Bachelor's Thesis

To what extent has the use of English in traffic advertising an effect on young people's driving behaviour in foreign countries?

A comparison between the Netherlands and Spain



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Abstract

Research on traffic safety advertisement has shown the importance of a good match between the message and the picture. Furthermore, unexpected elements, like a switch of languages, catch the viewers' attention. However, most advertisements were not successful in persuading people of a certain behavior. For example, using the phone while driving causes distraction and young drivers are not aware of the dangers that this behaviour entails. This research investigated whether the use of English as foreign language influences young drivers to not use their phone while driving. An experiment was conducted amongst Dutch and Spanish drivers to compare if English could function as an unexpected element to catch the drivers' attention. Dutch people are familiar with English, while Spanish people prefer to avoid English. Attitude towards the native language and English were taken into consideration, just as driver experience. For both nationalities three different advertisements were created, a native version, a mixed version of English and native language and a fully English version. Results suggest that advertising in the native language is more effective in convincing young drivers of not using their phone while driving than with the surprising use of English. The differences in the English proficiency and the drivers experience were substantial between the Netherlands and Spain. In fact, Dutch people reacted negatively towards the fully English advertisement, their intention to change the behaviour decreased drastically. In comparison, Spaniards had an increase in behaviour change when seeing the English advertisement. These were unexpected results; however, the results are only moderately reliable due to the uneven distribution of the number of people who have a driver's license. Further research needs to find participants with similar characteristics equally divided. Also, justification needs to be found for the unexpected results.

Keywords: traffic safety advertising, foreign language, cross-national, behaviour change

1. Introduction

A life without it is unimaginable: the mobile phone, everywhere people are holding it in their hands. It offers humans great opportunities, but also causes distraction. This can lead to dangerous situations, for example in traffic. Governments address the dangers by advertising potential consequences, but phone users only pay little attention to it. Particularly young people, who grew up with mobile phones do not see the dangers of phone usage in traffic, especially when driving (WHO, 2011). On the one hand they have little experience in driving and on the other hand they overestimate their multitasking skills. This can lead to serious accidents, also involving innocent people (Brace et al., 2007). Another factor that becomes more important every day is the use of the English language. English is seen as a global language and its influence is continuously increasing. Especially European teenagers are much in contact with the English language; they grow up learning English and the importance of acquiring it well (Hall & Cook, 2015; Parker, 2015). Generally, the young European generation cannot imagine a life without the phone nor a life without the English language. The aim of this research is to gain insights into the role of language in institutional safety campaigns aimed to convince young people of abolishing phone usage while driving by comparing advertisements in English and the native language.

Theoretical framework

1.1 The use of English in advertising

Most European inhabitants learn English in school, nonetheless their level of competence in English varies (Parker, 2015). The understanding of English is increasingly important in the rapidly globalizing world. Education First (EF) publishes an annual report about the proficiency of English as foreign language amongst different countries around the world. In the current publication, the Netherlands ranks highest, because Dutch people communicate most proficiently in English. The report states that the English proficiency of Spanish people is rated on the 33rd place. Compared to other years, both countries have improved their English skills, with the Dutch being more successfully than the Spanish inhabitants. Both countries belong to the European Union, therefore it is interesting to research what consequences the different levels of proficiency have in a larger context (EF, 2021).

One reason for the large difference could be, that Dutch people are more open to learn a new language. English has a high presence in the daily life of Dutch people, for example in the education system, media, and films. Even though Spanish students are aware of the importance

English has in business, the regional languages (like Catalan or Valenciano) are highly valued and introducing English is seen as a threat to the local identity (Busse, 2017).

The different appreciation of English can also be seen in the field of advertising. In Spain, the main part of the English content was found in the pictures of advertisements, whereas in the Netherlands English was mainly present in the words of headlines, body copies and slogans. More precisely, nativized words can be found in the Dutch ads (Gerritsen et al., 2007). This is a consequence of the lack of dubbing of English content in the Dutch television. Hence, these findings support the EF report (2021); Dutch people have integrated English into their daily lives and understand English better than Spaniards. Nevertheless, Gerritsen and colleagues (2007) do not indicate how the consumers are influenced by English advertisements.

In the case of English in slogans; Hornikx et al. (2010) found that English slogans were more appreciated by the Dutch consumers when they thought the translation corresponded to what would be expressed in Dutch. The difficulty of the slogan was not relevant, since all slogans were rated similarly in comprehension for both languages; English was even higher for the easy slogans (Hornikx et al., 2010). It can be concluded that appreciation is affected by comprehension. Spanish people also have a positive attitude towards English as a language, however, Spanish in advertising is perceived as more appealing than English to Hispanic people (van Hooft et al., 2017a). Even though Spaniards are open to English, they will not appreciate the advertising if they do not understand the text. This conclusion reflects the findings from the EF report (2021).

Generally, the use of English as a foreign language may elicit different reactions when comparing several native languages. This effect can be explained by the Markedness model (Myers-Scotton, 1983) which is an attempt to explain why people unexpectedly use another language than their native language in a communication situation. When using the native language, the focus is solely on the content (called "unmarked") whereas when the language switches (called "marked") the speaker activates associations with the just used language and the focus no longer remains solely on the content, but associations and content get combined (Myers-Scotton, 1983). The language switch can cause different interpretations of the content and therefore provoke different reactions.

Based on Planken et al.'s (2010) assumption that English in international advertising evokes positive associations with the product and thus also evokes positive attitudes by consumers, they conducted a study in Poland using English-language advertisements from (Polish) glossy magazines. They created a second version with the text translated to Polish, to be able to detect

any differences based on the language. Only in one case the English version of the advertisement caused a positive attitude towards the brand in comparison to the Polish version. With these results Myers-Scotton's (1983) theory can only be partly confirmed. The language switch seemed to not provoke different associations and the perception of the content remained similar. Interestingly, the content in the native language appeared to be more difficult to understand than the English version, the foreign language. As a matter of fact, Planken et al. (2010) indicate that English in Eastern countries is not necessarily regarded as a global language, and especially the highly educated Poles are proficient in English; Poland is in 16th place of the report (EF, 2021).

