from humans raters. The words used in the appeals were chosen based on the average level of valence rating. For example, for the negative emotional appeals, words such as "death" and "slaughter" were rated as negative in the database, while for the positive appeal, the words "hero" and "happy" were rated as positive. For the informational appeals, "associate" and "consumption" were rated as neutral in the database. The Dutch version of this database was also used to construct the Dutch appeals (Zijlstra et al., 2004).

Subjects

The participants consisted of 153 native Dutch speakers with English as a second language. Three participants had another native language (not English) in addition to Dutch. These three participants were included as Caldwell-harris and Dinn (2016) found that individuals can perceive their native languages to be similar in emotionality. All participants were recruited based on acquaintances via WhatsApp group posts and social media. Among the participants, female (117) subjects accounted for 76.5% of the participants, while male

subjects (35) accounted for 22.9% of the participants. A non-binary subject made up 0.7% of the participants. A Chi-square test showed no significant difference of gender distribution in each of the conditions (X^2 (10) = 15.01, p = .86). Neither was there a significant difference between the participant's age in the different conditions (F(5, 147) = 1.43, p = .23). The average age among all participants was 21.44 (SD = 1.93). All participants were students who consisted of Bachelor's (43.8%), Master's (15%), HBO (35.3%), MBO (4.6%) and other (1.3%) students. The distribution of conditions did not differ among the different types of students (X^2 (20) = 18.21, p = .574). Hence, there were no significant differences in student participation in all conditions. In addition, only participants who started learning English after the ages of 5 were considered as having English as a second language and were thus included in this study. On average, their self-reported English reading proficiency was good, with an average of 5.37 (SD = 1.24) on a 7 point scale. The participants consumed meat on average 3 times a week (M = 3.95, SD = 1.63). Their amount of meat consumption did not differ between the conditions (F(5, 147) < 1). The participants who never ate meat were excluded from further analysis.

Design

A between-subjects design was effectuated as all 153 bilinguals were exposed to either one of the six Dutch or English advertising messages. Participants were randomly assigned to one of six experimental conditions. This implies that each participant viewed either an informational appeal in Dutch or English, a negative appeal in Dutch or English and a positive advertising appeal in Dutch or English.

Instruments

The dependent variables attitude, behavioural intention and the perceived emotionality were presented in both English and Dutch. Two dependent variables were used to measure the effectiveness; attitude and behavioural intention towards meat reduction. The behavioural intention was operationalised to assess future intended behaviours. The intention to reduce meat consumption was measured with 4 items. Each item started with the sentence "Because of this ad I intend to, followed by one of the following phrases: "cut the number of meals with meat to half", "refrain from eating meat, "replace meat with meat substitutes, vegetables or beans", and "eat vegetarian food twice as often". The items were measured with a 7-point Likert scale ranging from "Totally disagree" to "Totally agree". These were retrieved from the study by Hunter and Röös (2016). A Cronbach's alpha determined that the reliability of

the behavioural intention towards meat reduction comprising four items was good: $\alpha = .85$. Consequently, the mean of all four items was utilised to calculate the compound variable "behavioural intention towards meat reduction", which was used in the further analyses.

The attitude towards meat reduction was assessed with one item; "Because of this ad, I would be concerned about eating less meat", with a 5-point Likert scale ranging from strongly disagree to strongly agree. This scale was inspired by Noble et al. (2014).

To measure the dependent variable "perceived emotionality", participants were asked to rate the emotionality of the ad on a single item: "I think this ad is emotional". A 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree" was used. This scale was inspired by Puntoni (2009).

In addition, participants provided information about their gender, age, and eating habits. The eating habit was inquired in order to exclude the vegetarian/vegan participants. Hence, participants indicated their daily meat consumption on a dimension ranging from 1 = never (0) to 7 = "6 or more times a week" This scale was developed by Kunst & Hohle (2016). Questions about their language proficiency, native language and age of acquisition were assessed. The language proficiency was assessed with the item "I consider my English reading proficiency as" on a Likert scale from 1 = poor to 7 = excellent. This scale was retrieved from Krishna and Ahluwalia (2008). Participants were required to indicate their native language(s) on a multiple choice scale: "Dutch, "Dutch plus another language" or "other". Non-native Dutch speakers were excluded from the study. Lastly, participants had to indicate at what age they started learning English: "before age 5", "at age 5 or later" and "I've never learned English".

Procedure

An online survey was utilised in order to respond to the questionnaire of this study. Due to the pandemic, the survey was sent via Qualtrics. Therefore, participants were able to fill out the questionnaire on their computers and smartphones. The questionnaire consisted of 13 questions and one of the 6 advertising appeals. Participants were told that the experiment was about social advertising in society. After reading and agreeing to the conditions of the experiment, they were allowed to start. The participants indicated their gender, age, educational level and eating habits.

Before viewing one of the advertising appeals, all participants read the following instruction: "Below you will see an advertisement. The next questions in the questionnaire will be about this ad. Take your time to read it carefully as you will not be able to go back

once you proceed." Subsequently, they were asked to rate their attitude, intentions towards meat reduction, and the perceived emotionality of the ad. For the final questions, participants indicated their English proficiency, when they started learning English, and their native language. Finally, participants were allowed to contact a researcher if they had follow-up questions about the study. They were not paid for their participation. The experiment took approximately 4 minutes.

Statistical treatment

In order to determine if there was an interaction between language of appeals (Dutch/English) and type of appeals (negative/positive/informational), or a main effect on either dependent variables: the attitude, behavioural intention and emotionality, a two-way ANOVA was utilised. To further investigate the significant differences found with the two-way ANOVA, follow-up independent sample t-tests were utilised.

Results

In this section, the results of the four research questions and hypothesis are provided. Firstly, a two way ANOVA was utilised to determine the main effects and interactions between the independent variables (language of appeal/type of appeal) on attitude, behavioural intention and emotionality. See table 1 and 2 for the means of the dependent variables.

