The effect of British, Dutch and Vietnamese English accentedness and perceived comprehensibility on attitudes towards managers and message effectiveness in interpersonal leadership communication in the Netherlands.

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Abstract

In an experiment, 180 Dutch participants responded to British English, Dutch English and Vietnamese English accented managers. The aim of this experiment was to test whether there were different attitudinal evaluations and communication effectiveness for Dutch accented English, Vietnamese accented English, and British speakers. Additionally, the study aimed to test the effects of accent familiarity, perceived comprehensibility, accent similarity, and demographic similarity on attitudinal evaluations and communication effectiveness. The results showed similar evaluations for the Dutch and Vietnamese speakers, and more positive evaluations for the British speakers for attitudinal evaluations, communication effectiveness, and perceived comprehensibility. Perceived comprehensibility had a slight mediating effect for accent variety and attitudinal evaluations, and a fully mediating effect for accent variety and communication effectiveness. Perceived comprehensibility was shown to be a significant predictor for the communication effectiveness for Dutch speakers, an effect that was not found for the other accent varieties. Moreover, for all speakers, competence, likeability, and demographic similarity were found to be significant predictors for communication effectiveness. These findings highlight the importance of the effects of non-native speech on attitudinal evaluations and communication effectiveness, and show why it is important for MNCs to invest in improving the comprehensibility of their managers.

*Keywords*: non-native speech, ELF, attitudes, accent similarity, demographic similarity, accent familiarity, interpersonal leadership communication, perceived comprehensibility
**Theoretical background**

Globalization of the world economy has caused an increase in the importance of multinational companies (MNCs) in the current economy (Harzing & Maznevski, 2002). These MNCs often employ individuals with different language backgrounds. This language diversity among employees makes these MNCs multilingual companies. Due to multilingualism, the need to communicate with someone from a different language background is becoming more common in the present professional domain, and therefore MNCs often require language standardization (Gluszek & Dovidio, 2010; Hendriks, van Meurs, & de Groot, 2017; Mai & Hoffmann, 2014; Piekkari & Zander, 2005; Rogerson-Revell, 2007; Seidlhofer, 2005). Language standardization is implemented to resolve language differences by defining one corporate language that is to be communicated in by everyone.

Nowadays, the preferred language for language standardization is English, which is thus called “the Lingua Franca of International Business” (Zander, Mockaitis, & Harzing, 2011, p. 2). More companies located outside of native English countries use English more often as their professional language, increasing the need for employees whose first language is not English to communicate in English during their professional activities. Correspondingly, it is to be expected that the number of interactions between non-native speakers of English will only keep growing (Seidlhofer, 2005).

Demanding non-native employees to fully communicate in English can put excessive pressure on these employees, especially in the competitive international business where the stakes are high (Louhiala-Salminen, Charles, & Kankaanranta, 2005). Due to language standardization, and thus the growing use of English in business communication, the role of language in international business communication has seen an increase in interest within language research (Rogerson-Revell, 2007).

**Social identity theory**

Language standardization solves the communication problems that arise when two non-native speakers of English need to communicate. However, language standardization also creates new problems, which relate to the social identity theory (Dragojevic & Giles, 2014). Since language is closely related to the social identity of people, language can be an indicator for the social group placement of an individual (Dragojevic & Giles, 2014). This means that listening to a non-native accent might trigger the categorization of a speaker into “us” and
“them”, which is referred to as the social in- or out-groups of the listener, solely based on the language a person speaks (Deprez-Sims & Morris, 2010).

Additionally, Gluszek and Dovidio (2010) discussed that non-nativeness is very often accompanied by a stigma, suggesting that non-native speech is a powerful out-group cue, regardless of social connotations. Since non-native speakers often speak an accented variety of English, which is an alteration of the pronunciation from that of native speakers (Lippi-Green, 1997; Mai & Hoffmann, 2014), Deprez-Sims (2010) and Gluszek and Dovidio (2010) suggest that non-native speakers, based on their accent, will always be placed in the social out-group of the listener.