Another research investigates the use of English with native Arabic speaking Egyptians. Again, as expected in the aforementioned experiment and based on the Markedness Model theory, English should lead to a positive evaluation of the advertisements. As a result, the Arabic-English mixed advertisement decreases the consumer's attitude towards the product and the ad. Egyptian consumers have a more positive attitude towards the English advertisement even though they rated their proficiency of Arabic higher. Consequently, the purchase intention was highest when the English ad was displayed (van Hooft et al., 2017b). This is new and in line with the Markedness Model compared to the before mentioned research (Planken et al., 2010). In this research the Arabic speakers had positive associations with the language English which led to a positive evaluation of the advertisements. However, the evidence is not profound enough to make generalizable predictions regarding the purchase intention. Symbolic value of both languages (Arabic/English) has potential influence on the decisions a consumer makes when getting persuaded by an advertisement (van Hooft et al., 2017b). Thus, the use of English in advertising does not necessarily result in a positive response from the consumer. It should be taken into consideration that the unmarked language is able to indicate if the use of English can provoke a positive reaction. In the case of Spanish and Dutch the use of English as marked language could evoke different associations and thus different reactions due to the varying experience the people have made (van Hooft et al., 2017a; Hornikx et al., 2010).

Next to the symbolic value, bilingualism is an influential factor which should not be neglected. Young Hong Kong women were asked about their attitude and purchase intention for different product ads from the girl magazine Cosmopolitan in originally English, a Cantonese version and a third version where both languages were mixed (van Hooft & Truong, 2012). The participants were bilingual, thus, fluent in both languages. The language had no influence on the attitude towards the product, the attitude towards the ad, nor the purchase intention. In summary, bilingual speakers give an equal importance to both languages based on their similar

competencies in both languages. These findings are restricted to luxury products and no conclusions can be drawn for necessity products nor institutional campaigns (van Hooft & Truong, 2012).

Besides the usage of English, the relation between the advertised product and the language needs to be addressed. Nederstigt and Hilberink-Schulpen (2018) researched that a higher language proficiency does not guarantee a positive attitude regarding the advertisement, although the language of the slogan matches with the product. Ads with German slogans were the least appreciated by the Dutch; people highly proficient in Spanish had a more positive attitude towards the product when the slogan was in Spanish rather than in Dutch. The purchase intention was highest for the Spanish version of the ad and lowest for the German. Consequently, when the proficiency in Spanish increased, also the intention to buy the product increased. Even though Dutch people generally have a higher proficiency in German and are more used to the language based on the proximity to Germany, the Spanish version appeared to be more attractive. The effect could be explained with the Markedness model (Myer-Scotton, 1973); Spanish evokes more attention because it appears as something new to the Dutch and is unexpected whereas German is somewhat common because of the close proximity. Further research should clarify to what extent the familiarity of the foreign language influences the attitude towards the advertisement (Nederstigt & Hilberink-Schulpen, 2018).

Concluding, English becomes more present in daily life (Gerritsen et al., 2007). People who need to learn English as a second language are potentially more affected when an advertisement contains English than bilinguals who grow up with speaking English (van Hooft & Truong, 2012). Nonetheless, the status of English as foreign language does not imply generalizable results that all non-native English speakers are similarly affected by (partly) English advertisements. Besides, English seems to attract attention when the consumer is not native English (Planken et al., 2010), but this does not count when multiple languages are combined in one ad (van Hooft et al., 2017b). Language proficiency gives no guarantee to predict consumers behaviour, people can be proficient and still not be interested in buying the advertised product (Nederstigt & Hilberink-Schulpen, 2018).

1.2 Driving behaviour in advertising

The current research analyses institutional campaigns regarding traffic safety. In the development of traffic safety people do not seem to be as well educated as they are in English.

There are numerous factors causing distraction by young people while driving a car. Additionally, young people have moderate experience, which leads to misinterpretations of traffic situations (Neyers & Boyle, 2007). Both components combined pose a serious threat to traffic safety for everyone involved.

In order to create awareness for the dangers and risks in traffic, effective campaigns from institutional organizations are intended to help decrease car accidents caused by distraction, especially among younger people. Most accidents happening on the road with young people in the car are caused by using the mobile phone or cognitive distractions like being lost in thoughts. People using the phone while driving generally have a higher likelihood to be involved in a crash and get injured heavily compared to a driver getting distracted by passengers (Neyens & Boyle, 2007).

To prove how easily the phone causes distraction Australian drivers were evaluated for their ability to follow a leading car and simultaneously being on the phone. Accordingly, the drivers' performance including speed and time headway decreased when the distraction increased. They feel the loss of control over the situation and compensate their risky behaviour with slowing down and increasing the distance to the leading car. In can be assumed that in a curve or on the highway the effect amplifies, because the danger increases and so should the compensatory behaviour increase (Saifuzzaman et al., 2015). These findings emphasize the importance of effective traffic campaigns and stress the need for governments to find new campaign designs that appeal to the young drivers. On a global level traffic injuries are the main cause of death of young people (aged 5-29 years) and the usage of the phone while driving increases the likelihood of a crash up to four times (WHO, 2021).

It is not questionable that the phone should not be used while driving. However, taking the WHO report (2021) into consideration traffic campaigns seemingly have not been successful in persuading young people of this stance.

Generally, young people are using their phone because they tend to overestimate their driving abilities (Scott-Parker & Oviedo-Trespalacios, 2017). To overcome this misperception of reality, positively framed advertisements should be published; humour and clever twists are appealing to young drivers (Sibley & Harré, 2009). Furthermore, commercials showing how to avoid crashes evoke more positive feelings. In an investigation with Australian drivers these just mentioned ways of advertising were successful in reducing the bias of overestimating ones driving proficiency, but it remains unclear to what extent the young people are going to change

their behaviour (Sibley & Harré, 2009). For the current research humour and twists could be generated by the use of a foreign language.

One way to communicate the potential risks of phone usage while driving entails using threats in traffic communication. On social media (Facebook), intentions to change driving behaviour are higher when the post of a metaphorical visual depiction is published by someone socially distant to oneself, also called the out-group (Lim et al., 2021). A second way to increase a change in behaviour is to use literal visual depiction shared by friends/family, which are considered to be the driver's in-group because they have a strong bond. A complementary visual strategy should be used, as matching the users' social distance from their peers with the visual representation of the threat maximises the threat's appeal. Driver's in- and out-group have equal impact on the user regarding the processing of the message, still personal characteristics like driving style were neglected (Lim et al., 2021). Another important factor is the source of advertising. For institutional campaigns, it is sufficient to display the logo to create trust and be regarded as a reliable source by the public (Alon-Barkat, 2019). Furthermore, through the institutions' logo people get a more positive attitude towards the advertised policy (Karens et al., 2015).