Table 1. Means and Standard deviation for the perceived emotionality, attitude and behavioural intention in function of type of appeal with intention (1 = strongly disagree, 7 = strongly agree), attitude and emotionality (1 = strongly disagree, 5 = strongly agree)

		Type of Appeal	
	Positive	Negative	Informational
	M(SD)	M(SD)	M(SD)
Emotionality	2.73 (1.01)	3.44 (1.06)	2.41 (1.14)
Attitude	3.15 (1.02)	2.80 (1.14)	2.86 (1.17)
Intention	3.30 (1.31)	3.08 (1.34)	3.00 (1.33)

Table 2. Means and Standard deviations for the effectiveness and emotionality in function of language with intention (1 = strongly disagree, 7 = strongly agree), attitude and emotionality (1 = strongly disagree, 5 = strongly agree)

	<u>English</u>	<u>Dutch</u>
	M(SD)	M(SD)
Emotionality	3.17 1.20	2.53 1.04
Attitude	3.01 1.19	2.88 1.05
Intention	3.21 1.37	3.06 1.29

In order to answer the first and second research questions, a set of combined two-way ANOVA's with language of appeal and type of appeal were effectuated on the behavioural intention and attitude. A two way ANOVA with language of appeal and type of appeal as factors did not show a main significant effect of type of appeal on attitude (F(2, 147) = 1.59,p = .21). The language of appeal was not found to have a significant main effect on attitude (F(1, 147) < 1). The interaction effect between language of appeal and type of appeal was not statistically significant (F(2, 147) = 1.92, p = .151). Also, a two-way ANOVA with language of appeal and type of appeal as factors did not show a main significant effect of type of appeal on the behavioural intention (F(1, 147) < 1). Hence, Hypothesis 1, which stated that negative appeals would be more effective in L1 and L2, was not confirmed. Similarly, there was no main significant effect of language of appeal on the behavioural intention (F(1, 147))< 1). As a result, Hypothesis 2, which stated that informational appeals in L2 should be more effective than information appeals in L1, was not confirmed. Hypothesis 2a, which hypothesised that emotional appeals in L1 would be more effective than emotional appeals in L2, was not met. The interaction effect between the language of appeal and type of appeal was not statistically significant (F(2, 147) = 1.93, p = .149). (see table 2)

In order to answer the third and fourth research question, a two-way ANOVA with language of appeal and type of appeal as factors showed a main significant effect of language of appeal on the perceived emotionality (F(1,147) = 11.97, p = .001). There was also a main significant effect of type of appeal on the perceived emotionality (F(2, 147) = 11.52, p < .001). However, there was no interaction effect between the type of appeal and language of

appeal $(F(2, 147) \le 1)$. In the following two paragraphs, follow up t-tests are reported for the third and fourth research question's main effects.

As the third research question showed a significant effect of type of appeal on the perceived emotionality (F(2, 147) = 11.52, p < .001), a follow-up analysis was effectuated. An independent sample t-test showed a significant difference between the emotional and informational appeals on the perceived emotionality (t (95) = 3.33, p = .001). Emotional appeals (M = 3.06, SD = 1.11) were perceived as more emotional than informational appeals (M = 2.41, M = 1.14). Among the emotional appeals (negative/positive), there was a significant difference between negative and positive appeals on the perceived emotionality (t (95) = 3.33, p = .001). The perceived emotionality in negative appeals (M = 3.44, M = 1.06) was higher than positive appeals (M = 2.73, M = 1.05). There was a significant difference between negative and informational appeals on the perceived emotionality (t (95) = 3.33, t = .001). The perceived emotionality in negative appeals was higher than informational appeals (t = 2.41, t = 1.41). Surprisingly, there was no significant difference in the perceived emotionality between informational and positive emotional appeals (t (106) = 1.51, t = .133). (see table 1).

As the fourth research question also showed a significant main effect (F(1,147)) = 11.97, p = .001), a follow up independent sample t-test was effectuated to determine the differences between the language of appeals. The t-test showed a significant difference between Dutch and English appeals on the perceived emotionality (t(151) = 3.53, p = .001). The perceived emotionality in English appeals (M = 3.17, SD = 1.20) was shown to have higher emotionality than the Dutch appeals (M = 2.53, SD = 1.04). (see table 2). As a result, hypothesis 4, which hypothesized that emotional appeals would be more emotional in L1 than in L2, was not confirmed. The interaction effect between language of appeal and type of appeal was not statistically significant (F(2, 147) = 1.92, p = .151).

Concerning participants' eating habits, there was an interesting finding on the behavioural intention towards meat reduction. An independent sample t-test showed a significant difference between low meat-eaters (1 to 2 times per week) and high meat-eaters (5 to 6 times per week) on the behavioural intention (t (95) = 2.86, p = .006). Low meat-eaters (M = 3.46, SD = 1.40) had a higher behavioural intention to reduce meat consumption than high meat-eaters (M = 2.65, SD = 1.09). Similarly, there was a significant difference between moderate meat-eaters (3 to 4 times per week) and high meat-eaters (5 to 6 times a week) on behavioural intention (t (119) = 3.65, p < .001). Moderate meat-eaters (M = 3.48, SD = 1.38) had a higher behavioural intention towards meat reduction than high meat-eaters

(M=2.65, SD=1.09). However, there was no significant difference between low meat-eaters and moderate meat-eaters on behavioural intention (t(86)=0.08, p < .934). According to the Cancer Council (2021), meat consumption was considered moderate if consumed 3 to 4 times per week. Therefore, in this study, 1 to 2 times per week was considered low, 3 to 4 times per week was considered moderate, and 5 to 6 times a week was considered high meat consumption.

Conclusion

This study aimed to determine the perceived emotionality and effectiveness of Dutch and English advertising appeals amongst bilinguals by utilising emotional and informational appeal types. In the following paragraphs, the answers to the research questions and hypothesis are reported.

The first research question was about the effectiveness of the different appeals; results showed that the attitude and intention towards eating less meat after viewing the advertisement did not differ significantly from each other. Therefore hypothesis 1, which stated that negative emotional appeals would be more effective than positive and informational appeals in L1 and L2, was not met because there was no difference between the appeals in terms of effectiveness.