The social identity theory (Tajfel, Billig, Bundy, & Flament, 1971) states that individuals attempt to maintain a positive self-image by associating themselves with positively regarded individuals. Consequently, all individuals of the out-group are perceived more negatively (Deprez-Sims & Morris, 2010). Other studies (see Munro and Derwing, 1995a; 1995b for an overview) showed that native speakers’ negative attitudes towards a non-native accent could transform into negative attitudes towards the speaker. Since out-group categorization causes negative attitudes towards a non-native accent, this might also lead to a negative attitude towards the non-native speaker, also for non-native listeners (Dragojevic & Giles, 2014; Mai & Hoffmann, 2014; Setter & Jenkins, 2005).

Categorizing a non-native speaker based on the spoken accent might lead to a decrease in the perceived competence of the speaker (Butler, 2007; Dalton-Puffer, Kaltenboeck, & Smit, 1997; Gluszek & Dovidio, 2010; Nejjar, Gerritsen, van der Haagen, & Korzilius, 2012; Tsalikis, DeSheilds, & LaTour, 1991). Studies have shown that non-native speakers may be regarded as less comprehensible, less intelligent, less loyal, less competent, and were rated lower in status compared to speakers with a native accent (Gluszek & Dovidio, 2010; Hendriks et al., 2017).

**Managerial implications**

Regardless of increasing attempts at successfully implementing English as a Lingua Franca (ELF), little seems to be known about the managerial implications of the negative effects of non-native speakers using ELF (Piekkari & Zander, 2005). Within the business context, it has been demonstrated that low proficiency in ELF can have an impact on the professional competence of an employee (Deprez-Sims & Morris, 2010; Marschan-Piekkari, Welch, & Welch, 1999; Piekkari & Zander, 2005). Loss of power due to low proficiency in ELF can then lead to diminished hiring chances, promotional opportunities, diminished
empowerment, social exclusion, and even to the isolation of entire groups (Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Kulkarni & Sommer, 2015; Piekkari & Zander, 2005; Tsalikis et al., 1991).

Deprez-Sims and Morris (2010) studied the effect of non-native accents on employee evaluations by managers. They concluded that there are lower quality expectations for non-native accented employees in contrast to native speaking employees. Tsalikis et al. (1991) studied how an accent influences the effectiveness of a salesperson. They concluded that the salesperson with a non-native accent was judged less favourably compared to the native salesperson. With these studies, Deprez-Sims and Morrison (2010) and Tsalikis et al. (1991) demonstrated that the existence of negative connotations for non-native speakers are also present in the professional context.

Perceived comprehensibility

In addition to non-native accents possibly causing social categorization and therefore negative connotations, accents might also influence the understandability of the message (Derwing & Munro, 1997; Mai & Hoffmann, 2014; Nejjari et al., 2012). One of the aspects of understanding a message is comprehensibility (Nejjari et al., 2012). ‘Comprehensibility refers to judgments on a rating scale of how difficult or easy an utterance is to understand’ (Derwing & Munro, 1997, p. 2). Studies have shown that non-native speech affects the comprehensibility of the speaker, meaning a non-native speaker is harder to understand than a native speaker (Munro, Derwing, & Morton, 2006; Nejjari et al., 2012).

Dragojevic, Giles, Beck, & Tatum (2017) stated that the social identity theory and the stigmas for non-native speech “fail to fully account for the fact that language attitudes do not always reflect simple categorical judgments about group membership” (Dragojevic et al., 2017, p. 1). They found that the effects of non-native speech on attitudinal evaluations in their study were mediated by listeners’ processing fluency. Processing fluency refers to the amount of effort people are required to deliver to process speech, which is connected to the degree of difficulty the listener experiences to understand the speaker, which can be measured as the perceived comprehensibility. In general, accented speakers with a different L1, especially non-native or unfamiliar accents, are more difficult to comprehend than accented speakers with the same L1 (Dragojevic et al., 2017; Munro & Derwing, 1995a; 1995b).