Generally, threat communication should either link the dangerous situation to a person where the driver has a close relationship with or link an extreme dangerous situation to a stranger. In order to see if the results from Lim et al. (2021) also have valence in classic advertising, Sieglova (2016) analysed billboard advertisements for traffic communication in Germany. The billboards showed a combination of visual and verbal elements by depicting relaxed scenes in the car from people at different ages accompanied with a short text that refers to the dangerous reality. A crash is not depicted; however, the text of the poster in combination with the visual element address the dangers of distraction in traffic. 71% of the people stated that the billboards led to more responsible driving (Sieglova, 2016). In summary, people can be reached with billboard posters, but it remains unclear if young drivers, who have a high chance of crashes based on distraction by phone, also get affected by the billboards.

In conclusion, various studies have been conducted on how to make young drivers aware of potential dangers in traffic. Advertisements should contain threat appeal and use persuasive language in combination (Chen, 2013). Also, the risk of death should not be mentioned explicitly but rather be interpretable based on the text and visuals used. Billboards are an effective way to persuade people in changing their driving behaviour (Sieglova, 2016). In the current research the focus will be on the advertisement's text.

Even though, literature above has shown which type of visualization appeals to young drivers and influences their driving behaviour in traffic communication, only little research has been done on the text that accompanies the depiction. Even less investigation has examined the effects of using different languages than the first language to create awareness and potentially change the behaviour of young drivers. Phone usage in traffic is not only dangerous but moreover a crime, which also holds legal consequences. The Spanish and the Dutch law prohibit phone use while driving (Ministerio de la Presidencia, 2021; Ministerie van Algemene Zaken, 2021). Also, they have different specifications regarding the age at which one can obtain a car driver's license. Both countries have a theory and a praxis part; in Spain, the minimum age is 18 years for starting with the theory (DGT, 2021) and in the Netherlands one can take the praxis exam from 17 years on (ANWB, 2022). This could have an effect on the impact safety advertising in traffic has on young people. When a teenager does not yet have a driver's license, he probably pays less attention to advertisements regarding car safety.

Given the gap in research, a cross-national analysis was conducted to gain further insights into the effects of English as foreign language in traffic communication. Research in European countries, like the Netherlands and Spain, where children learn English at school is relevant, because the preconditions of the teenagers do not differ immensely from each other (Hall & Cook, 2015), which makes comparisons between the nationalities easier. Even though, in both countries using the car is common for young drivers, the Netherlands is more actively researching the underlying problems and potential solutions (Atchison, 2016). The varying proficiencies of English is a factor of importance to detect significant differences. Also, the Markedness Model is relevant, the use of English as foreign language could influence how young drivers interpret the message of the advertisements which secondarily has an effect on the young drivers' perception regarding traffic safety. For example, Dutch people are largely familiar with English; words get nativized. This raised the question if the usage of English will have an effect at all. Likewise, in Spain, the overall attitude towards English is positive; however, in advertising Spanish the content appeals more to the consumer. One reason could be the lower English proficiency the Spaniards have, they are more familiar with depictions containing English (Gerritsen et al., 2007). Following the principle of the Markedness Model, this could cause that the Spaniards pay more attention because they are surprised by the unexpected language switch.

Heretofore, product advertisements containing a foreign language create awareness and sometimes even influence the intention to buy the product. Traffic communication needs

attention to create awareness for the dangers of phone use in the car. It can be inferred that the driver distraction situation by phone in Australia (Saifuzzaman et al., 2015) is similar in Europe. It is essential to create awareness by the young drivers about the dangers phone usage in the car has.

The researchers Razzouk and colleagues (2021) demonstrate that the idea is not off-topic. In fact, it could be a new way to reach out to the young generation and persuade them. Research in this field is limited and Razzouk et al. (2021) suggest further investigations for different products than only tobacco, which they analysed. They investigated the effect of the languages Spanish, English, and a mixture of both for e-cigarette warnings in the US. The psychological reactance was higher for the mixed version, but the Spanish warning was greater than the English version for the Spanish sub-group. Subsequently, the overall advertisement's appeal was greater when the warning was in Spanish. Nevertheless, the comprehension of the languages mixed advertisement could also be influenced by neglected factors like, not fully understanding the warning (Razzouk et al., 2021).

The comparison between the Netherlands and Spain should reveal which level of proficiency in English is more effective for advertising aimed at young drivers. In the Netherlands, the high proficiency perhaps enables a better comprehension, but for the Spaniards the novelty of the language could create a higher attention (Nederstigt & Hilberink-Schulpen, 2018). Both countries are not in direct contact with an English-speaking country or the language itself. Taking all mentioned factors into consideration it remains unclear which aspects lead to a change in behaviour, therefore research on how English as foreign language can influence the intention to change the young people's behaviour in the car is necessary. In the following research young Spanish and Dutch people will be compared in native language and English advertisements on how the foreign language impacts the intention to change the driving behaviour. This research aims to help create more suited advertisements for young drivers; especially how young people the easiest can be convinced by the text in advertisements. Therefore, the research question is:

To what extent has the use of English as foreign language in traffic safety advertisements an effect on young drivers based on a comparison between Spain and the Netherlands?

Sub-questions:

- 1.1 Do young Dutch drivers better comprehend English advertisements than Spanish drivers?
- 1.2 Do Dutch drivers have a more positive attitude towards the fully English ad and have therefore Spanish drivers a more positive notion towards their native ad?
- 1.3 Have young Dutch drivers a higher intention to change their behaviour when seeing the English advertisement compared to Spanish drivers?
- 1.4 To what extent do the attitudes towards the national Dutch and national Spanish institutions differ?

2. Method

Materials

To realise this study an experiment with advertisements regarding traffic safety and phone use was created. The advertisements contained a combination of text and image which complemented each other. Since the focus is on the language used in the text, six different versions with the same picture but different text were created. The content of the text stayed similar; the language changed. So, the first independent variable was language: either native language, a mixture of native language and English or completely English.

The other independent variable was the nationality. In this investigation native Spaniards were compared with native Dutch. Thus, the used language in the advertisements were in line with the nationality of the participant for the native version and the mixed version. Specifically, Dutch participants either saw a completely Dutch ad, a mixed ad with Dutch and English or a completely English ad. The schema was used for the Spaniards with Spanish and English.

The stimulus material entailed in total six advertisements (see Appendix A), one in each native language (Dutch/Spanish), for both native languages a mixture with English and two fully in English. To ensure ecological validity the advertisements contained a logo of a national institution for traffic, which should be familiar to the participants and generate a trustable source (Alon-Barkat, 2019). The ads combined two already existing traffic campaigns. The text is adapted from a Welsh police advertisement (Road Safety Wales, 2020) and the picture is from an Italian governmental traffic campaign (ASAPS, 2013). This ensures that the design is based on research but was not exposed in the Netherlands nor Spain. Based on Sieglova's (2016) advice, death will not be addressed directly, but can be inferred by the combination of the picture and the text. When young people see an advertisement combining a high threat message with a highly perceived efficacy interpretation, they choose to decrease their speed choice. Eventually, driving behaviour of young people can be positively affected by appealing to fear and perceived efficacy. Efficacy-building through the text is an important component in threatbased communication in traffic (Carey & Sarma, 2016). Furthermore, forceful written ads caused a negative cognitive response, but neither forceful nor persuasive written texts in advertisements caused a difference in the behavioural intention to change (Chen, 2013).

