Factors influencing communicative success and interlocutor evaluation: what role do a shared linguistic background and visibility play in Computer-Mediated Communication?

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Abstract

Due to the recent COVID-19 pandemic, rapid technology changes, and an accelerated globalisation, people increasingly make use of online meetings for work or educational purposes. However, could this online environment influence the communicative success of these meetings? In addition, cross-border meetings commonly make use of English as Lingua Franca (ELF), which might influence how people perceive each other. Previous research has shown that people tend to like each other more when speaking in their native language (L1), but not in their second language (L2). Furthermore, little research has been done on the role of visibility in Computer-Mediated Communication (CMC). Therefore, this study intents to fill this research gap by investigating if a shared linguistic background and visibility affects communicative success and interlocutor evaluation by the means of a spot-the-differences task and a questionnaire. Dutch and German participants were placed in L1-L1 pairs or L1-L2 pairs, while speaking English at all times, and could either see each other or not in Zoom. Findings demonstrate that both visibility and language sharedness did not have an effect on neither communicative success nor interlocutor evaluation. However, multiple correlations revealed that there are several relationships between communicative success and interlocutor evaluation, in terms of likeability, solidarity, and competence. Consequently, research contributions are made for the Communication Accommodation Theory, and practical suggestions for organisations' policies.

Keywords: communicative success, Zoom, ELF speakers, visibility, linguistic background, Communication Accommodation Theory, likeability, solidarity, competence

Content

Introduction

Cave paintings in prehistoric Europe, petroglyphs by Aboriginals, and fire and smoke in ancient China: communication is as old as human history. Each of these examples capture the essence of communication: the aim of getting a message across. The most 'natural' form of communication is real-life dialogue. However, the everchanging landscape of technology, globalisation, and the recent COVID-19 pandemic contribute to a rapid increase of online communication worldwide, resulting in real-life dialogue being hampered. Meetings that previously took place at the office, moved to an online environment, and where employees flew around the world to meet with international partners, cross-border online meetings gradually became the new normal.

Therefore, it is now more than ever relevant to research online communication among speakers of different nationalities. Whether for work or educational purposes, it is important to examine what happens in these meetings. Hence, this research aims at analysing a shared linguistic background and visibility, which could influence communicative success and interlocutor evaluation (in terms of likeability, solidarity, and competence). There could be a potential coherence among these factors, but how are they related in an online environment? The study is both of scientific and societal relevance since it intends to contribute to several existing communication theories and aspires to offer suggestions for organisations' policies and international teams.

Theoretical framework

Theories about communication

Creating a single definition for communication is rather difficult. Dance (1970) researched the multifaceted nature of communication by reviewing 95 definitions to extract the essential components of communication. The research led to the conclusion that no single definition seems to be able to include all aspects of communication. Its multitudinous nature might be appointed to the various scientific disciplines of which communication draws its theory from: psychology, philosophy, sociology, politics, and other social sciences (Eadie & Robin, 2013).
In spite of these diverse definitions of communication, multiple scholars agree that the communication process predominantly focuses on transmitting and receiving a message. Stohl and Horan (1997) define communication as "the collective and interactive process of generating and interpreting messages", Gerbner (1966) characterizes communication as "social interaction through symbols and message systems", and Buchanan and Huczynski (2019) describe the

communication process as "the transmission of information, and the exchange of meaning, between at least two people". For the aim of this research, all mentioned definitions are relevant. The degree to which interlocutors are acquainted with which symbols to use to communicate (i.e., choice of language or language background) make symbols pertinent in this context. The message system is relevant in an online environment, where there is the possibility to turn the cameras on and off. In addition, Buchanan and Huczynski's definition is also applicable, given their emphasis on the exchange of meaning. In the present study, the participants work on a spot-the-differences task. In this context, they transfer messages to each other by communicating, and exchange meaning by concluding which differences they spot.

In order for real-life communication to take place, several components have to be considered: source, message, channel, receiver, encoding, decoding, noise, and feedback (Liu, Volcic & Gallois, 2018). Table 1 lists these elements and their meanings.

Table 1

Overview elements communication process (Liu, Volcic & Gallois, 2018)

Element	**Definition**
Source	A source is the origin of information: someone needs and wants to exchange information with someone else.
Message	A message is composed of verbal and/or non-verbal codes to communicate to another person or group in a specific context about certain things.
Channel	A channel is the route the message takes to move from one person to another.
Receiver	The receiver is the intended target of the message.
Encoding	Encoding is the process by which the source uses shared codes to convert concepts, thoughts, and feelings into a message.
Decoding	Decoding is the process by which the receiver attaches meaning to the source's message by interpretating it.
Noise	Noise are the factors outside the communication process which interfere with or distract attention from the transmission and reception of the intended meaning.
Feedback	Feedback is the process through which the transmitter of a message detects whether and how the message has been received and decoded.

Of these elements, encoding and decoding, receiver and source, and feedback and channel are particularly interesting for the present study. In conversations, communication is not received passively. Once the message has been encoded and transferred from the source to the receiver, the receiver should decode it. This is done by the attempt to interpret the message how the source had intended it to be: a difficult process which often can lead to miscommunication if the message is interpreted incorrectly (Buchanan and Huczynski, 2019). One factor that could hinder the process of decoding, is that people have their own perceptual filters. These are individual characteristics, predispositions, and preoccupations that could interfere with the effective transmission and receipt of messages (Buchanan & Huczynski, 2019). In the present research, a shared language background is an important aspect. In this context, source and receiver might not share the same language and have different cultures, which can lead to difficulties when decoding and interpreting the message. Vice versa, it could be the reverse for participants sharing the same language and cultural background: the decoding process of a message might be relatively easier for them.

Finally, the elements feedback and channel are particularly applicable for this research given the focus on visibility (feedback) in Zoom (channel). Their importance is explained more in-depth in the following section. Thereafter, the relevance of a shared linguistic background is discussed.

Visibility

In a dialogue, an important task of receivers is to emit signals that they are still listening, comprehending, and interested in what the speaker has to say. These signals are defined as backchannel responses (Duncan, 1974) or feedback (Liu, Volcic & Gallois, 2018). These responses are often short utterances, for instance “M-hm”, “Yes”, or “Yeah”. Alongside audible backchannel responses, people can also produce visual backchannels, such as nodding the head, gestures, and/or facial expressions (Fasold & Connor-Linton, 2014).

The importance of being able to produce feedback (both audible and visible), is highlighted by the following study by Boyle and colleagues (1994). They investigated whether visibility plays a role on dialogue and performance by working on a cooperative problem-solving task. The participants could either see each other or not when performing a task, while the researchers measured task outcome and various dialogue parameters. The results uncovered that both transferring information and turn-taking was more successful in the visible condition than in the non-visible condition. In addition, when people saw each other, many visual

backchannels, such as non-verbal signals, were present, whereas in the non-visible condition audible backchannel responses were more frequent. The current study also predicts that the transfer of a message improves if people see their partner when collaborating on a task. However, this research was done in 1994 in real-life communication (not online mediated by a computer). Therefore, it remains unclear whether these results will still be applicable for the present study.

Furthermore, there is still little research done on the role of visibility in Computer-Mediated Communication (CMC), which makes the present investigation even more relevant. The existing body of research mostly focuses on the comparison of spoken interaction (face-to-face communication) versus CMC (text or video) (see: Guo et al., 2009; O'Conaill et al., 1993; Newlands et al., 2003). Thus, the chosen channel in the communication process is compared: either the message is transferred via a real-life channel (face-to-face communication) or via an online channel (CMC, either text or video based). In the present study, the participants solely use one online channel (Zoom).

Shared language background

Globalisation is another important aspect that goes hand in hand with communication. There are more people with different language backgrounds who need to communicate with each other, resulting in an increase of English as Lingua Franca (ELF). Lingua franca is, according to Berns (2009), defined as "a tool for interpersonal communication among speakers with no single language in common", and defined by Jenkins (2006) as "in its purest form, a contact language that is only used among non-mother tongue speakers". Thus, in a conversation between two or more people, the need for using a language other than the interlocutor's native language could arise, which is then called the lingua franca. This can occur in various situations, for example during a conversation between employees in a multinational company or during a seminar in an internationally diverse classroom. Discourse then can only seem to be successful if all parties involved in the dialogue make use of this lingua franca by accommodating their language to each other.