The naïve theory presented by Dragojevic et al. (2017) explained that people place the responsibility of communicating effectively partly (or even entirely) on the speaker. Consequently, when a speaker is not easy to comprehend, the listener may interpret the low
perceived comprehensibility as an inability of the speaker to communicate, which can downgrade the status and likeability of the speaker (Dragojevic, 2016; Dragojevic et al., 2017). This means that processing fluency, or perceived comprehensibility, is a cue to differences in attitudinal evaluations, independent of native and non-native speech.

**Listener characteristics**

It has been discussed that speaking with a non-native English accent can lead to negative connotations and loss of comprehensibility (Munro & Derwing, 1995a; Nejjari et al., 2012). The non-native accentedness and comprehensibility are characteristics that are connected to the speaker. In addition to these speaker characteristics, there are also listener characteristics that influence attitudinal connotations. These characteristics are the extent to which a listener is familiar with the accent, the extent to which a listener feels similar to the speaker, and the extent to which a listener feels like the accent of the speaker is similar to their own accent.

**Accent familiarity**

Accent familiarity is defined as knowing an accent and having been exposed to it for some considerable amount of time (Nejjari et al., 2012). The study of Nejjari et al. (2012) suggested that when native listeners are familiar with a non-native English accent, they tend to rate this accent less favourably. They studied the effects of familiarity with the Dutch English accent evaluated by British listeners, and found that familiarity with the Dutch-English accent decreased the perceived status of, and the affect for, the Dutch English speakers.

However, Russo, Islam, & Koyuncu (2016) argued that high exposure to a non-native, and therefore familiar, accent moderates the negative stigmas associated with non-native accents. Milroy and McClenaghan (1977) found that for the listener it is not necessary to have a correct identification of the nationality of the speaker to have negative connotations with the non-native speaker. This suggests that merely the foreignness of an accent seems to be enough to create negative connotations for the speaker, and familiarity with the accent might not have an influence on these connotations.

Several other studies have focussed on the effect of accent familiarity on comprehensibility (Huang, 2013; Huang, Alegre, & Eisenberg, 2016; Nejjari et al., 2012). The studies of Huang (2013) and Huang et al. (2016) have found no significant differences between the evaluation of the comprehensibility for familiar and non-familiar accents. They
did however indicate that the listeners reported that their comprehension was slightly influenced by their familiarity with the accent and they tended to be more lenient towards the familiar accents. However, Wingstedt and Schulman (1984), Fayer and Krasinksi (1987), and Nejjar et al. (2012) found that familiarity with an accent increased perceived comprehensibility.

**Similarity attraction theory**

In addition to accent familiarity, Deprez-Sims and Morris (2010) argued that the similarity-attraction paradigm (Byrne, 1971) elaborates on the process of social categorizing. Perceived similarity in personal attitudes, background, and demographic characteristics, creates some interpersonal attraction, which can lead to more positive evaluations (Goldberg, 2005; Turban & Jones, 1988). Interpersonal attraction allows speakers that are perceived similar by the listener on demographic characteristics to be placed into the social in-group. It has been argued before, that if individuals are placed in the social in-group, the evaluation of the speaker turns out to be more positive compared to that of speakers that are categorized in the out-group. This would lead to similarity having a positive effect on speaker evaluations (Deprez-Sims & Morris, 2010).

Deprez-Sims and Morris (2010) studied the effects of similarity in the context of job hiring. They found that job applicants with higher perceived similarity were evaluated more positively in terms of suitability for the job. The applicant that was perceived as less similar to the participants was evaluated more negatively regarding suitability for the job.

Dahlbäck, Wang, Nass, and Alwin (2007) studied accent similarity for Swedish and American English. They found that when Swedish and American participants listened to a Swedish and American English accent, both preferred the speaker the same L1, and thus with a similar accent, over the speaker with a different L1. They also rated the speaker with the same L1 higher on knowledgeability and information quality. This suggests that in addition to similarities in demographic characteristics, accent similarity can also lead to more positively connotations.