Subjects

217 responses were recorded, after filtering the responses by age (no older than 30 years), nationality (only Dutch or Spanish), completeness of questionnaire and native language

(Dutch or Castellano) 151 participants remained, 75 with a Dutch nationality and 76 with a Spanish nationality.

31 Spaniards indicated that they were bilingual, so did 26 native Dutch. Almost all Dutch participants had a driver's licence (N = 72), whereas about half of the Spanish participants held a driver's licence (N = 40). A Chi-square test showed a non-significant relationship between the condition and the holding of a driver's license ($\chi 2$ (2) = .74, p = .693). In order to have enough participants, the ones without a license were maintained since the samples in the different conditions are comparable. The distribution can be found in table 1.

Table 1. Distribution of driver's license

	Are you posses	•	_
Condition	Yes	No	Total
Native language	38	15	53
Native & English mix	34	13	47
English	40	11	51
Total	112	39	151

A simple analysis of variance showed a non-significant effect of driving experience and Dutch nationality in all conditions (F(2, 72) = 1.57, p = .214). A simple analysis of variance showed a non-significant effect of driving experience and Spanish nationality in all conditions (F(2, 73) < 1, p = .411). The participants were equally distributed amongst the conditions regarding traffic violations. For the reporting of the means see table 2.

Table 2. Descriptives driver experience

Condition	Nationality	M(SD)	N
Native language	Spanish	1.48 (1.00)	26
	Dutch	2.26 (1.33)	27
	Total	1.88 (1.23)	53
Native & English mix	Spanish	1.64 (.81)	25
	Dutch	1.84 (1.04)	22
	Total	1.73 (.92)	47
English	Spanish	1.32 (.69)	25
	Dutch	2.48 (1.35)	26
	Total	1.91 (1.22)	51

A Chi-square test showed a non-significant relationship between gender, condition, and nationality ($\chi 2$ (6) = 1.91, p = .927). It means that the groups were homogeneous across the conditions and nationalities, there was no significant difference in the distribution. This can also be seen in table 3.

Table 3. Distribution of gender

			Condition Language	
Nationality	Gender	Native language	Native & English mix	English
Spanish	Man	1	3	2
-	Women	23	20	21
	Non-binary	1	1	1
	Do not want to say	1	1	1
	Total	26	25	25
Dutch	Man	5	7	7
	Women	22	15	19
	Total	27	22	26
Total	Man	6	10	9
	Women	45	35	40
	Non-binary	1	1	1
	Do not want to say	1	1	1
	Total	53	47	51

A simple analysis of variance showed a non-significant effect of age and Dutch nationality in all conditions (F (2, 72) = 1.72, p = .188). A simple analysis of variance showed a non-significant effect of age and Spanish nationality in all conditions (F (2, 73) < 1, p = .745). It can be concluded that both nationality groups have a proportionate distribution. The mean age of Spaniards was 19 years (SD = 2.18). The Dutch people were slightly older with 21 years (SD = 1.77). This can be seen in table 4.

Table 4. Distribution of age

Nationality	Condition	M(SD)	N	Minimum	Maximum
Spanish	Native language	19.65 (2.01)	26	18	24
	Native & English mix	20.08 (2.56)	25	18	27
	English	19.68 (1.99)	25	18	23

	Total	19.80 (2.18)	76	18	27
Dutch	Native language	21.89 (1.69)	27	18	26
	Native & English mix	22.36 (2.06)	22	18	26
	English	21.42 (1.55)	26	18	25
	Total	21.87 (1.77)	75	18	26
Total	Native language	20.79 (2.16)	53	18	26
	Native & English mix	21.15 (2.58)	47	18	27
	English	20.57 (1.97)	51	18	25
	Total	20.83 (2.24)	151	18	27
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A Chi-square test showed a non-significant relationship between level of education, condition, and nationality ($\chi 2$ (10) = 7.84, p = .644). In the Dutch group more people had a higher education than in the Spanish group. The majority had a university degree whereas most Spanish participants had a high school diploma. Table 5 shows the results.

Table 5. Distribution of education level

		Condi	tion Language	
		N	lative & Englis	h
Nationality	Level of Education	Native language	mix	English
Spanish	HAVO	1	2	3
	VWO	21	18	20
	MBO	4	5	1
	WO Bachelor	0	0	1
	Total	26	25	25
Dutch	HAVO	1	0	0
	MBO	1	0	0
	HBO	13	10	7
	WO Bachelor	9	8	13
	WO Master	3	4	6
	Total	27	22	26
Total	HAVO	2	2	3
	VWO	21	18	20
	MBO	5	5	1
	НВО	13	10	7
	WO Bachelor	9	8	14
	WO Master	3	4	6
	Total	53	47	51

A simple analysis of variance showed a non-significant effect of English proficiency and Dutch nationality in all conditions (F(2, 72) < 1, p = .968). A simple analysis of variance showed a

non-significant effect of English proficiency and Spanish nationality in all conditions (F(2, 73) < 1, p = .678). The distribution of the participants was balanced amongst the different conditions regarding their English skills. For the reporting of the means see table 6.

Table 6. Descriptives English proficiency

Condition	Nationality	M(SD)	N
Native language	Spanish	4.28 (.37)	26
	Dutch	5.80 (.79)	27
	Total	5.05 (.98)	53
Native & English mix	Spanish	4.29 (.65)	25
	Dutch	5.74 (.72)	22
	Total	4.97 (1.00)	47
English	Spanish	4.39 (.42)	25
	Dutch	5.80 (1.12)	26
	Total	5.11 (1.10)	51

Design

The research consists of a between-subjects design (2x3). In each of the six conditions were approximately 25 participants. The native condition consists of 53 participants; 47 participants were given the language mixed condition and 51 participants remained in the fully English condition.

Instruments

The software Qualtrics was used to randomly generate the different versions amongst the participants and to save their answers. With the help of a questionnaire in the respondents' native language the dependent variables were measured. Translations were done by the researchers.