Another possibility is to replace ELF with L1-L2 interactions. One person in the conversation then makes use of their mother tongue (L1), while the other interlocutor with a different native language uses that same language as a second language (L2). Van Mulken and Hendriks (2015) compared the effectiveness of realising communicative goals between L1-L2 versus ELF interactions and investigated if the people in the two types of interactions used

different communication strategies. A within-subject design was used, in which Dutch-German pairs (speaking Dutch, German, or English) worked together on multiple spot-the-differences tasks. Their findings indicate that L1-L2 interactions are more effective than ELF, and that both types of interactions indeed used other communication strategies.

Nonetheless, ELF remains to be the most frequently used medium within multilingual communication according to Backus and colleagues (2013). In their research on Inclusive Multilingualism, they mention that ELF speakers show more effort to generate successful communication, by monitoring the interaction, adjusting their language proficiency to the same level of the interlocutor, and by using repetitions, clarifications, and self-repair in a proactive way. Therefore, it was chosen to adhere to the use of ELF instead of another multilingual possibility.

Although the focus of research on ELF is predominantly on the interaction between two non-native speakers of English, Margić (2017) researched whether and how native English speakers accommodated their language when interacting with non-native speakers of English, and their attitude towards this. Participants explained that they adjusted their communication by articulating more clearly, talking less fast, and using fewer idioms. Motivation to accommodate their language was mostly to endorse mutual comprehensibility, to promote courtesy, and to help the non-native speaker improve their language skills. Thus, they showed more effort, which is in line with Backus and colleagues' (2013) research about ELF.

Adjusting one's language is an important factor of the Interactive Alignment Model (IAM) proposed by Pickering and Garrod (2004). They state that alignment is necessary for communication to be successful. Alignment is the interactive process of people adapting their language use to each other to form common ground for their communication. During a conversation, interlocutors' mental modes are aligned via priming. On the one hand, this is because people make shortcuts in their language production, but on the other hand because it makes communication easier when using, for instance, the same words. This helps to make it clearer during a conversation that the interlocutors are talking about the same thing, which leads to more common ground. In line with this reasoning, perhaps people with a shared linguistic background have more common ground than those who do not share the same language.

Another research (Yow & Lim, 2019) contributes to this theory by revealing that sharing the same language leads to better task performance. English-speaking bilingual participants were matched in pairs of either two participants who both spoke the same two languages, or two participants with one different language. The subjects had to complete three tasks: Raven's

Matrices, an insight problem-solving task, and a divergent thinking task. Results showed that pairs sharing the same languages performed better in the insight problem-solving task but not in the divergent thinking task. This appeared to be fully mediated by a difference in ethnicity within pairs.

Thus, with its roots in globalisation, ELF has become an important aspect of communication internationally, even when L1-L2 interactions appeared to be more effective. In addition, native English speakers accommodated their language use to the proficiency of their interlocutor. An explanation for this could be to create common ground, according to the Interactive Alignment Model. Common ground. In line with this reasoning, sharing the same language could be an explanation for performing better at insight problem-solving tasks (Yow & Lim, 2019). How aligning and accommodating one's language could influence communicative success, is explained further in the next section.

Communicative success

Over the years, several theories were investigated to explain why people adjust their communication style to one another. According to Dragojevic, Gasiorek, and Giles (2015) these adaptations can be explained by the Communication Accommodation Theory (CAT). This theory assumes that people accommodate their interaction in social situations to minimize the differences between each other, for instance, to be certain that two speakers are aligned in a conversation to avoid miscommunication, or to improve what image they have of each other. The former is predominantly based on the aforementioned Interactive Alignment Model (Pickering & Garrod, 2004), whereas the latter is in line with research about the Social Identity Theory (SIT) (Tajfel et al., 1979).

Chun and Kaan (2020) demonstrate how people accommodate their language rather to in-group members than out-group members. The researchers found evidence that several social factors influence L2 speakers' syntactic priming (i.e., the phenomenon underlying interactive alignment). They uncovered that L2 speakers were significantly influenced by speaker accents and their familiarity with those accents. This familiarity can be linked to the fact that accommodating with a familiar accent resembles the choice between in-group (familiar accents) and out-group (non-familiar accents). These choices proceed from the basic principles of the Social Identity Theory: people define themselves and their own identity with other social groups, resulting in both in-group relations and out-group discrimination (Tajfel et al., 1979)

In line with this rationale, identifying to a social group is, to a certain degree, creating common ground. The self-categorization theory (Turner et al., 1987) claims that people can have a sense of feeling closer to each other when sharing the same language. The feeling of belonging to the same social group could be thanks to several factors, such as an accent, ethnicity, or thus a shared language (Turner et al., 1987). As a consequence, this sharedness led to more comfort and a better cooperation.

Interlocutor evaluation

In addition to the assumption that sharedness and common ground improve communicative success, the Communication Accommodation Theory also predicts that it could lead to a higher perceived likeability of the conversational partner (Dragojevic, Gasiorek & Giles, 2015). This assumption proceeds from the Communication Accommodation Theory being partially based on the Social Identity Theory.

Nevertheless, there are several studies that demonstrate opposite results. Schoot et al. (2016) investigated syntactic alignment and found no support that a speakers' desire to be liked influenced how much they align their syntactic choices with the interlocutor, nor was there support for a solid connection between syntactic alignment and perceived likeability. In addition, Abrahams and colleagues (2018) researched individual differences in syntactic mimicry and whether prosocial effects played a role in that. It appeared that participants' prosocial behaviour did not increase after being mimicked. Interestingly, another recent research of Abrahams and colleagues (2019) found support in structural alignment with participants when both communicating in their L1, but not for L2. When the participants were exposed to structural alignment, only the L1 participants showed an increase in prosocial behaviour. Since the present study focuses on L2 speakers, it is possible to find out whether the results will contradict or align with the conclusions of Abrahams et al. (2019).

In addition to likeability, the current research also investigates perceived solidarity and competence of the interlocutor. Measuring solidarity is based on research done by Fuertes and colleagues (2012) on interpersonal evaluations, while the choice for competence was based on the prediction that people perceive their conversational partner differently considering their language proficiency. A low proficiency might restrain communication to be successfulness, which could result in a lower interlocutor evaluation.

Thus, based on the overlap of the Communication Accommodation Theory with the Social Identity Theory, the CAT could play a role in the perceived evaluation of interlocutors,

since it assumes that people maintain their positive, social identity by accommodating their communication. Research on accommodating one's language preferably with an in-group rather than an out-group confirms this theory. Yet, some studies show contradictory results.

Present study

There are several factors influencing communicative success, among which language background, and visibility. Having a shared language background and seeing the interlocutor might result in better task performance and communicative success. However, these theories are predominantly based on real-life dialogue rather than online communication. In addition, several theories explain that a feeling of sharedness could increase the perceived likeability, whereas other studies contradict these results. Therefore, the present study aims to answer the following research question:

RQ: to what extent do a shared language background and visibility influence communicative success and interlocutor evaluation?

In previous literature (CAT, SIT), it is assumed that the feeling of a shared language background can increase the feeling of (in-group) belonging, which could lead to a higher interlocutor evaluation. Common ground, which is created by the feeling of sharedness, can also result in a higher communicative success. Hence, the hypotheses regarding shared language background are:

H1: Participants with a shared language background will have a higher communicative success than participants not sharing a language.

H2: Participants with a shared language background will have a higher interlocutor evaluation than participants not sharing a language.

Furthermore, it can be argued that without mutual visibility in an online setting, the transfer of information may be less successful than with mutual visibility. Consequently, the task performance might be lower, which could affect the communicative success. This can be hypothesized based on previous literature (Boyle, Anderson & Newlands, 1994), where results

showed that tasks were performed better when people had mutual visibility compared to non-mutual visibility. Therefore, the hypotheses for visibility are:

H3: Participants who are able to see each other will have a higher communicative success than participants who are not able see each other.

H4: Participants who can see each other will rate the interlocutor evaluation higher than participants who are not able to see each other.