The study of Chiba, Matsuura, and Yamamoto (1995) provided some evidence of the difference between accent familiarity and accent similarity. They researched the attitudes of Japanese individuals towards British English speakers and Japanese English speakers, and found that the familiarity with the British English accent led to more favourable connotations. This positive effect of accent familiarity however was not found for the Japanese English accent. They argued that “Japanese English has a negative connotation in Japan, where
English is a foreign language and the targeted model has been a native variety” (Chiba et al., 1995, p. 84). The study therefore showed that recognizing a Japanese English speaker did not result in accepting it and thus accent similarity can create negative connotations.

Nonetheless, Schmader and Lickel (2006) argued that, despite the theory of Deprez-Sims & Morris (2010), negative connotations could also be provoked for in-group members. The previous mentioned study of Chiba et al. (1995) provides an explanation for this phenomenon. When an in-group member has an accent that is connected to a negative stereotype of that in-group, in the study of Chiba et al. (1995) this is the Japanese English accent, this can lead to vicarious shame. Vicarious shame ensues from the tendency that people loathe anything that will confirm negative stereotypes of their social in-group. This can thus create negative connotations for the listener, regardless of the speaker being in the in-group (Schmader & Lickel, 2006).

Communication effectiveness

Lastly, all the above variables can have an influence on the communication effectiveness of the speaker. Tsalikis et al. (1991) found that a salesperson with a non-native accent was judged as being a less effective salesperson compared to the native salesperson. This suggests that non-native speech might have a negative effect on the actual message that is sent. Additionally, the perceived comprehensibility, accent familiarity, demographic similarity, accent similarity, and attitudinal evaluations might influence the communication effectiveness.

Research gaps

The literature review revealed several research gaps. Firstly, several studies have provided evidence for negative attitudinal evaluations for non-native accented speakers, and more positive evaluations for native speakers. These findings are however for a large part based on the evaluations of native listeners and only few studies have measured how non-native listeners evaluated native and non-native accented speakers (Buckingham, 2014; Butler, 2007; Chiba et al., 1995; Dalton-Puffer et al., 1997; Hendriks, van Meurs, & Hogevorst, 2016; Hendriks et al., 2017). The current study will therefore research the evaluations of non-native and native English accented speakers by non-native listeners.

Secondly, it was shown that there is an effect of non-native accents on comprehensibility, which is that non-native speech is less comprehensible compared to native speech. Besides, it was found that for listeners that were more familiar with an accent,
perceived comprehensibility was higher. The study of Dragojevic et al., (2017) found that processing fluency, or comprehensibility, was a mediating factor for accent variety and evaluations, indicating that processing fluency, or perceived comprehensibility, is itself a cue to attitudinal evaluations, independent of native and non-native speech. Subsequently, this study will test whether the non-native speakers were harder to comprehend than the native speakers, and whether perceived comprehensibility has an influence on the attitudinal evaluation of the speaker and the communication effectiveness, mediating the effects of accent variety.

Thirdly, research showed different effects of accent familiarity. Nejjari et al. (2012) found that accent familiarity enhanced negative connotations, Russo et al. (2016) found that accent familiarity moderated the negative connotations, and Wingstedt and Schulman (1984) and Fayer and Krasinski (1987) found no relationship between accent familiarity and attitudinal evaluations. These different findings might originate from the difference between non-native and native listeners in these studies. Nevertheless, since every possible effect of accent familiarity on evaluations is found, a need exists to investigate the effect of familiarity with accents on attitudinal evaluations. This study will therefore test the evaluations of Dutch listeners of a Dutch English and a Vietnamese English accent. It is expected that the participants will be less familiar with the Vietnamese English accent compared to the Dutch English accent.

Additionally, it also was suggested that perceived demographic similarity with the speaker could enhance the in-group effect that arises due to the social categorization. This implies that when a listener feels similar to the speaker, the attitudinal evaluations will be less negative. On the other hand, accent similarity can lead to vicarious shame and thus to negative evaluations, even though the speaker is still categorized in the in-group of the listener. Not much research has been done to verify both effects, and this study aims to provide insights in the effect of both similarities. Since Dutch listeners will evaluate a Dutch accented speaker, the speaker should be perceived as similar for both demography and accent similarity. This would not be true for the Vietnamese speaker.