The measurement for intention to change behaviour was adapted from Hoeken et al. (2019), in a combination with the measurement used by Godin et al. (2010). Seven-point Likert scales were used ranging from 1 = very unlikely to 7 = very likely for three items (e.g., 'I plan to use my phone less while driving'), the reliability for the nationalities and the total were minimal satisfactory: $\alpha = .78$. Attitude towards the advertisement was measured with the help of seven-point semantic differential scales containing eight items (e.g., 'logical' – 'illogical') which are based on the research by van Hooft et al. (2012). The reliability for all Cronbach's alpha was

satisfactory ranging from α = .66 to α = .77. Comprehensibility was assessed similarly, but the seven-point scale contained the item ('difficult to understand' – 'easy to understand') from van Enschot and Hoeken (2015). Attitude towards the institution was based on Bruner (2013) and measured with seven-point Likert scales (1 = strongly disagree, 7 = strongly agree) containing four items (e.g., 'I admire organisations such as the Ministry of Infrastructure and Water Management'). After removing one item reliability became satisfactory: α = .71 (ESP: α = .89; NL: α = .64).

Also, two control variables were incorporated, English proficiency was measured by using four items (e.g., 'Reading skills') which anchor on the seven-point semantic differential scale (1 = very poor, 7 = excellent), based on van Hooft et al. (2017b). Again, reliability remains satisfactory for the languages separated and for the overall variable with a minimum of α = .85. Driving style was analysed with two seven-point Likert scales (1 = never, 7 = always) (e.g., 'Do you use your phone while driving?') which are based on a combination of the measurements from Reason et al. (1990) and Martinussen et al. (2014). The reliability for all elements was higher than α = .58. A table of all α and the questionnaires can be found in Appendix B - D.

Procedure

For the native Spanish participants Emelie Koenen visited classes at the University of Alicante and asked students to participate in the questionnaire. Native Dutch participants were asked to answer the questionnaire by researchers sharing the link/QR code of Qualtrics on social media like LinkedIn, Instagram, WhatsApp. Thus, the snowball principle was used. The questionnaire was in the native language of the participants to limit the possibilities of misunderstanding the questions. The participation was voluntary, and people did not get a reward. It should be mentioned, that for the Spanish participants there was more pressure to participate because of the presence of the researcher.

First, the participants gave their consent to participate in the research. Then, everyone got randomly assigned to see one version of the advertisement (so either in the native language, a mixture or in English) and was then asked to answer multiple questions. Continuing, they were asked for the self-assessment questions regarding their English proficiency and their driving style followed by the questions about their demographics. This took approximately six minutes, and the questionnaire could have been stopped at any given moment. There was no debriefing. At the beginning the researchers email addresses were mentioned, so that participants had the chance to get in contact if they wished to.

Statistical treatment

To answer the research questions four two-way ANOVAs are run using version 26 of SPSS. Although, in some cases the homogeneity of variance assumption was violated for these analyses the regular *F*-test will be reported since all groups had almost equal group sizes and the descriptive analysis showed no unbalanced distribution.

3. Results

In this section results for each dependent variable are presented.

3.1 Comprehension

A two-way analysis of variance with condition (language) and nationality as factors showed a significant main effect of nationality on the comprehension (F (1, 145) = 1390.66, p < .001). The condition was not found to have a significant main effect on the comprehension (F (2, 145) < 1). The interaction effect between condition and nationality was not statistically significant (F (2, 145) < 1). Participants with a Dutch nationality (M = 6.36, SD = 1.02) thought that all advertisements were easy to understand compared to the Spanish participants (M = 1.22, SD = 0.60). For the reporting of the remaining means see table 7.

Table 7. Descriptives comprehension

Condition	Nationality	M(SD)	N
Native language	Spanish	1.15 (.46)	26
	Dutch	6.44 (1.25)	27
	Total	3.85 (2.83)	53
Native & English mix	Spanish	1.20 (.41)	25
	Dutch	6.41 (.96)	22
	Total	3.64 (2.72)	47
English	Spanish	1.32 (.85)	25
	Dutch	6.23 (.82)	26
	Total	3.82 (2.61)	51
Total	Spanish	1.22 (.60)	76
	Dutch	6.36 (1.02)	75
	Total	3.77 (2.71)	151

3.2 Attitude towards the advertisement

A two-way analysis of variance with condition (language) and nationality as factors showed no significant main effect of nationality on attitude towards the advertisement (F (1, 145) < 1). The condition was not found to have a significant main effect on the attitude towards the advertisement (F (2, 145) = 1.02, p = .363). The interaction effect between condition and nationality was statistically not significant (F (2, 145) < 1). For the reporting of the means see table 8.

Table 8. Descriptives attitude towards the advertisement

Condition	Nationality	M(SD)	N
Native language	Spanish	4.62 (1.099)	26
	Dutch	4.33 (1.187)	27
	Total	4.47 (1.143)	53
Native & English mix	Spanish	4.39 (.906)	25
	Dutch	4.29 (.653)	22
	Total	4.35 (.791)	47
English	Spanish	4.22 (.867)	25
	Dutch	4.18 (.983)	26
	Total	4.20 (.919)	51
Total	Spanish	4.41 (.966)	76
	Dutch	4.27 (.973)	75
	Total	4.34 (.969)	151

3.3 Attitude towards the institution

A two-way analysis of variance with condition (language) and nationality as factors showed no significant main effect of nationality on attitude towards the institution (F (1, 145) = 1.55, p = .214). The condition was not found to have a significant main effect on the attitude towards the institution (F (2, 145) = 1.63, p = .198). The interaction effect between condition and nationality was statistically not significant (F (2, 145) < 1). For the reporting of the means see table 9.

Table 9. Descriptives attitude towards the institution

Condition	Nationality	M(SD)	N
Native language	Spanish	3.29 (.94)	26
	Dutch	3.14 (.92)	27
	Total	3.21 (.93)	53
Native & English mix	Spanish	3.21 (.84)	25
	Dutch	3.18 (1.04)	22
	Total	3.20 (.93)	47
English	Spanish	3.11 (.82)	25
	Dutch	2.74 (.87)	26
	Total	2.92 (.86)	51
Total	Spanish	3.21 (.86)	76
	Dutch	3.01 (.95)	75
	Total	3.11 (.91)	151

3.4 Intention to change behaviour

A two-way analysis of variance with condition (language) and nationality as factors showed a not significant main effect of nationality on intention to change behaviour (F(1, 145) = 1.67, p = .198). The condition was not found to have a significant main effect on the intention to change the behaviour (F(2, 145) = 2.43, p = .092). The interaction effect between condition and nationality was statistically significant (F(2, 145) = 3.8, p = .025). To discover where the significant interaction lies, two separate one-way ANOVAs were conducted for each nationality.