Based on the Communication Accommodation Theory, the final hypothesis considers whether there is a relationship between communicative success and interlocutor evaluation:

H5: There is a positive correlation between communicative success and interlocutor evaluation, in terms of likeability, solidarity, and competence.

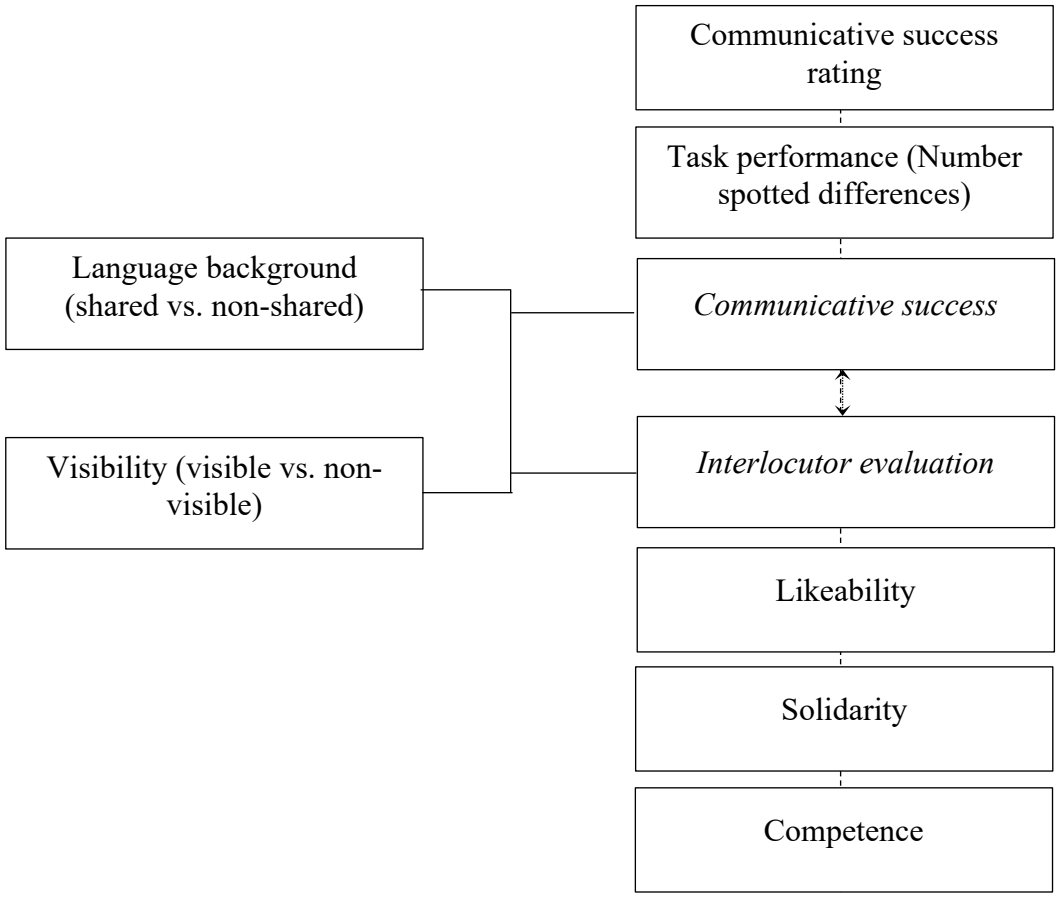
Methodology

Design

Language sharedness and visibility were the independent variables, whereas communicative success and interlocutor evaluation were the dependent variables. Figure 1 visualizes the research design of this study.

Figure 1

Analytical Model of the Experimental Design



Participants only participated in one condition, making it a 2x2 between-subjects design. Table 2 shows the number of participants per condition.

Table 2

Conditions of the Experiment with Number of Participants

Condition	Number of participants (N)
Shared language background with visibility	8
Shared language background without visibility	4
Non shared language background with visibility	14
Non shared language background without visibility	6

Participants

For this study, a total of 34 participants voluntarily took part. One pair was excluded from the analyses due to an unstable internet connection, which interfered with the reliability of the experiment. The remaining 32 participants were between the age of 19 and 26 (*M* = 22.03, *SD* = 1.84), mostly female (65.6%), and almost half had a Dutch nationality (53.1%). The highest completed or ongoing level of education for most participants was WO or Hochschulabschluss ((university level) 71.9%). This ranged from VWO or Abitur (high school) as lowest educational level to WO or Hochschulabschluss as the highest. An overview of how these characteristics were distributed among each condition can be seen in Table 3.

Table 3

Characteristics Participant per Condition

	Age	Gender	Language	Education				SA Proficiency
	M (SD)	Female (%)	Dutch (%)	VWO	HBO	WO	Other	M (SD)
Condition 1 (N = 8)	22.38 (1.77)	75.0%	62.5%	-	37.5%	62.5%	-	3.84 (1.63)
Condition 2 (N = 4)	21.75 (1.26)	50.0%	50.0%	-	-	100.0%	-	5.44 (0.55)
Condition 3 (N = 14)	21.50 (1.65)	85.7%	50.0%	7.1%	7.1%	78.6%	7.2%	5.21 (0.60)
Condition 4 (N = 6)	23.00 (2.53)	16.7%	50.0%	33.3%	16.7%	50.0%	-	5.25 (0.74)

The participants appeared to be unequally distributed among conditions for gender and self-assessed proficiency. A Pearson Chi-Square analysis showed that an effect between gender and visibility was statistically different ($\chi^2(2) = 10.26$, $p = .006$). More men were present in the non-visible conditions (70%), whereas more women participated in the visible conditions (81.8%). Furthermore, a one-way ANOVA with self-assessed proficiency as dependent variable and conditions as factor showed a significant relation (F (3, 28) = 4.23, $p = .014$). The proficiency within the shared-visible condition ($M = 3.84$, $SD = 1.63$) was lower than within the non-shared-visible condition ($p = .023$, Bonferroni correction; $M = 5.21$, $SD = 0.60$). There were no statistical differences found between the shared-visible condition and shared-non-visible ($p = .078$, Bonferroni correction) nor with non-shared-non-visible ($p = .077$, Bonferroni correction).

By the means of convenience, network, and snowballing sampling, the participants were recruited voluntarily. The prospective participants received a text with an explanation about the experiment and a weblink to the pre-questionnaire. The aim of this pre-screening survey (Appendix A) was to match the participants to a partner accordingly for each condition. One of the background variables was the participants' self-assessed proficiency of English, which was based on the self-assessment grid of Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001) (Appendix B). The subjects had to assess themselves on speaking, listening, writing, and reading on a six-point scale. According to Cronbach's Alpha, the reliability for this self-assessment grid of CEFR compromising four items was good: $\alpha = .96$. Therefore, the mean of these four items was used to compute the compound variable 'mean self-assessed proficiency'.

Furthermore, several demographical questions were asked, such as gender, age, and language, as well as some practical questions: if they had access to a computer with(out) a webcam, their availability for the experiment, and their email address. The latter was to be able to contact the participants once they were matched with another participant. Thanks to the researchers' connections with the participants, it was ensured that the participants were not matched with someone they were acquainted with.

Not all participants that filled in the pre-questionnaire (N = 53) took part in the experiment (N = 32) because of scheduling difficulties, a short amount of time, and (last-minute) cancellations.

Materials

During the experiment, the participants used the spot-the-differences task and video platform Zoom Video Communications.

First, the spot-the-differences task was based on the task material 'DiapixUK' (Baker & Hazan, 2011), consisting of a pair of two nearly identical pictures where several differences can be spotted. The task's aim is to elicit spontaneous speech as soon as two participants discuss the differences in the two pictures. The DiapixUK pictures used in this experiment were exclusively Street 3A and Street 3B, which can be seen in Figure 2 and 3 respectively.

Figure 2

DiapixUK Street 3A (Baker & Hazan, 2011)

Figure 3

DiapixUK Street 3B (Baker & Hazan, 2011)

Second, video platform Zoom was used as online communication tool in which the participants communicated with each other during the task, and the researchers instructed the participants. Even though the researchers needed a licensed account for this programme, the participants did not: they were able to join a Zoom conversation with an unlicensed account, and even without registration. Furthermore, the participants needed access to a good functioning computer, a stable internet connection, and a working camera (visible condition). Zoom has the option to record the meeting, which was used in order to have the opportunity to review it again in case of disagreement among the researchers about the number of differences spotted.[1] The participants were informed in the email and during the Zoom meeting about the recording.