The second research question concerned the effectiveness of the Dutch and English appeals. The results showed that neither English nor Dutch appeals differed significantly from each other in terms of the attitude towards meat reduction and the intent to reduce meat. Hypothesis 2, which hypothesised that L2 informational appeals would be more effective than L1 informational appeals, was not confirmed because L1 informational appeals did not differ from L2 informational appeals in terms of effectiveness. Likewise, hypothesis 2a, which stated that positive and negative emotional appeals would be more effective in L1 than in L2, was not confirmed because L1 and L2 positive and negative appeals did not differ from each other in terms of effectiveness.

For the third research question concerning the perceived emotionality between the types of appeals, the results showed that negative appeals were perceived as more emotional than positive appeals and informational appeals. The fourth research question, which concerned the language of appeals on emotionality, showed that English appeals have a higher emotionality than Dutch appeals. In addition, hypothesis 4 hypothesised that emotional appeals would be more emotional in L1 than in L2. However, this was not

confirmed because the English appeals were perceived to have a higher emotionality than the Dutch appeals.

Interestingly, participants who consumed meat once or twice per week had a higher behavioural intention towards meat reduction than persons who consumed meat over four to six times a week. Also, participants who consumed meat between three to four times a week had a higher intention towards meat reduction than participants who consumed between 4 to 6 times a week.

Discussion

An explanation of this study's findings could be that emotionality may not influence attitude formation and intention, contrary to previous findings. These previous findings showed that emotional appeals lead to attitude formation (Noble et al., 2014, Palomo-Velez et al., 2018). However, even though the negative appeal was perceived as more emotional than the other appeal types in this study, it did not lead to a difference in attitude. The finding of this study is similar but asymmetrical to Noble et al. (2014), in that they found no effects of perceived emotionality but found that the negative and positive appeals were effective in terms of attitude and behavioural intention towards the issue. Therefore, emotionality may have no direct influence on the effectiveness of appeals.

Alternatively, a further explanation of this study's finding could be the adverse effects of negative emotional appeals. Although negative emotional appeals have been shown to render attitude formation (Noble et al., 2014), this finding was not present in this study. An explanation for this diverging result could be linked to the negative valence of the appeal. According to Marchand and Filiatrault (2002), who investigated AIDS prevention advertisements, negative (guilt) appeals could lessen the attitude towards an issue due to the evoked negative affect. Therefore, it seems that the topic of meat reduction may have challenged the participants' existing beliefs on their meat consumption, consequently leading to a lower attitude regarding the issue.

An explanation for the higher emotionality in the English appeals could be linked to the episodic trace memory. Puntoni et al. (2009) investigated the perceived emotionality in positive and neutral appeals on Dutch-English bilinguals. Their findings showed that an L2 could be perceived as more emotional than an L1. Their findings were explained in terms of the episodic trace memory, which posits that words experienced in a particular language tend to be more emotional in that language. Thus Puntoni et al. (2009) observed that when participants were shown words frequently heard and experienced in an L2 context, these

words were perceived to be more emotional than L1 words. In this study, it seems possible that participants may have frequently encountered and experienced the words featured in the appeals in an English context than in a Dutch context, consequently leading to a higher perceived emotionality in English.

The frequent encounter with English seems plausible. Because, first of all, English is used frequently in the Dutch media, such as advertising and business communication (Zenner et al., 2015). Secondly, Verheijen et al. (2018) found that English words and phrases are frequently used among Dutch youth in computer-mediated communication. Thirdly, Breetvelt (2018) reported a growing anglicisation process in the Dutch education system, especially in higher education, which could be why participants, most of whom were higher education students, may have encountered English frequently. In addition, Caldwell-Harris and Dinn (2016) found that a second language could feel more emotional if used frequently, learned to a high level and learned via immersion. Also, Degner and Wentura (2012) found that perceived emotionality is related to the frequency of language use. Therefore, the high English usage, high proficiency, and English use in interpersonal computer-mediated communication may explain the higher emotionality in English (L2). The high English usage and proficiency may also be why the informational appeals in L2 were not more effective than the informational appeals in L1 as they may process both languages similarly.

The first limitations of this study are that this study utilised self-reported measures to assess L2 proficiency instead of standardised tests. Hence, future research may want to utilise standardised tests to assess L2 proficiency. In addition, This study is not generalisable to a wider population as only students participated. Future studies should include non-students as university students tend to be more proficient in language-related research (Peterson and Merunka, 2005). Thus, Dutch appeals could be more emotional among adults/non-students, as they may not encounter L2 words or memories as often as students.

A further limitation of this study may be the participants varied meat consumption. In this study, participants who never ate meat were excluded from the study. However, individuals who ate meat once a week and over were included. A study by Dagnelie and Mariotti, (2017) showed that the distinction between meat-eaters and non-meat eaters is complex. Due to this complexity, it is possible that participants in this current study, who consumed meat at most thrice a week could have been easily persuaded with the appeals in contrast to those who ate meat over four times a week. Therefore, future research should explore the different levels of emotional appeals on the frequency of meat consumption. Persons who consume meat over four times a week may be difficult to persuade; hence they

may require a highly emotional appeal to engender attitude formation and behavioural intention towards meat reduction than those who consume less meat.

The findings of this study can be further investigated by effectuating a pre-test. This pre-test should constitute several advertising texts made up of valenced words and context-based emotional words associated with the Dutch culture and family setting. As mentioned in the introduction, the use of elements associated with culture or family may increase emotions (Jaganathan et al., 2013). The most emotional word combinations should be utilised for the actual study. In addition, participants should be assessed on how often they use English (L2) in their daily lives (study, job, family, friends). This investigation could facilitate the inference of the frequency of language use on emotionality. This way, it would be possible to distinguish between participants who rarely encounter English from those who encounter English more often as this may lead to different levels of emotionality.

For marketers, the implications of this study might be two-fold; firstly, due to the high proficiency and usage of English in the Dutch society, in particular among students, NGOs need not limit themselves to "Dutch only" social advertising. Secondly, the findings showed that negative appeals were perceived to be more emotional than any other appeal. Hence, NGOs should consider using negative appeals in either language. However, it should be noted that the higher perceived emotionality did not equate to the effectiveness of appeals in this study. Furthermore, this study contributes to the current understanding of emotionality in languages by extending the psycholinguistic approach to NGO advertisements. Thus, the findings of this study could have useful implications for psycholinguists and institutions interested in the factors that may render an L2 more emotional than an L1.