The one-way ANOVA for the Spaniard's intention to change behaviour with between subject factor condition showed no significant main effect (F(2, 73) < 1). The one-way ANOVA for the Dutch's intention to change behaviour with between subject factor condition showed a significant main effect (F(2, 72) = 3.48, p = .036).

The intention to change the behaviour when seeing the advertisement in the native language (M = 5.41, SD = 1.39) was higher than for the completely English advertisement (p = .044, Tukey's HSD; M = 4.19, SD = 1.89). There was no difference between the native language and the mixed version (p = .964, Tukey's HSD), nor the mixed version and the completely English version (p = .106, Tukey's HSD). For the reporting of the remaining means see table 10.

Table 10. Descriptives intention to change behaviour

Condition	Nationality	M(SD)	N
Native language	Spanish	4.56 (.96)	26
	Dutch	5.41 (1.39)	27
	Total	4.99 (1.26)	53
Native & English mix	Spanish	4.70 (.46)	25
	Dutch	5.27 (2.14)	22
	Total	4.97 (1.51)	47
English	Spanish	4.75 (.44)	25
	Dutch	4.19 (1.89)	26
	Total	4.46 (1.40)	51
Total	Spanish	4.67 (.66)	76
	Dutch	4.95 (1.87)	75
	Total	4.81 (1.40)	151

4. Conclusion & Discussion

Referring back to the initial research question, to what extent does the use of English as foreign language in traffic advertising have an effect on young drivers based on a comparison between the Netherlands and Spain, no final answer can be given. The results show a principal effect between the nationalities but not on the conditions, which means that the two analysed countries differ from each other but within the nationality differences were only small. Overall, the use of English had a negative effect on Dutch participants with regard to change of behaviour whereas the English language caused positive reactions amongst the Spanish participants. The young Dutch driver sample was less likely to not use the phone while driving when seeing the English advertisement compared to the Spanish one. On the contrary, the young Spanish driver sample was more likely to put away the phone while driving when seeing the advertisement in English.

In detail, Dutch participants did better comprehend the English advertisement than Spanish participants, but this had no effect on the attitude towards the ad. The attitudes were relatively similar amongst the conditions and the differences between the nationalities were minimal.

Interestingly, both nationalities were most positive about the advertisement written in their native language. The Dutch driver sample did not have a more positive attitude towards the fully English ad than to the Dutch or language mixed ad, so did not the Spanish sample.

When looking at the intention to change the behaviour unexpected results have been found. In fact, the intention to change their behaviour decreased drastically among the Dutch participants when they saw the advertisement completely in English. For the Spanish participants there was a slight increase regarding their intention to change their behaviour when the ad was completely in English.

Regarding the attitude towards the national institution both nationality groups had similar attitudes. The advertisements in the native and in the mixed version caused a slightly more positive attitude towards the national Spanish or Dutch institution than the English version.

Putting all results together, it can be concluded that advertising traffic safety in the Netherlands and in Spain remain most effective when at least half of the content is in the native language. To convince the young drivers to change their behaviour different elements than only the usage of English need to be applied. English proficiency seems not to be important regarding the intention to change the behaviour, however, it influences how the advertisement is comprehended.

The findings are partly new compared to previous research. Generally, one limitation from Razzouk et al. (2021) has been solved. This time a change in behaviour in traffic was advertised and not a product, the current results are mainly in line with their findings. Advertising health hazards in the native language is more effective than in English. However, in the present research the differences were found between the nationalities and not between the conditions. Razzouk and colleagues (2021) state that the language mixed condition was most effective for advertising E-Cigarette warnings, whereas for the Dutch and the Spaniards advertising the no phone usage while driving was most effective in the native language. This could be due to the different characteristics the participants had; in Razzouks et al. research (2021) all participants were bilingual, in the current research the majority was monolingual. Further research should clarify if there are notable differences between monolinguals and bilinguals. As already researched by van Hooft and Truong (2012) bilinguals give both languages an equal status, this could have influenced the present research results because it was not designed in a way to gain enough knowledge about the participant's bilingual background in order to draw conclusions.

Comparing the results with the Markedness model (Myers-Scotton, 1983) it becomes clear that the unexpected language switch in the advertisement did provoke small differences regarding the intention to change the behaviour. This means that even though the exposure to English in daily life is different for the Spaniards and the Dutch, they have somewhat similar associations with the English language. For the Spanish people English was thought to be an unexpected language, but the different conditions had no effect on the comprehension of the message of the advertisement nor on how it was perceived. While Busse (2017) indicated Spanish people probably do have bad connotations with the English language which in turn could cause a bad evaluation of the advertisement, this research cannot verify this assumption. Spanish participants seemed to have positive connotations with English. Interestingly, the Dutch's intention to change the behaviour decreased drastically which means according to the Markedness model that Dutch people apparently have more negative associations with English than the Spaniards. One reason for this difference could be that the Dutch people perhaps connotate the use of English with their spare time. English is frequently used in the media (films, books, radio), they can choose to whether have an exposure to the English language or not. In this experiment the participants had no choice, thus the constraint could have evoked negative association in the context of traffic advertising. Another reason could be that the advertisement was designed as if the Dutch government was the sender of the message. Again, the Dutch participants might not be familiar with receiving information from the government in another language than Dutch. Further research should help to find explanations for this unexpected result.

Next, this study supports the EF findings (2021), Spanish participants indicated a lower English proficiency compared with the Dutch participants which is also displayed in the poor scores of comprehending the advertisements. However, it should be taken into consideration that in all conditions Spanish people did not fully comprehend the advertisement. Perhaps, this can be an indication that the overall advertisement's design was too complex to be understood by the Spaniards. This in turn could have caused a worse comprehension and is not necessarily related to the used language. Nevertheless, the Spanish sample somewhat liked the advertisements by means of a rather positive attitude towards the advertisement. Further research focusing on recall and complexity of the advertisement are necessary to clarify to what extent people pay attention to the content of the advertisement and understood it.

Besides that, the current research was not able to tackle the limitation by van Hooft et al. (2017b) already mentioned. Again, the symbolic value of English and the native language were neglected. Especially in the case of Spain it is important to differentiate in depth between the symbolic value of Spanish, the local accents like Catalan or Valenciano and English. Depending on the type of added value the perception of the advertisement changes. The symbolic value is also related to the Markedness model since both constructs deal with the evocation of specific associations. Further research needs to analyse these factors to better understand which effects the use of the languages have.