Instruments

The questions in the pre-questionnaire were asked in English since these questions were in essence short and demographical questions. The 'main' questionnaire that was filled in directly after the experiment, was also in English (Appendix C).

Communicative success consisted of task performance and a communicative success rating. Task performance was measured by the researchers' tallying how many differences the pairs thought they had spotted during the 5-minute task, regardless of whether these differences were in fact correct. In the questionnaire, the participants had to rate how successful they perceived the communication to be, which was based on previous research (Kootstra & students, 2021). The seven-point Likert scale ranged from false to true/right (Appendix D). A Cronbach's Alpha analysis showed that the reliability for communicative success comprising of five items was acceptable: $\alpha = .75$. Hence, the mean of the five items was used to create the compound variable 'mean communicative success rating'.

Furthermore, the interlocutor evaluation was evaluated in terms of likeability, solidarity, and competence. A Likert scale ranging from 1 until 7 was used to measure likeability, which was based on Nejjari and colleagues' research (2012). The questions revolved around considerateness, pleasantness, and friendliness (Appendix E). Another Cronbach's Alpha analysis demonstrated that the reliability for likeability comprising of three items was good: $\alpha = .89$. Consequently, a compound variable for 'mean likeability' was calculated by the mean of all three items.

[1] The footage was not looked at afterwards since there was no disagreement among the researchers.

Based on Fuertes and colleagues (2012), their seven-point Likert scale was used to measure solidarity, measuring similarity, cooperativeness, benevolence, and trustworthiness (Appendix F). An analysis of Cronbach's Alpha revealed that the reliability for solidarity comprising of four items was acceptable: $\alpha = .75$. Therefore, the mean of all four items was used to calculate the compound variable 'mean solidarity'.

Lastly, the perceived competence of the interlocutor was measured by using a six-point Likert scale based on CEFR's self-assessment grid (Council of Europe, 2001) (Appendix B). To prevent participants from comparing their evaluation of proficiency to each other after the experiment, participants had to assess their own proficiency before the experiment. In addition, while all aspects of the CEFR were asked for the self-perceived proficiency (speaking, listening, writing, and reading), only speaking and listening skills were rated in the assessment for the interlocutor's skills. The participants could only evaluate how the other person speaks and listens, therefore rating the partner's reading and writing skills were omitted in the main questionnaire. Cronbach's Alpha indicated that the reliability for competence comprising of two items was good: $\alpha = .90$. Consequently, the mean of the two items was used to create the compound variable 'mean competence'.

Procedure

Participants were recruited via the researchers' network via WhatsApp and LinkedIn and asked if they would be willing to voluntarily take part in the experiment. The message was accompanied with a weblink to the pre-questionnaire. On the first page of the pre-screening survey the research outline was stated, and on the second page the participants had to sign an informed consent with their autograph.

The researchers tried to match participants and researchers accordingly, which led in most cases to a date and time to be set in stone for the experiment. Shortly thereafter, the subjects received an email with information regarding the experiment, their participant ID, and the link to the Zoom call. Given that the experiment was anonymous, the participants were asked to change their username on Zoom to the given participant number. If a participant had not changed their name yet, they could enter the meeting, change their name, and were placed back into the waiting room. Both participants were then admitted at the set time, and the experiment would begin.

Important aspects that were made clear at the beginning was that cameras needed to remain off or could be switched on (depending on the condition), which nationality the participants had, that note-taking was allowed, and that both the participants and researchers were obligated to speak in English at all times.

After the introduction, the participants had to indicate via the chat function if everything was clear. If that was the case, the two participants were divided in two breakout rooms, each accompanied by one researcher. Via Zoom's screen-sharing function, the researchers simultaneously showed either Street 3A or Street 3B. After two minutes, the screen-sharing was stopped, and the researchers contacted each other via WhatsApp to inform when finished. Once that was assured, everyone returned to the main room. Here, the participants were again instructed about what was expected of them during the task and that the researchers would not intervene until the five minutes had passed. If clear, the recording was started, and the researchers' cameras were turned off.

After completing the task, the participants were placed back in the breakout rooms, and filled in the questionnaire. Once they had reached the end of the survey, they were debriefed, thanked again, and allowed to leave the Zoom call. The time to fill in the questionnaire was approximately two to three minutes.

To ensure the reliability of the experiment, a protocol (Appendix G) was created by the researchers to use during the experiments.

Statistical analyses

Since there are two independent variables, shared language background and visibility, two-way univariate ANOVAs were performed. As for the dependent variables, the communicative success was measured via the task performance and the communicative success rating, each in separate univariate ANOVA analyses. The interlocutor evaluation, which was measured via likeability, solidarity, and competence, was also analysed by several univariate ANOVA analyses. A one-way ANOVA analysis was used for the self-perceived language proficiency.

Finally, an extra analysis was executed to provide additional information about the Communication Accommodation Theory. A Pearson correlation analysis between the dependent variables was performed, since the CAT assumes that there is a relation between communicative success and perceived likeability. Given that this research already analyses and measures these variables, it was interesting to analyse whether there was a correlation between these elements as well.

Results

Table 9 summarises the ratings of communicative success, likeability, solidarity (1= completely disagree, 7 = completely agree), task performance (1-7), self-assessed proficiency, and competence (1 = not proficient, 6 = proficient) on language background and visibility. The significance of these differences will be discussed hereafter.

Table 4

Means and Standard Deviations for Self-Assessed Proficiency, Communicative Success Rating, Task Performance, Likeability, Solidarity, and Competence

	Visible		Non-visible		Total	
	M	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
Self-assessed proficiency						
Shared	3.84	(1.63)	5.44	(0.55)	4.38	(1.54)
Non-shared	5.21	(0.60)	5.25	(0.74)	5.23	(0.63)
Total	4.72	(1.25)	5.33	(0.65)	4.91	(1.12)
Communicative Success Rating						
Shared	5.75	(0.98)	6.55	(0.34)	6.02	(0.89)
Non-shared	6.16	(0.57)	6.37	(0.15)	6.22	(0.49)
Total	6.01	(0.75)	6.44	(0.25)	6.14	(0.66)
Task performance						
Shared	3.75	(2.32)	3.50	(2.89)	3.67	(2.39)
Non-shared	4.29	(1.33)	3.67	(0.52)	4.10	(1.17)
Total	4.09	(1.72)	3.60	(1.71)	3.94	(1.70)
Likeability						
Shared	6.17	(0.73)	7.00	(0.00)	6.44	(0.72)
Non-shared	6.81	(0.31)	6.67	(0.42)	6.77	(0.34)
Total	6.58	(0.58)	6.80	(0.36)	6.65	(0.53)
Solidarity						
Shared	5.66	(1.05)	6.75	(0.35)	6.02	(1.01)
Non-shared	6.25	(0.72)	6.25	(0.50)	6.25	(0.65)
Total	6.03	(0.88)	6.45	(0.50)	6.16	(0.80)
Competence						
Shared	4.88	(1.03)	5.38	(0.75)	5.04	(0.94)
Non-shared	5.14	(0.77)	4.92	(0.92)	5.08	(0.80)
Total	5.05	(0.86)	5.10	(0.84)	5.06	(0.84)

Communicative success

Task Performance

A two-way analysis of variance with language sharedness and visibility as factors, showed no significant main effect of visibility on task performance (number of differences found) (F (1, 28) = 0.40, p = .533). The sharedness of a language was not found to have a significant main effect on task performance either (F (1, 28) = 0.26, p = .614). Furthermore, the interaction effect between visibility and language sharedness was not statistically significant (F (1, 28) = 0.07, p = .791).

Communicative Success Rating

Another two-way ANOVA with language sharedness and visibility as factors, did not demonstrate a significant main effect of visibility on the communicative success rating (F (1, 28) = 4.11, p = .052). The sharedness of a language did not show a significant main effect on the communicative success rating either (F (1, 28) = 0.20, p = .657). Moreover, the interaction effect between language sharedness and visibility was not statistically significant (F (1, 28) = 1.40, p = .246). Thus, both a (non-)shared language background and (not) being able to see the interlocutor in Zoom did not elicit statistically significant results with respect to communicative success.