The successful manipulation of emotional appeals still tends to be problematic. Although emotions have been shown to influence behavioural intention and attitude change, the processes to achieve this fit are not clearly understood (Jorgensen, 1998). Additionally, the variability of the emotional meaning that emerges from stimuli differs amongst individuals based on the context, the individual and available information in stimuli (Brosch et al., 2010, as cited in Pavlenko, 2010). Fortunately, this variability in emotionality can best be investigated with the two languages of a bilingual. Hence, future research should grasp the opportunity to investigate more on the ever-growing bilingual society. Although the findings of this study do not answer the question of what the most effective advertising appeal is amongst bilinguals, instead, it shows that a second language may be perceived as more emotional than the first language. The findings also leave room for further investigation of this phenomenon.

Reference

- Akbari, M. (2015). Different impacts of advertising appeals on advertising attitude for high and low involvement products. *Global Business Review*, *16*(3), 478–493. https://doi.org/10.1177/0972150915569936
- Bhatia, T. K. (2019). Emotions and language in advertising. *World Englishes*, *38*(3), 435–449. https://doi.org/10.1111/weng.12420
- Bond, M., & Lai, T. (1986). Embarrassment and code switching into a second language. *Journal of Social Psychology*, 126, 179-186.
- Bouvard, V., Loomis, D., Guyton, K. Z., Grosse, Y., Ghissassi, F. E., Benbrahim-Tallaa, L., International Agency for Research on Cancer Monograph Working Group. (2015). Carcinogenicity of consumption of red and processed meat. *The Lancet Oncology*, *16*(16), 1599–1600. https://doi.org/10.1016/S1470-2045(15)00444-1
- Bowers, J. S., & Pleydell-Pearce, C. W. (2011). Swearing, euphemisms, and linguistic relativity. *PloS One*, 6(7), e22341. https://doi.org/10.1371/journal.pone.0022341
- Breetvelt, I. (2018). English-medium instruction in Dutch higher education: a policy reconstruction and impact study. *L1 Educational Studies in Language and Literature*, *18, Running Issue*(Running Issue), 1–24.
- Caldwell-Harris, C. L., & Aycicegi-Dinn (2016). Emotionality differences between a native and foreign language: Implications for cultural marketing strategies. *Cultural marketing Strategy*, 2, https://doi-org.ru.idm.oclc.org/10.1177/0963721414566268
- Caldwell-Harris, C. L., Tong, J., Lung, W., & Poo, S. (2011). Physiological reactivity to emotional phrases in Mandarin—English bilinguals. *The International Journal of Bilingualism: Cross-Disciplinary, Cross-Linguistic Studies of Language Behavior*, 15(3), 329–352. https://doiorg.ru.idm.oclc.org/10.1177/1367006910379262
- Cancer Counci (2021) *Red meat, Processed meat and Cancer*.

 https://www.cancercouncil.com.au/lin3cancers/lifestyle-choices-and-cancer/red-meat-processed-meat-and-cancer/
- Carfora, V., Bertolotti, M., & Catellani, P. (2019). Informational and emotional daily messages to reduce red and processed meat consumption. *Appetite*, *141*(104331), 104331. https://doi.org/10.1016/j.appet.2019.104331
- Cordts, A., Nitzko, S., Spiller, A., Cordts, A., Nitzko, S., & Spiller, A. (2014). *Consumer response to negative information on meat consumption in Germany*. Unknown. https://doi.org/10.22004/AG.ECON.164599

- Dewaele, J.-M. (2004). The emotional force of swearwords and taboo words in the speech of multilinguals. *Journal of Multilingual and Multicultural Development*, 25(2–3), 204–222, DOI:10.1080/01434630408666529
- Long Yi, L. (2011). The impact of advertising appeals and advertising spokespersons on advertising attitudes and purchase intentions. *African Journal of Business Management*, *5*(21), 8446–8457. https://doi.org/10.5897/AJBM11.925
- Dufour, R., & Kroll, J. F. (1995). Matching words to concepts in two languages: a test of the concept mediation model of bilingual representation. *Memory & Cognition*, 23(2), 166–180. https://doi.org/10.3758/BF03197219
- Caldwell-Harris, C. L., Staroselsky, M., Smashnaya, S., & Vasilyeva, N. (2012). *Emotional* resonances of bilinguals two languages vary with age of arrival: The Russian–English bilingual experience in the US'.
- Favreau, M., & Segalowitz, N. S. (1983). Automatic and controlled processes in the first- and second-language reading of fluent bilinguals. *Memory & Cognition*, 11(6), 565–574. https://doi.org/10.3758/BF03198281
- Gerritsen, M., Nickerson, C., Van Hooft, A., Van Meurs, F., Nederstigt, U., Starren, M., & Crijns, R. (2007). English in product advertisements in Belgium, France, Germany, the Netherlands and Spain. *World Englishes*, 26(3), 291–315. https://doi.org/10.1111/j.1467-971X.2007.00510.x
- Grosjean, F. (2018). Être bilingue aujourd'hui. *Revue Française de Linguistique Appliquée*, vol. xxiii(2), 7-14. https://doi.org/10.3917/rfla.232.0007
- Harris, C. L., Ayçiçegi, A., & Gleason, J. B. (2003). Taboo words and reprimands elicit greater autonomic reactivity in a first language than in a second language. *Applied Psycholinguistics*, 24(04). https://doi.org/10.1017/s0142716403000286
- Henley, N., & Donovan, R. J. (2003). Young people's response to death threat appeals: do they really feel immortal? *Health Education Research*, *18*(1), 1–14. https://doi.org/10.1093/her/18.1.1
- Holland, J., & Gentry, J. W. (1999). Ethnic consumer reaction to targeted marketing: A theory of intercultural accommodation. *Journal of Advertising*, 28(1), 65–77. https://doi.org/10.1080/00913367.1999.10673577
- Hornik, J., Ofir, C., & Rachamim, M. (2017). Advertising Appeals, Moderators, And Impact on Persuasion: A Quantitative Assessment Creates a Hierarchy of Appeals. *Journal of Advertising Research*. 57. JAR-2017. 10.2501/JAR-2017-017. https://doi.org/10.2501/JAR-2017-017