Hence, the current findings once more stress to not neglect the importance of the familiarness of a foreign language. The actual results are similar to Nederstigt and Hilberink-Schulpen results (2018); a higher proficiency in English does not automatically mean a more positive attitude towards the ad. In this case, a higher proficiency does not even function as a predictor for the change of a certain behaviour.

Another limitation is the unequal number of young people who possess a driver's license across the two nationalities. When interpreting the results, one must consider that almost twice as many young Dutch people had a driver's license at the beginning of their twenties than Spanish people. Since these advertisements aimed to change a behaviour, one first needs to experience this behaviour before changes can be done. Almost half of the Spanish participants had no driver's license, thus, their answers only give limited insights into the effectiveness of the

advertisement. Further research should aim to only analyse participants with driver experience to have more comparable and expressive results.

Another suggestion for further research is to find answers why the intention to change the behaviour decreased drastically for the Dutch participants when seeing an advertisement completely in English. Perhaps, one of the above-mentioned limitations influenced the results or other factors like for example previous experience with English or offences already committed on the road need to be considered to find explanations for the unexpected results.

Practical recommendation of the findings is that traffic safety can be increased when advertisements contain the native language of the young drivers. This is an effective way to make them aware of the dangers that distraction by phone usage entails while driving a car. Persuading the young drivers to change their behaviour by using advertisements may help to decrease car accidents. Beside the fact, that phone usage in the Netherlands and in Spain is illegal young people need to be made aware of the risks. Overestimating the own driving abilities could cost someone's life. This does not only count for young drivers, but for drivers at all ages that use their phone while driving. Advertising in the native language has the positive side effect that more people that only the young generation could feel targeted. In addition, advertisements regarding traffic safety raise awareness for the topic and invite the drivers to critically reflect their driving behaviour under the aspect of safety.

Concluding, the effect of English on young Dutch and Spanish drivers is only limited in institutional traffic advertising. Depending on the nationality the impact of English varies, the Dutch did not want to change their behaviour when the advertisement contained only English. The Spaniards intention increased when the amount of English increased. However, taking all analysed factions into consideration both nationalities did not prefer English over the native language; only some elements in English were accepted by the people. This research gave new insights on which elements advertisements should contain to be successful in persuading young drivers from not using their phone while driving. Furthermore, it explored a new way to make the roads in Spain and in the Netherlands a little safer and save some lives.

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Appendix A

Stimuli material

For the Spanish participants







For the Dutch participants







Appendix BTable Cronbach's Alpha

Table B1. Cronbach's α

	Spanish	Dutch	Total
Attitude towards the ad	.66	.77	.71
Attitude towards Institution	.80	.64	.71
Intention to change behaviour	.78	.94	.92
English proficiency	.87	.85	.93
Driver experience:	.83	.58	.69

Appendix CQuestionnaire Spanish

Attitude towards Advertisement Opino que este anuncio es...

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
funcional	0	0	0	0	0	0	0	no funcional
lógico	0	0	0	0	0	0	0	ilógico
repelente	0	0	0	0	0	0	0	atractivo
malo	0	0	0	0	0	0	0	bueno
desagradable	0	0	0	0	0	0	0	agradable
irrespetuoso	0	0	0	0	0	0	0	respetuoso
superficial	0	0	0	0	0	0	0	auténtico
conmovedor	0	0	0	0	0	0	0	no conmovedor

Comprehension Este anuncio es...

	1	2	3	4	5	6	7	
difícil de entender	0	0	0	0	0	0	0	fácil de entender
entender				O			Ü	entender

Attitude towards Institution

Indique en qué medida está de acuerdo con la declaración.

	desacuerdo total 1	2	3	4	5	6	Totalmente de acuerdo 7
Admiro organizaciones como la Dirección General de Tráfico	0	0	0	0	0	0	0
Me siento inspirado/a por organizaciones como la Dirección General de Tráfico	0	0	0	0	0	0	0
Respeto organizaciones como la Dirección General de Tráfico	0	0	0	0	0	0	0
Me gustan organizaciones como la Dirección General de Tráfico	0	0	0	0	0	0	0

Intention to Change Behaviour

_	Nada probable 1	2	3	4	5	6	Muy probable 7
Tengo la intención de utilizar menos el teléfono durante la conducción.	0	0	0	0	0	0	0
Planeo de utilizar menos el teléfono durante la conducción.	0	0	0	0	0	0	0
Intentaré utilizar menos el teléfono durante la conducción.	0	0	0	0	0	0	0

English Proficiency

Indique el nivel de su inglés para...

	Muy malo 1	2	3	4	5	6	Excelente 7
Comprensión de lectura	0	0	0	0	0	0	0
Expresión escrita	0	0	0	0	0	0	0
Expresión oral	0	0	0	0	0	0	0
Comprensión auditiva	0	0	0	0	0	0	0

Driver Experience

¿Poses un carné o permiso de conducir?

- o Sí (1)
- O No (2)

	Nunca 1	2	3	4	5	6	Todo el tiempo 7
¿Usa el teléfono móvil mientras conduce?	0	0	0	0	0	0	0

¿Con qué frecuencia comete una infracción de tráfico?

	1	2	3	4	5	6	7	
Nunca	0	0	0	0	0	0	0	Siempre

Demograph	iics
¿Cuántos añ	os tiene ?

Género	o:
0	Hombre (1)
0	Mujer (2)
0	Non-binario (3)
0	Prefiero no decir (4)
NI:	
nivei a	ctual de estudios:
0	Sin estudios finalizados (1)
0	Estudios primarios (2)
0	Estudios secundarios (3)
0	Estudios universitarios medios (Grado) (4)
0	Estudios universitarios superiores (Licenciatura) (5)
0	Estudios post universitarios superior (Mastería, Doctorado) (6)
0	NS/NC (7)
¿Cuál e	es su nacionalidad?
0	Española (1)
0	Portuguesa (2)
0	Francesa (3)
0	Marroquí (4)
0	Otra (5)
¿Cuál e	es su lengua materna?
0	Español (1)
0	Inglés (2)
0	Portugués (3)
0	Marroquí (4)
0	Francés (5)
0	Otro (6)
¿Cuál e	es su primera lengua extranjera?
0	Español (1)
0	Inglés (2)
0	Portugués (3)
0	Marroquí (4)

o Francés (5)

Otro (6)

¿Es bilingüe? (aprendió dos idiomas antes de los 4 años)

- o Sí (1)
- O No (2)

Appendix DQuestionnaire Dutch

Attitude towards Advertisement Deze advertentie is...