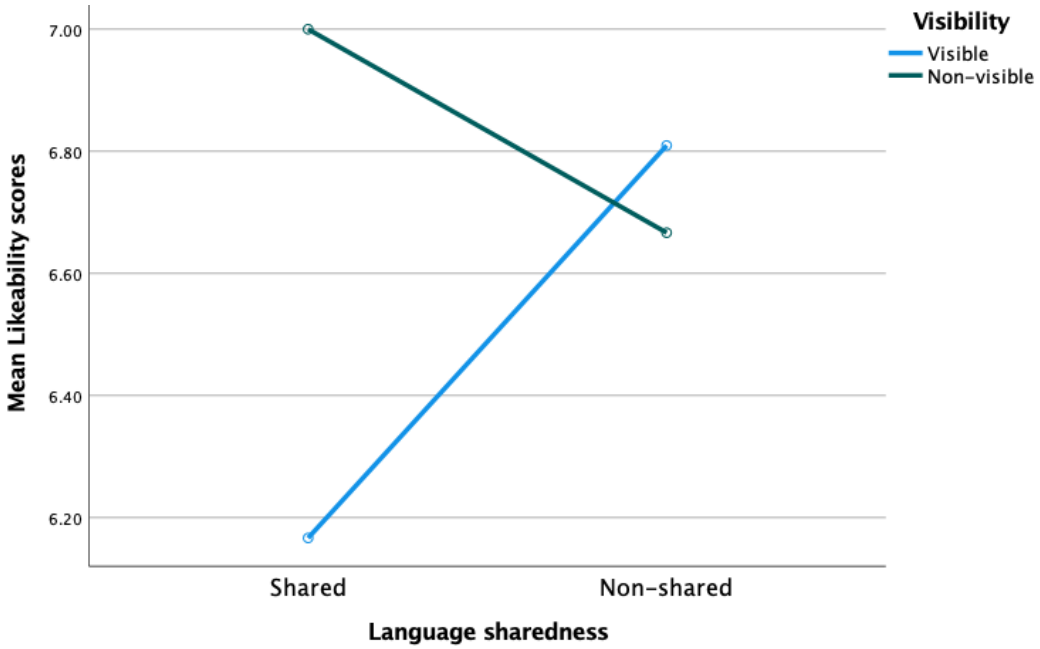
Interlocutor evaluation

Likeability

A two-way analysis of variance with language sharedness and visibility as factors, neither showed a significant main effect of visibility on likeability (F (1, 28) = 3.67, p = .066), nor for shared language on likeability (F (1, 28) = 0.74, p = .398). In addition, the interaction effect between visibility and language sharedness was statistically significant (F (1, 28) = 7.33, p = .011). Figure 4 shows that participants in the visible condition scored lower on likeability when the language was shared (M = 6.17, SD = 0.73) than when it was not shared (M = 6.81, SD = 0.31). Vice versa, subjects in the non-visible condition assessed higher likeability scores for shared language (M = 7.00, SD = 0.00), than for non-shared language (M = 6.67, SD = 0.42).

Figure 4

Interaction between Language Sharedness and Visibility on Likeability



Solidarity

A two-way ANOVA on solidarity with visibility and language sharedness as factors, demonstrated a non-significant effect for visibility (F (1, 28) = 3.39, p = .076). Likewise, no statistically significant effect was found for language sharedness on solidarity (F (1, 28) = 0.03, p = .876). There was no statistical effect found for interaction either (F (1, 28) = 3.39, p = .076).

Competence

As for the other-perceived proficiency, a two-way univariate analysis of variance with visibility and language sharedness showed a non-significant main effect for visibility (F (1, 28) = 0.16, p = .689), neither was a non-significant main effect found for language sharedness (F (1, 28) = 0.08, p = .781). Furthermore, an interaction effect for visibility and language sharedness was not found to be statistically significant (F (1, 28) = 1.15, p = .293).

Thus, it seemed that only the interaction between language sharedness and visibility on likeability had a statistically significant effect, while solidarity and competence had not found any statistical differences on neither visibility nor language sharedness.

Correlations

In the final place, Pearson Correlations were calculated between self-assessed proficiency, communicative success rating, task performance, likeability, solidarity, and competence. Table 9 depicted an overview of all correlations, however, only the five statistically significant correlations are discussed here.

First, a significant positive correlation was found between likeability and communicative success rating (r (32) = .57, p = .001). This strong correlation effect results in the increase of a communicative success rating if likeability increases.

Second, there was found to be a strong, significant positive correlation between solidarity and communicative success rating (r (32) = .63, p < .001). This means that solidarity is likely to increase with an increased rating of communicative success.

Third, a significant positive correlation was found between competence and communicative success rating (r (32) = .40, p = .025). The correlation has a moderate effect on the increase of communicative success rating with the competence of the participants.

Fourth, there was found to be a strong, significant positive correlation between solidarity and likeability (r (32) = .69, p < .001). Thus, solidarity seemed to increase with likeability.

Fifth, a moderate, positive significant correlation between task performance and solidarity was uncovered (r (32) = .36, p = .040). That is to say, when the number of differences found increased, solidarity also seemed to increase.

Table 5

Pearson Correlations (r) between Self-Assessed Proficiency, Communicative Success Rating, Likeability, Solidarity, and Competence (N = 32)

	1.	2.	3.	4.	5.	6.
1. Self-Assessed Proficiency						
2. Communicative Success Rating	.31					
3. Likeability	.18	.57**				
4. Solidarity	.18	.63**	.69**			
5. Competence	.31	.38*	.27	.33		
6. Task Performance	.12	.01	.20	.36*	.08	

* p < .050, ** p < .010

Conclusion and discussion

Possible explanations

This research investigated to what degree linguistic background and visibility could influence communicative success and interlocutor evaluation.

First, analyses regarding communicative success rating and task performance demonstrated that variations were not statistically different. Therefore, the first hypothesis that participants with a shared language background would have a higher communicative success, is refuted. The opposite appeared to be true, although not statistically different: participants without a shared language background evaluated communicative success higher and scored higher on task performance than the participants sharing the same language.

Second, it was suspected that participants with a shared language background would rate each other higher on interlocutor evaluation in terms of likeability, solidarity, and competence. Eventually, neither of these three variables had an effect on language sharedness. Therefore, the second hypothesis is refuted.

A plausible explanation for a shared language background not yielding any results regarding communicative success nor interlocutor evaluation, might be that the manipulation of the linguistic background was not strong enough. Dutch and German are two closely related languages, and two neighbouring countries, perhaps causing them to be perceived as too identical. Chun and Kaan (2020), for instance, used Korean English and Indian English speakers: two relatively more divergent languages. Therefore, two less closely related languages might yield different results regarding the effect of a shared or non-shared linguistic background. Another justification could be assigned to the use of a spot-the-differences task. Within the research of Yow and Lim (2019), English bilinguals were paired in either English-*same* pairs or English-*different* pairs who were asked to execute several tasks. Among these tasks, there turned out to be different results in who performed better: those with the same language, or those who were mixed. Perhaps, the task used in the present study was not the correct test to elicit the hypothesised results.

Third, the expectation that participants who could see each other would have a higher communicative success than when non-visible, was proven wrong. Neither the communicative success rating nor the differences spotted appeared to be statistically significant for visibility.

Fourth, it was also predicted that visible participants would have higher ratings on interlocutor evaluation compared to non-visible participants. However, this effect was not found by likeability, solidarity, nor competence. An important remark here, though, is that the

two conditions without visibility merely had four (shared language) and six (non-shared language) participants.