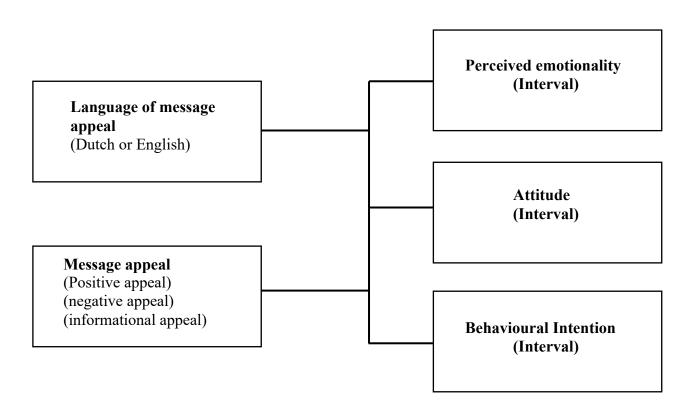
- Hunter, E., & Röös, E. (2016). Fear of climate change consequences and predictors of intentions to alter meat consumption. *Food Policy*, *62*, 151–160. https://doi.org/10.1016/j.foodpol.2016.06.004
- Jaganathan, Paramaswari & Mahfoodh, Omer & Pin Ling, Lee & Pek Har, Gan. (2013). Measuring Language Effects of Bilingual Advertisements on the Language Preference among Chinese students in a University. *New Media and Mass Communication*. 19. 45-61.
- Jorgensen, P. F. (1998). Affect, persuasion, and communication processes. In *Handbook of Communication and Emotion* (pp. 403–422). Elsevier.
- Kelly-Holmes, H. (2000). Bier, parfum, kaas: language fetish in European advertising. *European Journal of Cultural Studies*, *3*(1), 67–82. https://doi.org/10.1177/a010863
- Kelly-Holmes, H. (2005). The special case of English. In *Advertising as Multilingual Communication*. Palgrave Macmillan UK. https://doi.org/10.1057/9780230503014
- Keysar, B., Hayakawa, S. L., & An, S. G. (2012). The foreign-language effect: Thinking in a foreign tongue reduces decision biases. *Psychological Science*, *23*(6), 661–668. https://doi.org/10.1177/0956797611432178
- Kunst, J. R., & Hohle, S. M. (2016). Meat eaters by dissociation: How we present, prepare and talk about meat increases willingness to eat meat by reducing empathy and disgust. *Appetite*, *105*, 758–774. https://doi.org/10.1016/j.appet.2016.07.009
- Laestadius, L. I., Neff, R. A., Barry, C. L., & Frattaroli, S. (2013). Meat consumption and climate change: the role of non-governmental organizations. *Climatic Change*, *120*(1–2), 25–38. https://doi.org/10.1007/s10584-013-0807-3
- Luna, D., & Peracchio, L. A. (2005). Sociolinguistic effects on code-switched ads targeting bilingual consumers. *Journal of Advertising*, *34*(2), 43–56. https://doi.org/10.1080/00913367.2005.10639196
- Lusk, J. L., & Norwood, F. B. (2011). Animal welfare economics. *Applied Economic Perspectives and Policy*, 33(4), 463–483. https://doi.org/10.1093/aepp/ppr036
- Marchand, J., & Filiatrault, P. (2002). AIDS prevention advertising: different message strategies for different communication objectives. *International Journal of Nonprofit and Voluntary Sector Marketing*, 7(3), 271–287. http://doi.org/10.1002/nvsm.185
- Morawetz, C., Oganian, Y., Schlickeiser, U., Jacobs, A. M., & Heekeren, H. R. (2017). Second language use facilitates implicit emotion regulation via content labeling. *Frontiers in Psychology*, *8*, 366. https://doi.org/10.3389/fpsyg.2017.00366
- Nationale Onderwijsgids. (2018, April 30). *Tweetalig onderwijs vooral op vwo, maar groei is het sterkst op vmbo en havo*. Nationale Onderwijsgids.

- https://www.nationaleonderwijsgids.nl/voortgezet-onderwijs/nieuws/43628-tweetalig-onderwijs-vooral-op-vwo-maar-groei-is-het-sterkst-op-vmbo-en-havo.html
- Noble, G., Pomering, A., & W. Johnson, L. (2014). Gender and message appeal: their influence in a pro-environmental social advertising context. *Journal of Social Marketing*, *4*(1), 4–21. https://doi.org/10.1108/JSOCM-12-2012-0049
- Obermiller, C. (1995). The Baby is Sick/The Baby is Well: A Test of Environmental Communication Appeals. *Journal of Advertising*, 24(2), 55–70. https://doi.org/10.1080/00913367.1995.10673476
- Palomo-Vélez, G., Tybur, J. M., & van Vugt, M. (2018). Unsustainable, unhealthy, or disgusting? Comparing different persuasive messages against meat consumption. *Journal of Environmental Psychology*, 58, 63–71. https://doi.org/10.1016/j.jenvp.2018.08.002.
- Patil VH (2006) Appeals with Negative Emotions and Strategies to Reduce Resistance to Persuasion: An Application in the Context of Charitable Solicitation. Faculty of the Graduate School of the University of Kansas. Accesses from the American University in Cairo.
- Pavlenko, A. (2012). Affective processing in bilingual speakers: disembodied cognition? *International Journal of Psychology: Journal International de Psychologie*, 47(6), 405–428. https://doi.org/10.1080/00207594.2012.743665
- Pavlenko, A. (2011). Studies in emotion and social interaction: Emotions and multilingualism.