	1	2	3	4	5	6	7	
functioneel	0	0	0	0	0	0	0	disfunctioneel
logisch	0	0	0	0	0	0	0	onlogisch
afstotend	0	0	0	0	0	0	0	aantrekkelijk
slecht	0	0	0	0	0	0	0	goed
irritant	0	0	0	0	0	0	0	plezierig
respectioos	0	0	0	0	0	0	0	respectvol
oppervlakkig	0	0	0	0	0	0	0	authentiek
aangrijpend	0	0	0	0	0	0	0	niet aangrijpend

Comprehension

Deze advertentie is...

	1	2	3	4	5	6	7	
moeilijk te begrijpen	0	0	0	0	0	0	0	makkelijk te begrijpen

Attitude towards Institution Geef aan in welke mate u het eens bent met de stelling.

	Helemaal mee oneens 1	2	3	4	5	6	Helemaal mee eens 7
Ik bewonder organisaties als het Ministerie van Infrastructuur en Waterstaat	0	0	0	0	0	0	0
Ik voel me geïnspireerd door organisaties als het Ministerie van Infrastructuur en Waterstaat	0	0	0	0	0	0	0
Ik respecteer organisaties zoals het Ministerie van Infrastructuur en Waterstaat	0	0	0	0	0	0	0
Ik vind organisaties als het Ministerie van Infrastructuur en Waterstaat leuk	0	0	0	0	0	0	0

Intention to Change Behaviour

	Onwaarschijnlijk 1	2	3	4	5	6	Heel waarschijnlijk 7
Ik ben van plan mijn telefoon minder te gebruiken tijdens het rijden	0	0	0	0	0	0	0
Ik plan mijn telefoon minder te gebruiken tijdens het rijden	0	0	0	0	0	0	0
Ik zal proberen mijn telefoon minder te gebruiken tijdens het rijden.	0	0	0	0	0	0	0

English Proficiency

Geef het niveau aan van uw Engelse...

	Heel slecht 1	2	3	4	5	6	Uitstekend 7
Leesvaardigheid	0	0	0	0	0	0	0
Schrijfvaardigheid	0	0	0	0	0	0	0
Spreekvaardigheid	0	0	0	0	0	0	0
Luistervaardigheid	0	0	0	0	0	0	0

.	_			
Driver	H V 1	neri	An	CA
D_{11} \vee \Box	L_{Λ}		CII	\sim

Bent u in het bezit van een rijbewijs?

- o Ja (1)
- O Nee (2)

	Nooit 1	2	3	4	5	6	Altijd 7
Gebruikt u uw telefoon tijdens het autorijden?	0	0	0	0	0	0	0

Hoe vaak begaat u een verkeersovertreding?

	1	2	3	4	5	6	7	
Nooit	0	0	0	0	0	0	0	Altijd

Demographics
Wat is uw leeftijd?

Geslac	ht:
0	Man (1)
0	Vrouw (2)
0	Non-binair (3)
0	Wil ik liever niet zeggen (4)
Wat is	uw opleidingsniveau?
0	Geen opleiding (1)
0	VMBO (2)
0	HAVO (3)
0	VWO (4)
0	MBO (5)
0	HBO (6)
0	WO Bachelor (7)
0	WO Master (8)
	uw nationaliteit? Nederlands (1)
0	Duits (2)
0	Anders (3)
Wat is	uw eerste taal?
0	Nederlands (1)
0	Engels (2)
0	Duits (3)
0	Frans (4)
0	Anders (5)
Wat is	uw vreemde tweede taal?
0	Ik spreek geen tweede taal (1)
0	Nederlands (2)
0	Engels (3)
0	Duits (4)
0	Frans (5)

O Anders (6)

Bent u twee-talig?

- o Ja (1)
- o Nee (2)

Appendix E

Checklist EACH (version 1.6, november 2020)

1. Is a health care institution involved in the research?

Expland	ation: A health care institution is involved if one of the following (A/B/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? \square Yes \rightarrow continue with questionnaire
	\square No \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
2. Do g	rant providers wish the protocol to be assessed by a recognised MIRB?
	oximes No $ ightarrow$ continue with questionnaire
	\square Yes \to This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen \to end of checklist
3. Does	is the research include $\frac{\text{medical-scientific research}}{\boxtimes}$ that might carry risks for the participant? \boxtimes No \rightarrow continue with questionnaire
	\square Yes \to This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen \to end of checklist

Standard research method

4. Does this research fall under one of the stated standard research methods of the Faculty of
Arts or the Faculty of Philosophy, Theology and Religious Studies?

 \boxtimes Yes \rightarrow (No.1) Standard evaluation and attitude research (fill in name and number of **standard research method)** \rightarrow continue with questionnaire

 \square No \rightarrow assessment necessary, end of checklist

Participants

5. Is the participant population a healthy one?

\boxtimes Yes \rightarrow continue with questionnaire
□ No → assessment necessary, end of checklist → 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?
\square Yes \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
oximes No $ ightarrow$ continue with questionnaire
8. Will participants undergo treatment or are they asked to perform certain behaviours that can lead to discomfort?
\square Yes \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
extstyle ext
9. Are the estimated risks connected to the research minimal?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
oximes Yes $ ightarrow$ continue with questionnaire
10. Are the participants offered a different compensation than the usual one?
\square Yes \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
\boxtimes No \rightarrow continue with questionnaire
11. Should <u>deception</u> take place, does the procedure meet the standard requirements?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
oximes Yes $ ightarrow$ continue with questionnaire
12. Are the standard regulations regarding <u>anonymity and privacy</u> met?
\square No \rightarrow assessment necessary, end of checklist \rightarrow go to assessment procedure
oximes Yes $ ightarrow$ continue with questionnaire
Conducting the research
13. Will the research be carried out at an external location (such as a school, hospital)?
□ No. , continuo 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
\boxtimes 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?
 □ No → assessment necessary, end of checklist → go to assessment procedure ☑ Yes → 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?
☐ No→ assessment necessary, end of checklist → 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 F

Statement of own work

Student name: Emelie Koenen

Student number: s1034390

PLAGIARISM is the presentation by a student of an assignment or piece of work which has in fact been copied in whole or in part from another student's work, or from any other source (e.g. published books or periodicals or material from Internet sites), without due acknowledgement in the text.

DECLARATION:

a. I hereby declare that I am familiar with the faculty manual (https://www.ru.nl/facultyofarts/stip/rules-guidelines/rules/fraud-plagiarism/) and with Article 16 "Fraud and plagiarism" in the Education and Examination Regulations for the Bachelor's programme of Communication and Information Studies.

b. I also declare that I have only submitted text written in my own words

c. I certify that this thesis is my own work and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communication.

Signature:	_E. Koenen				
Place and date:	Alicante 13th of June				