Thus, visibility did not demonstrate results for neither communicative success nor interlocutor evaluation. Regarding communicative success, these findings contradict with research of Boyle and colleagues (1994). They showed that problem-solving tasks were performed better when people had mutual visibility compared to non-mutual visibility. A logical explanation for these contradicting results could be that (young) people nowadays are extremely accustomed to online communication which causes visibility to not be of influence (anymore). People are very familiarised with online communication where mutual visibility is not necessarily needed anymore to make the transfer of a message succeed (i.e., texting or emailing), which might be the reason why visibility did not have an effect on communicative success. A study done by Newlands and colleagues (2003), for example, compared communicative strategies with a problem-solving task regarding computer-mediated communication (CMC) versus spoken interaction. One finding was that CMC users became more effective over time and adopted a strategy to elicit more precise communication. Hence, not being able to see each other might not be a necessity to use effective communication. In line with this reasoning, it might be that interlocutor evaluation was not affected for non-visibility due to communicative success being unaffected. This could be a logical explanation, given the correlation between communicative success and interlocutor evaluation, which is explained more in-depth hereafter.

Fifth, the hypothesis of communicative success and interlocutor evaluation correlating positively, was fulfilled. As expected, there were connections between the communicative success rating and likeability, solidarity, and competence. In addition, correlations were found between solidarity and likeability, and between solidarity and task performance.

That these factors would uncover a relationship, was assumed by the Communication Accommodation Theory. This theory believes that accommodation minimises differences in social situations, resulting in more sharedness. As a consequence, this created common ground could have led to a higher perceived likeability of the interlocutor. The present study could only partially confirm to this theory. On the one hand, even though the same language background did not seem to be of influence, communicative success did have a positive influence on interlocutor evaluation. On the other hand, the current research could not provide a confirmation regarding that communicative success or interlocutor evaluation were scored higher when there was more sharedness and common ground (shared vs. non-shared language). Perhaps this could

be because the participants found common ground in another aspect (e.g., age instead of language). Thus, one way or another, the communication was perceived to be successful among the participants, which then led to a higher interlocutor evaluation.

Limitations

First, not enough participants were recruited to make the research generalizable. Several implications made it difficult: 1) there was little time to recruit participants and execute the experiments, 2) some participants could not be paired because their availabilities did not match, and 3) there were last-minute cancellations. Furthermore, the majority of the participants had a university related degree, and most participants were women. Even though this could have accounted for little noise, it might also have led to a smaller variation among participants and a lower generalizability.

Considering an element of the communication process, another limitation could be that there was noise in Zoom. This might have interfered with the transmission and reception of the messages, which could have caused a lower perceived proficiency of the interlocutor. A future study should compare whether there are differences in perceived proficiency in online spoken communication versus face-to-face communication.

Moreover, all questionnaires were constructed in English, instead of Dutch and German, due to time restrictions and possible translation errors. Almost all participants had an advanced or even near native proficiency of the language, but it remains possible that the questions were interpretated differently. Therefore, future studies could conduct the same research with more participants and a questionnaire in the L1 instead of the L2.

Future research

Nearly all participants were able to speak and/or understand English (very) well. Perhaps, the results would differ if participants were to be less advanced in English. If the proficiency is lower, the task might be more difficult, resulting in communicative success being more at stake. How would interlocutor evaluations be assessed in this scenario? Possibly, other factors become (more) pertinent. This should be examined in the future.

In addition, while participants were from two different nationalities, culture was not a considered factor. Therefore, a suggestion would be to monitor cultural differences, for instance according to Hofstede's cultural dimensions (Hofstede, 1984). When comparing the Netherlands and Germany based on these dimensions, it can be observed that Germany has a

high score on the Masculinity – Femininity dimension, while the Netherlands scores rather low. A culture with a high score (more masculine) tends to find achievements, competition, and success important, whereas a low score values caring for others, society, and quality of life. In line with the current research, this might account for German participants evaluating the communicative success scores higher than the Dutch, given their drive for success. Contrastingly, Dutch participants might respond higher with regard to likeability, given their focus on caring for others. Future research could investigate this.

Another consideration could be to involve participants of two similar cultures to account for cultural differences. According to Johnson and colleagues (2005), more masculine cultures often tend to display more acquiescent response behaviors, whereas more feminine cultures tend to prefer more middling and less extreme response styles. An extreme response style occurs when people frequently use the most extreme answer options on a scale (i.e., strongly (dis)agree), while the middling or less extreme response style often choose (dis)agreed or somewhat (dis)agreed. This also appeared to be the case in the present study, in which the Dutch participants never chose the most extreme answer on the self-assessed proficiency scale, while the Germans did.

Lastly, during the spot-the-differences task, participants often encountered the issue that one participant had focused on details (i.e., colours, shoes of people, what was behind the shopping window, etc.), whereas the other participant had predominantly looked at the entire picture (i.e., there were shops, a girl with a bike, a car, etc.). It might be that the choice of focus (detailed or broad) can be connected to cultural differences, such as the analytical-holistic thinking framework. Analytical thinkers generally focus on details of individual attributes, while holistic thinkers focus on the general structure of a scene or image, and search for relationships of the individual parts (Koo, Choi & Choi, 2018). This framework is often linked to Western and East Asian countries (Koo, Choi & Choi, 2018), or individualistic and collectivistic cultures (Alotaibi, Underwood & Smith, 2017).

Contributions

Altogether, a (non-)shared linguistic background and (not) being able to see each other had an effect on communicative success and interlocutor evaluation to a smaller degree than anticipated. Even though the present study did not yield any results on the sharedness of a language nor on visibility, future research with a larger sample would be necessary to investigate whether this is truly the case, or that other factors played a role here (i.e., an

ineffective manipulation, cultural differences, a meagre sample etc.). On the other hand, contributions can still be made regarding the Communication Accommodation Theory, given that there are multiple relationships between communicative success and interlocutor evaluation.

From a practical perspective, this research could be beneficial for globally oriented organisations that frequently use online communication. For them in particular, it is interesting to realise that a non-shared language background should not cause implications for neither communicative success nor interlocutor evaluation. In addition, communicative success and perceived likeability, solidarity, and competence seemed to be positively related, indicating that the interlocutor evaluation will increase if communication appears to be successful, and vice versa. Therefore, this study has two suggestions. On the one hand, companies and schools should prioritise likeability, solidarity, and competence, possibly via team building and group activities. This could result in a higher interlocutor evaluation and consequently a higher communicative success, which ultimately might lead to better results regarding the project and/or productivity. On the other hand, prioritising communicative success can also be meaningful, for example, when a perceived likeability or competence is extremely important, such as during a job interview. Perhaps, language proficiency or communication trainings would improve the communicative success, and consequently increase interlocutor evaluations.

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Appendix A

Pre-Screening Survey

Survey Flow

Block: Introduction (1 Question)
Standard: Consent form (1 Question)
Standard: Basic details (4 Questions)
Standard: Language (6 Questions)
Standard: Practicalities and availability (3 Questions)

Page Break

Start of Block: Introduction

Hello! Welcome to the pre-screening survey for our experiment. In this questionnaire, we ask you some general questions, how well you would rate your English proficiency and if you would be available for a short Zoom experiment in the period between Friday 19 November and Wednesday 1 December.
We would like to address that participation is voluntary. This means that you can withdraw your participation and consent at any time during the research, without giving a reason. Please take time to read the following information carefully. If something is not clear, or you would like more information, please ask the researcher.
In this research we want to see an interaction on Zoom. During the Zoom experiment, you will work on a task together in English with one other person.
Your answers will be handled confidentially and only disclosed to the research team (for scheduling purposes).

End of Block: Introduction

Start of Block: Consent form

The aim of the research study has been outlined to me. I was given the opportunity to ask questions regarding the research study. I participate voluntarily in the research study. I understand that I can stop at any point during the research study, should I wish to do so. I

understand how the data of the research study will be stored and how they will be used. I consent to participating in the research study as described in the information document.