 Cambridge University Press.
- Pavlenko, A. (2004). "stop doing that,Ia komu skazala!": Language choice and emotions in parent—child communication. *Journal of Multilingual and Multicultural Development*, 25(2–3), 179–203. https://doi.org/10.1080/01434630408666528
- Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research*, 67(5), 1035–1041
- Petty, R. E., & Briñol, P. (2015). Emotion and persuasion: cognitive and meta-cognitive processes impact attitudes. *Cognition & Emotion*, 29(1), 1–26.
- Petty, R. E., & Cacioppo, J. T. (1986). Communication and persuasion: Central and peripheral routes to attitude change (1986th ed.). Springer.
- Piller, Ingrid. (2000). Language choice in bilingual, cross-cultural interpersonal communication. *Linguistik online*. https://doi.org/10.13092/lo.5.1015
- Puntoni, S., de Langhe, B., & van Osselaer, S. M. J. (2009). Bilingualism and the emotional intensity of advertising language. *The Journal of Consumer Research*, *35*(6), 1012–1025. https://doi.org/10.1086/595022

- Rogers, R., Cacioppo, J., & Petty, R. (1983). Cognitive and physiological processes in fear appeals and attitude change: *A revised theory of protection motivation*.
- Scheff, T. J. (1988). Shame and conformity: The deference-emotion system. *American Sociological Review*, *53*(3), 395. https://doi.org/10.2307/2095647
- Seleshe, S., Jo, C., & Lee, M. (2014). Meat consumption culture in Ethiopia. *Korean Journal for Food Science of Animal Resources*, 34(1), 7–13. https://doi.org/10.5851/kosfa.2014.34.1.7
- Sella, H. (1993). L'emploi des langues étrangères dans la publicité grecque. *La Linguistique*, *29*(1), 89-101. Retrieved April 4, 2021, from http://www.jstor.org/stable/30248690
- Talmi, D., & Moscovitch, M. (2004). Can semantic relatedness explain the enhancement of memory for emotional words? *Memory & Cognition*, 32(5), 742–751. https://doi.org/10.3758/BF03195864
- Vainio, A., Irz, X., & Hartikainen, H. (2018). How effective are messages and their characteristics in changing behavioural intentions to substitute plant-based foods for red meat? The mediating role of prior beliefs. *Appetite*, 125, 217–224. https://doi.org/10.1016/j.appet.2018.02.002
- Verheijen, L., de Weger, L., & van Hout, R. (2018). Code-mixing with English in Dutch youths' online language: OMG SUPERNICE LOL! In R. Vandekerckhove, D. Fišer, & L.Hilte (eds.), Proceedings of the 6th Conference on Computer-Mediated Communication (CMC) and Social Media Corpora (pp. 63-67). Antwerp: University of Antwerp.
- Zenner, E., Speelman, D., & Geeraerts, D. (2015). A sociolinguistic analysis of borrowing in weak contact situations: English loanwords and phrases in expressive utterances in a Dutch reality TV show. *The International Journal of Bilingualism: Cross-Disciplinary, Cross-Linguistic Studies of Language Behavior*, 19(3), 333–346. https://doi.org/10.1177/1367006914521699
- Zheng, M. (2020). When and why negative emotional appeals work in advertising: A review of research. *Open Journal of Social Sciences*, 08(03), 7–16. https://doi.org/10.4236/jss.2020.803002
- Zijlstra, H., Van Meerveld, T., Van Middendorp, H., Pennebaker, J. W., & Geenen, R. (2004). De Nederlandse versie van de 'linguistic inquiry and word count'(LIWC). *Gedrag Gezond*, 32(4), 271-281

Analytical Model



Independent variables

Dependent variables

Appendix A

Advertising appeals

Positive emotional appeal (Dutch)

In Nederland worden dagelijks 1,7 miljoen dieren geconsumeerd. Dit omvat koeien, kippen en varkens.

Door simpelweg minder vlees te eten, kan je deze dieren een kans geven om het lange en gelukkige leven te leiden dat ze verdienen. We kunnen allemaal een rol spelen bij het stoppen van de constante toename van de consumptie van dieren.

Word jij een held en red je deze dieren?

In Nederland worden dagelijks 1,7 miljoen dieren geconsumeerd. Dit omvat koeien, kippen en varkens.

De consumptie van vlees wordt geassocieerd met een verminderd dierenwelzijn. De gemiddelde Nederlander eet ongeveer 77 kg vlees per jaar. Deze consumptie stijgt voortdurend, maar jij kunt helpen dit aantal omlaag te brengen.

Ga jij je vleesconsumptie verminderen of niet?

In Nederland worden dagelijks 1,7 miljoen dieren geconsumeerd. Dit omvat koeien, kippen en varkens.

Jouw vleesconsumptie draagt bij aan de uitbuiting en slachting van onschuldige dieren. Het aantal doden en de gruwelijkheid in deze industrie neemt voortdurend toe en we zijn allemaal verantwoordelijk daarvoor.

Is de smaak van vlees het waard om bloed aan je handen te hebben?

Appendix B

Checklist Each

Checklist Ethics Review (version 1.6, november 2020)

You fill in the questions by clicking on the square next to the chosen answer \square After clicking, a cross will appear in this square \boxtimes

Ajter Ci	icking, a cross will appear in this square 🖾
	health care institution involved in the research? ation: A health care institution is involved if one of the following (A/B/C) is the case:
Expluii	ution. A neutricule institution is involved if one of the following (AVB/C) is the case.
A.	One or more employees of a health care institution is/are involved in the research as principle or in the carrying out or execution of the research.
В.	The research takes place within the walls of the health care institution and should, following the nature of the research, generally not be carried out outside the institution.
C.	Patients / clients of the health care institution participate in the research (in the form of treatment).
	oximes No $ ightarrow$ continue with questionnaire
	\square Yes \rightarrow Did a Dutch Medical Institutional Review Board (MIRB) decide that the Wet
	Medisch Onderzoek (Medical Research Involving Human Subjects Act) is not applicable? \Box Yes \rightarrow continue with questionnaire
	\square No \rightarrow This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen \rightarrow end of checklist
2. Do g	grant providers wish the protocol to be assessed by a recognised MIRB?
	\boxtimes No \rightarrow continue with questionnaire
	\square Yes \rightarrow This application should be reviewed by a Medical Institutional Review Board,
	for example, the Dutch CMO Regio Arnhem Nijmegen \rightarrow end of checklist
3. Doe	s the research include $\frac{\text{medical-scientific research}}{\boxtimes}$ that might carry risks for the participant? \boxtimes No \rightarrow continue with questionnaire
	\square Yes \rightarrow This application should be reviewed by a Medical Institutional Review Board,
	for example, the Dutch <u>CMO Regio Arnhem Nijmegen</u> \rightarrow end of checklist
Stand	dard research method
	s this research fall under one of the stated <u>standard research methods</u> of the Faculty of the Faculty of Philosophy, Theology and Religious Studies?
	\boxtimes Yes \to Standard evaluation and attitude research (1) \to continue with questionnaire \square No \to assessment necessary, end of checklist