End of Block: Consent form

Start of Block: Basic details

Gender

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Prefer not to say (4)

Age

_____

Highest level of education (either completed or ongoing)

- ○ MBO/ Realschulabschluss (1)
- ○ VWO/ Abitur (2)
- ○ HBO/ Fachhochschulabschluss (3)
- ○ WO/ Hochschulabschluss (4)
- ○ Other (5)

If you follow a study programme right now, please indicate the name of your study programme

_____

End of Block: Basic details

Start of Block: Language

Native language

- ○ Dutch (1)
- ○ German (2)
- ○ Other, namely: (3) _____

Are you proficient in any other language(s) besides your native language and English? If so, please specify which one(s)

_____

I would rate my English reading skills as

	Understand familiar names, words, simple sentences	Read short, simple texts. Find specific, predictable information in simple everyday material	Understand texts with high frequency every day or job-related language. Understand descriptions of events, feelings and wishes	Read articles and reports with contemporary problems with writers' viewpoints.	Understand long and complex factual and literary texts, appreciating distinctions of style. Understand specialised articles and technical instructions	Read with ease all forms of written language	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

I would rate my English writing skills as

	Write simple phrases	Write short, simple notes and messages	Write simple connected text on familiar/interesting topics	Write clear, detailed text on wide range of topics, and pass on information with supported arguments	Write clear, well-structured text, expressing points and underline salient issues. Select style appropriate to reader in mind	Write clear, smoothly flowing text in appropriate style, complex texts with effective logical structure, write summaries of professional/literary works	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

I would rate my English speaking skills as

	Speak simple phrases	Speak a series of related phrases	Speak and connect phrases in a simple way, including brief argumentation	Present clear, detailed descriptions on a wide range of subjects	Present clear, detailed descriptions on very complex subjects	Speak very clear, smoothly flowing, sentences. (close to) Native English	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

I would rate my English listening skills as

	Recognise familiar words and basic phrases	Understand words and phrases on a basic level	Understand main points of standard speech and conversation	Understand extended speech and more advanced structures	Understanding complex language structures and arguments	Understand everything, (close to) native English speaker	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

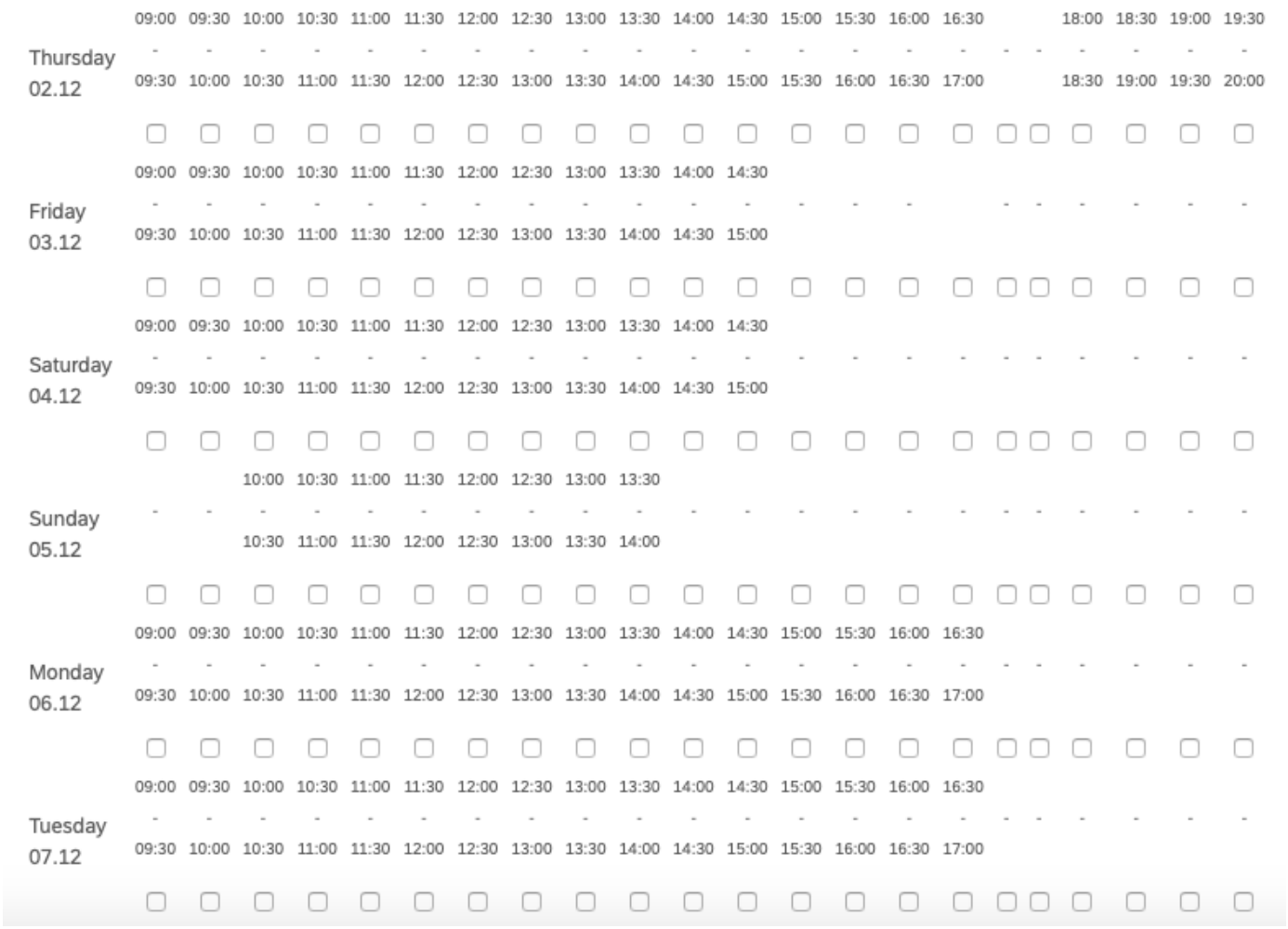
End of Block: Language

Start of Block: Practicalities and availability

Do you have access to a computer with a webcam in the period between Thursday 18 November and Wednesday 1 December?

- ○ Yes, I have access to a computer with a webcam (1)
- ○ Yes, I have access to a computer, but not with a webcam (2)
- ○ No, I don’t have access to a computer (3)

Please provide your availability by checking the boxes of the timeslots you would be able to participate in our experiment. The research team will contact you via email in the upcoming days to provide further information and verify your experiment appointment.



Please enter your email address, so we can get into contact with you

_____

End of Block: Practicalities and availability

Appendix B

Items scale Competence

CEFR (Council of Europe, 2001)

The six items for the Common European Framework of Reference for Languages (CEFR) are:

1. A1 – Basic user
2. A2 – Basic user
3. B1 – Independent user
4. B2 – Independent user
5. C1 – Proficient user
6. C2 – Proficient user

		A1 Basic User	A2 Basic User	B1 Independent user	B2 Independent user	C1 Proficient user	C2 Proficient user
Understanding	Listening	I can understand familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand extended speech and lectures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.
	Reading	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular attitudes or viewpoints. I can understand contemporary literary prose.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.
Speaking	Spoken interaction	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).	I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.
	Spoken production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.	I can present a clear, smoothly-flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the recipient to notice and remember significant points.
Writing	Writing	I can write a short, simple postcard, for example sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can write short, simple notes and messages. I can write a very simple personal letter, for example thanking someone for something.	I can write simple connected text on topics which are familiar or of personal interest. I can write personal letters describing experiences and impressions.	I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events and experiences.	I can express myself in clear, well-structured text, expressing points of view at some length. I can write about complex subjects in a letter, an essay or a report, underlining what I consider to be the salient issues. I can select a style appropriate to the reader in mind.	I can write clear, smoothly-flowing text in an appropriate style. I can write complex letters, reports or articles which present a case with an effective logical structure which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.

Common European Framework of Reference for Languages (CEF): © Council of Europe

Figure 5. Common European Framework of Reference for Languages – Self-assessment grid (Council of Europe, 2001)

Appendix C

Main Questionnaire

Survey Flow

Block: Introduction (1 Question)
Standard: Participant number (1 Question)
Standard: Communicative Success (5 Questions)
Standard: Likeability, Solidarity, Competence (4 Questions)

Page Break

Start of Block: Introduction

Thank you for taking part in our experiment. This survey is still part of the study, and we would therefore ask you to fill it in truthfully. Once you are done, please indicate so to the researcher. After that you are free to leave the Zoom call.

End of Block: Introduction

Start of Block: Participant number

Participant number

_____

End of Block: Participant number

Start of Block: Communicative Success

The conversation with my partner went smoothly

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
False	○	○	○	○	○	○	○	True

Talking to this person was easy

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
False	○	○	○	○	○	○	○	True

I think this person understood what I was saying

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
False	○	○	○	○	○	○	○	Right

There were no misunderstandings

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
False	○	○	○	○	○	○	○	Right

I was able to help the other person when they were, for instance, stuck

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
False	○	○	○	○	○	○	○	Right

End of Block: Communicative Success

Start of Block: Likeability, Solidarity, Competence

The person I worked with was...

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Inconsiderate	○	○	○	○	○	○	○	Considerate
Unpleasant	○	○	○	○	○	○	○	Pleasant
Unfriendly	○	○	○	○	○	○	○	Friendly

The person I worked with was...

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Not similar to me	○	○	○	○	○	○	○	Similar to me
Uncooperative	○	○	○	○	○	○	○	Cooperative
Uncaring	○	○	○	○	○	○	○	Caring
Untrustworthy	○	○	○	○	○	○	○	Trustworthy

I would rate my partner's English listening skills as:

	Recognise familiar words and basic phrases	Understand words and phrases on a basic level	Understand main points of standard speech and conversation	Understand extended speech and more advanced structures	Understanding complex language structures and arguments	Understand everything, (close to) native English speaker	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

I would rate my partner's English speaking skills as:

	Speak simple phrases	Speak a series of related phrases	Speak and connect phrases in a simple way, including brief argumentation	Present clear, detailed descriptions on a wide range of subjects	Present clear, detailed descriptions on very complex subjects	Speak very clear, smoothly flowing, sentences. (close to) Native English	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	
Very basic	○	○	○	○	○	○	Very advanced

End of Block: Likeability, Solidarity, Competence

Appendix D

Items scale Communicative Success Rating

(Kootstra & students, 2021)

The six items that will be used to measure communicative success are:

1. The conversation with this person went smoothly
2. Talking to this person was easy
3. I think this person understood what I was saying
4. There were no misunderstandings
5. I was able to help the other person when they were, for instance, stuck

Appendix E

Items scale Likeability

(Nejjari et al., 2012)

On a semantic five-point scale, ranging from 1 (most negative) to 5 (most positive), there are eight items:

1. Incompetent – Competent
2. Pleasant – Irritating
3. Uneducated – Educated
4. Aggressive – Considerate
5. Stupid – Intelligent
6. Inferior position – Having authority
7. Not cultured – Cultured
8. Unfriendly – Friendly

Appendix F

Items scale Solidarity

(Fuertes et al., 2012)

There are four items on which the scale for solidarity can be based on:

1. Speaker's similarity to the listener
2. Attractiveness
3. Benevolence
4. Trustworthiness

Appendix G

Protocol

1. **Enter the main room together with the other research colleague**
2. **Make sure you have your camera on and change your name on ZOOM to Researcher: [first name]**
3. **Let the participants in the ZOOM meeting on the agreed time.**
   (But let them enter individually and put them back into the waiting rooms for the sake of the Display name changing to their participant ID)
5. **Speak the text underneath out loud:**

First part, main room:

Hello, and thank you both for joining today's experiment. Please do not switch your camera or microphone on if not indicated by us. (Both researchers shortly introduced)

My research colleague and I will guide you through today's experiment. This session will be recorded, and the experiment will be conducted in English. [Participant ID person 1], you have a [Dutch/German] nationality, and [Participant ID person 2], you have (also) a [Dutch/German] nationality.

Together the two of you will perform a spot-the-differences task. For that, we will shortly divide you into two breakout rooms and show you both a different picture. You will have 2 minutes to look at the picture and take notes. Afterwards, you'll be put back in the main room and have 5 minutes to compare the images and find the differences. As this is in no way a test and there are no right or wrong answers, please do not take any pictures of the images or cheat in any other way.

If everything is clear, please indicate so via the chat function.

Okay, we will now go into the breakout rooms.

6. **Put the participants in 2 separate breakout rooms.**
7. **One researcher will enter break-out room 1 with no camera on and the other researcher will enter break-out room 2 with no camera on.**

8. **One researcher shows participant 1 picture (Street 3A), sets the time (2 minutes) and tells them they can start looking and make notes, while the other researcher does the same for the other participant while showing picture Street 3B. (BO-room1 = A, BO-room2 = B)**
9. **After the 2 minutes the researchers will speak the following text out loud:**

Second part, in the breakout rooms:

Okay, your time is up now. We will now return to the main room.

10. **Make sure you text the host via WhatsApp so the researcher can put you back in the main room**

In the main room:

So, you both saw a picture for 2 minutes. We will start the recording now. Now you both can start on the spot-the-differences task. We will turn off our cameras and will not intervene during the experiment. We will let you know when your time is up and you're finished.

11. **START RECORDING → "Technical researcher" does this; START TIMER → "Talking host" does this**
12. **Put the participant back in the main room and make sure you have your camera and microphone off (*hide self-option).***
13. **The participants now have 5 minutes to discuss the differences they saw in the pictures.**
14. **Mark the differences they spot.**
15. **After 5 minutes speak the following text out loud:**

Final part, after the experiment:

Thank you, your time is up now. Please do not leave the session just yet. Soon you will be going back in a break out room. In the chat in the breakout room, you will find a link to a follow-up questionnaire that will take approximately 5 minutes to fill in.

16. **END RECORDING**

17. **Put the participants back in separate break-out rooms and send the link for the questionnaire: https://radboudletteren.eu.qualtrics.com/jfe/form/SV_3Eo2DktQjbG288m**
18. **Make sure your camera is still of and wait for the participant to fill it in.**
19. **When the participant is done, thank them again and they can leave.**
20. **Go back into the main room and wait for the other researcher.**
21. **End of experiment.**

Appendix H

Checklist Ethics Review

Version 1.6, November 2020

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

Explanation: 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.
B. 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).

☒ No → continue with questionnaire

☐ Yes → Did a Dutch Medical Institutional Review Board (MIRB) decide that the Wet Medisch Onderzoek (Medical Research Involving Human Subjects Act) is not applicable?

☐ Yes → continue with questionnaire

☐ No → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen → end of checklist

2. Do grant providers wish the protocol to be assessed by a recognised MIRB?

☒ No → continue with questionnaire

☐ Yes → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen → end of checklist

3. Does the research include medical-scientific research that might carry risks for the participant? ☒ No → continue with questionnaire

☐ Yes → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch CMO Regio Arnhem Nijmegen → 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?

☒ Yes → continue with questionnaire

☐ No → assessment necessary, end of checklist

Participants

5. Is the participant population a healthy one?

☒ Yes → 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?

☐ Yes → assessment necessary, end of checklist → go to assessment procedure

☒ No → continue with questionnaire

8. Will participants undergo treatment or are they asked to perform certain behaviours that can lead to discomfort?

☐ Yes → assessment necessary, end of checklist → go to assessment procedure

☒ No → 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 deception 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 anonymity and privacy met?

☐ No → assessment necessary, end of checklist → go to assessment procedure

☒ Yes → continue with questionnaire

Conducting the research

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

☒ No → continue with questionnaire

☐ Yes→ Do you have/will you receive written permission from this institution?

☐ No → assessment necessary, end of checklist → go to assessment procedure

☐ Yes → 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?

☐ No→ assessment necessary, end of checklist → go to assessment procedure

☒ Yes → 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

☒ Yes → 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? (see explanation on informed consent and sample documents).

☐ No→ assessment necessary, end of checklist → go to assessment procedure

☒ Yes → continue with questionnaire

18. Do participants and/or their representatives sign a consent form? (see explanation on informed consent and sample documents.

☐ No→ assessment necessary, end of checklist → go to assessment procedure

☒ Yes → checklist finished

Appendix I

Declaration of no Fraud and Plagiarism

Student: Linde Heinsius

Bachelor student of Communication and Information Studies at the Faculty of Arts of the Radboud University in Nijmegen, declares the following by signing this form:

a. I hereby declare that I am familiar with the faculty manual (http://www.ru.nl/stip/english/rules-regulations/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 and that I have applied the rules of citing, paraphrasing, and referencing according to the Vademecum Reporting Research. I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of documentation.

c. I certify that this thesis is my own work, and that I have not submitted work that I have previously (in part) submitted for any other examination of this or another educational program without explicit consent of my thesis supervisor.

d. I declare that (my part of) the research data described in the thesis are obtained empirically and processed with integrity and in a scientifically responsible manner.

Place and date: Arnhem, 10 January 2022