Participants

5. Is the participant population a healthy one?
\boxtimes Yes \rightarrow continue with questionnaire
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
6. Will the research be conducted amongst minors (<16 years of age) or amongst (legally) incapable persons?
 ☐ Yes → assessment necessary, end of checklist → go to assessment procedure ☑ No → continue with questionnaire
Method
7. Is a method used that makes it possible to produce a coincidental finding that the participant should be informed of?
$□$ Yes \to assessment necessary, end of checklist \to go to assessment procedure $В$ No \to continue with questionnaire
8. Will participants undergo treatment or are they asked to perform certain behaviours that can lead to discomfort?
$□$ Yes \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure $В$ No \rightarrow continue with questionnaire
 9. Are the estimated risks connected to the research minimal? □ No → assessment necessary, end of checklist → go to assessment procedure ☑ Yes → continue with questionnaire
 10. Are the participants offered a different compensation than the usual one? □ Yes → assessment necessary, end of checklist → go to assessment procedure ⋈ No → continue with questionnaire
 11. Should <u>deception</u> take place, does the procedure meet the standard requirements? □ No → assessment necessary, end of checklist → go to assessment procedure ☑ Yes → continue with questionnaire
 12. Are the standard regulations regarding <u>anonymity and privacy</u> met? □ No → assessment necessary, end of checklist → <u>go to assessment procedure</u> ☑ Yes → continue with questionnaire
Conducting the research

13. Will the research be carried out at an external location (such as a school, hospital)?

oximes No ightarrow continue with questionnaire

☐ Yes→ Do you have/will you receive written permission from this institution?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
\square Yes \rightarrow continue with questionnaire
14. Is there a contact person to whom participants can turn to with questions regarding the research and are they informed of this?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
\boxtimes Yes \rightarrow continue with questionnaire
15. Is it clear for participants where they can file complaints with regard to participating in the research and how these complaints will be dealt with?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
\boxtimes Yes \rightarrow continue with questionnaire
16. Are the participants free to participate in the research, and to stop at any given point, whenever and for whatever reason they should wish to do so?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
\boxtimes Yes \rightarrow continue with questionnaire
17. Before participating, are participants informed by means of an information document about the aim, nature and risks and objections of the study? (zie <u>explanation on informed consent</u> and <u>sample documents</u>).
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
oximes Yes $ ightarrow$ continue with questionnaire
18. Do participants and/or their representatives sign a consent form? (zie <u>explanation on informed consent</u> and <u>sample documents</u> .
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure

Appendix B(1)

Thesis survey (English)

Q1_IN_EN Welcome to the survey.

Dear participant, Thank you for participating in our study. This questionnaire is part of the International Business Communication Bachelor's programme at Radboud University. This one-time survey, consisting of 13 questions, will take approximately 5 minutes to finish. We are conducting research on social advertisements in society. In order to do so, Dutch native speakers are needed. All the obtained data will be confidential and will only be available to the researchers conducting this questionnaire. Your participation is completely anonymous and voluntary. You can withdraw from this questionnaire at any given point. If you have any questions or complaints about this study, please send an e-mail to annabel.schwarz@student.ru.nl.By filling out this form, you declare that you have been sufficiently informed about the study and that you want to voluntarily participate. Thank you for your time, Frances van Drogenbroek, Isi Omole, Annabel Schwarz, Bente Nijkamp, Fleur de Jong, Mees Bartholomeus, and Nguyên Luong. By selecting "I agree" you are consenting to the conditions as described above.

O I agree (1)
O I disagree (2)
Skip To: End of Survey If Welcome to the survey. Dear participan participan participan
Q2_IN_EN Are you a student ?
○ Yes (1)
O No (2)
Q3_IN_EN Are you above the age of 18?

Skip To: End of Survey If Are you above the age of 18? = No



○ Yes (1)

 \bigcirc No (2)

Thank you for

Q4_IN_EN What is your age?	
Q5_IN_EN Which gender do you identify as?	
O Male (1)	
O Female (2)	
O Non-binary/Other (3)	
O Prefer not to say (4)	
Q6_IN_EN What is your current educational level?	
○ MBO (1)	
○ HBO (2)	
O University (Bachelors) (3)	
O University (Masters) (4)	
O PhD (5)	
Other (6)	

Q105 Eating	g habits						
	Never (0) (1)	once per week (2)	twice per week (3)	3 times a week (4)	4 times a week (5)	5 times a week (6)	
How many days a week do you eat meat?	0	0	0	0	0	0	0
Q8_IN_EN Below you withis ad. Take proceed.							
Q9_IN_EN	Please ans	wer this que	stion on the		-	viewed ad	vertisement
		\mathcal{O} \mathcal{I}	Somewhat agree (2)	Neither agree no disagree (or disagr	ewhat ree (4)	Strongly disagree (5)
Because of the ad I would be concerne about eating	e d ng	0	0	0		0	0

Q10 IN EN Please answer this question on the basis of the previously viewed advertisement Neither Strongly Strongly agree Somewhat Agree Somewhat Disagree disagree agree disagree nor agree (3) (6) (2) **(1)** disagree **(7)** (5) (4) Because of this ad, I intend to cut the number of meals with meat to half(1)Because of this ad, I intend to refrain from eating meat (2) Because of this ad, I intend to replace meat with meat substitutes, vegetables or beans (3) Because of this ad, I intend to eat vegetarian food twice as often as today (4)

36

Q11_IN_EN	Please ansv Stron agree	gly S	estion on the omewhat agree (2)	Neither agree nor disagree (3)	Som	y viewed a newhat gree (4)	Strongly disagree (5)
I think this ad is emotional (1)	(\supset	0	0		0	0
Q12_IN_EN	Proficiency	7	D-1				
	Very poor (1)	poor (2)	Below average (3)	Average (4)	Good (5)	Very good (6)	
I consider my English reading proficiency as (1)	0	0	0	0	0	0	0
birth)?	·	ur native la	nguage (the	e language in v	vhich yo	u were rais	sed from
O Dutch	(1) plus anoth	er languag	e (2)				
O Other	-	er ranguag	(2)				
Q14_IN_EN	At what ag	e did you s	tart learning	g English? (Fo	r exampl	e at school	or at home)
O Before	e age 5 (1)						
O At age	e 5 or later	(2)					
O I've ne	ever learne	d English ((3)				

Q15_IN_EN If you experienced any technical difficulties or have any comments about the study that you would like to share, please let us know here.
Thesis survey (Dutch)
Q1_IN_NL Welkom bij deze enquête.
Beste deelnemer,
Bedankt voor het bijdragen aan onze studie. Deze vragenlijst is deel van de studie Communicatie- en Informatiewetenschappen aan de Radboud Universiteit. Deze eenmalige enquête, bestaande uit 13 vragen, zal ongeveer 5 minuten duren. Dit onderzoek betreft sociale advertenties in de maatschappij. Hiervoor zijn mensen met Nederlands als moedertaal nodig.
Alle verkregen gegevens worden als vertrouwelijk behandeld en zijn alleen beschikbaar voor de onderzoekers. Jouw bijdrage in deze studie is compleet anoniem en op vrijwillige basis. Je kunt stoppen op ieder gewenst moment.
Mocht je vragen of opmerkingen hebben betreffende dit onderzoek, kun je deze mailen naar: annabel.schwarz@student.ru.nl
Door het invullen van deze enquête verklaar je voldoende ingelicht te zijn over dit onderzoek en vrijwillig deel te nemen.
Bedankt voor je tijd,
Frances van Drogenbroek, Isi Omole, Annabel Schwarz, Bente Nijkamp, Fleur de Jong, Mees Bartholomeus en Nguyên Lurong.
Door "Ik stem toe" te selecteren ga je akkoord met de voorwaarden als hierboven omschreven.
O Ik stem toe (1)
O Ik stem niet toe (2)
Skip To: End of Survey If Welkom bij deze enquête. Beste deelnemer, Bedankt voor het bijdragen aan onze studie. Deze vragen = Ik stem niet toe

Q2_	IN_NL Ben je een student?
	O Ja (1)
	O Nee (2)
:	
Q3_	IN_NL Ben je 18 jaar of ouder?
(O Ja (1)
	O Nee (2)
Skip	To: End of Survey If Ben je 18 jaar of ouder? = Nee
Q4_	IN_NL Wat is je leeftijd?
Q5_	IN_NL Waarmee identificeer je jezelf?
	○ Man (1)
(O Vrouw (2)
(O Non-binair/Anders (3)
(O Wil ik liever niet zeggen (4)
Dog	- Rreak

Q6_IN_NL	Wat is je hi	uidige oplei	dingsniveau	1?			
Омв	O (1)						
○ нво	O (2)						
O Univ	versiteit (Ba	chelor) (3)					
O Univ	versiteit (Ma	aster) (4)					
O PhD	(5)						
O And	ers (6)						
Q7_IN_NL	Eetgewoon	tes 1 keer	2 keer	3 keer	4 keer	5 keer	D 1''
Hoe vaak per week eet je vlees?	Nooit (0) (1)			per week (4)	per week (5)	per week (6)	Dagelijks (7)

Q9_IN_NL Beantwoord deze vraag alsjeblieft op basis van de advertentie die je hiervoor hebt gezien

	Helemaal mee eens (1)	Mee eens (2)	Niet mee eens en niet mee oneens (3)	Mee oneens (4)	Helemaal mee oneens (5)
Door deze advertentie zou ik me interesseren in het eten van minder vlees (1)	0	0	0	0	0

Q10_IN_NL Beantwoord deze vraag alsjeblieft op basis van de advertentie die je hiervoor hebt gezien

	Helemaal mee eens (1)	Mee eens (2)	Een beetje mee eens (3)	Niet mee eens en niet mee oneens (4)	Een beetje mee oneens (5)	Mee oneens (6)	Helemaal mee oneens (7)
Door deze advertentie ben ik van plan om mijn aantal maaltijden met vlees te halveren (1)	0	0	0	0	0	0	0
Door deze advertentie ben ik van plan om af te zien van het eten van vlees (2)	0	0	0	0	0	0	0
Door deze advertentie ben ik van plan om vlees te vervangen door vleesvervangers, groenten of bonen (3)		0	0	0	0	0	0
Door deze advertentie ben ik van plan om vanaf vandaag twee keer zo vaak vegetarisch te eten (4)	0	0	0	0	0	0	0

Q11_IN_NL Beathebt gezien	antwoord deze v	raag alsjeblieft	op basis van de	e advertenti	e die je hiervoor
neot gezien	Helemaal mee eens (1)	Mee eens (2)	Niet mee eens en niet mee oneens (3)	Mee onee (4)	Helemaal mee oneen (5)
Ik vind deze advertentie emotioneel (1)	0	0	0	0	0
Q12_IN_NL Bel	Erg Slee	gemiddeld	Gemiddeld	Goed	Heel Uitsteker
	(2)	(3)	(4)	(5)	$ \begin{array}{ccc} (6) & (7) \end{array} $
Ik beschouw mijn Engelse leesvaardigheid als (1)		0 0	0	0	0 0
Q13_IN_NL Wa O Nederlan O Nederlan O Anders (ds (1) ds plus andere t	·	rmee je opgevo	oed bent va	naf je geboorte)
Q14_IN_NL Op thuis)	welke leeftijd b	en je begonnen	met Engels ler	en? (Bijvoo	orbeeld op school
O Voor de l	leeftijd van 5 jaa	ar (1)			
On de lee	eftijd van 5 jaar	of later (2)			
○ Ik heb no	ooit Engels gelee	erd (3)			

 	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												-	-	-	-	-	-	-	-	-	-			-	-	-	
Q15_IN_NL Als je technische problemen hebt ondervonden of opmerkingen hebt over het onderzoek die je zou willen delen, laat het ons dan hier weten.																																																							