Finally, studies on accent evaluations have been executed in different contexts, such as teaching (Buckingham, 2014; Butler, 2007; Dalton-Puffer et al., 1997; Hendriks et al., 2016; Huang, 2013), employability (Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Kulkarni & Sommer, 2015; Russo et al., 2016) and sales (Nejjari et al., 2012; Tsalikis et al., 1991). However, the research into non-native accents in the business field, and specifically management, is a neglected field (Piekkari & Zander, 2005).
Most studies within the business field have focussed on the social categorization of individuals due to ethnic or racial stigmas instead of accent related stigmas (Carlson & McHenry, 2006; Russo et al., 2016). Similarly, some scholars have researched the effects of language diversity, however this study focusses more on language proficiency in general rather than specifically on accents (Russo et al., 2016).

Due to the absence of accent studies in the business field, the current study is conducted in the business context, specifically focussing on interpersonal leadership communication. Interpersonal leadership is an important leadership skill managers should have in MNCs (Mumford, Campion, & Morgeson, 2007). Since the emphasis of interpersonal leadership lies not on leading an organisation but on leading people, communication is an essential component of this skill (Zander, 2005).

Due to globalisation and language standardization, it is more likely that managers are frequently non-native English speakers. Since previous literature has shown that non-native speech is related to negative connotations, non-native speech is not an area that should be neglected within leadership communication. Still, no previous research exists on the effects of non-native language on interpersonal leadership communication.

This study aims to test whether the attitudes towards the speaker, the communication effectiveness of the message, and the comprehensibility of Dutch English, Vietnamese English, and British English speakers differ for Dutch listeners in the context of interpersonal leadership communication. Subsequently, it also aims to test whether comprehension, the familiarity with the accent, the demographic similarity with the speaker, and the accent similarity influence the attitudinal evaluations. Additionally, it will be tested to what extent perceived comprehensibility mediates the relationship between accent variety and attitudinal evaluations, and accent variety and communication effectiveness. Lastly, it will be tested whether the effectiveness of the communication is can be predicted by the perceived comprehensibility, the attitudinal evaluations, accent familiarity, accent similarity, and demographic similarity. The research questions for this study are:

**Research question:** To what extent do Dutch listeners differ in their evaluations of Dutch English, Vietnamese English, and British English accented managers in the context of interpersonal leadership?
Sub-research question: To what extent do Dutch listeners differ in their evaluations of the perceived effectiveness of the message by Dutch English, Vietnamese English, and British English accented managers in the context of interpersonal leadership?

Sub-research question: To what extent is perceived comprehensibility a mediating factor for the relationship between accent variety and attitudinal evaluations, and accent variety and communication effectiveness?

Sub-research question: To what extent do attitudinal evaluations, perceived comprehensibility, accent familiarity, and demographic and accent similarity predict communication effectiveness?

Method

Materials

The first independent variable in this study was the accent variety of the speaker, consisting of two non-native varieties: Dutch English and Vietnamese English, and a native accent control group: British English. British English was selected as native accent, since this is the standard model for English in Europe (Setter & Jenkins, 2005). The Dutch English accent is used as the familiar accent, and the Vietnamese accent is used as the unfamiliar accent.

The three accent varieties were incorporated in the questionnaire in the form of audio files. The choice to use audio files as a material, instead of for example videos, was made to eliminate any extra-linguistic cues that play a role in communication, which ensured that the responses were measured solely as a result of the accent (Nejjari et al., 2012). To ensure that the results were not dependent on an individual speaker, two speakers, resulting in six audio files for three accent varieties, presented every accent variety.

Based on the chosen context of this study, interpersonal leadership communication, the content of audio files related to interpersonal leadership communication. Mumford et al. (2007) claimed there are several interpersonal leadership skills, of which persuasion is one, and a part of persuasion is motivation. Therefore, it was decided that the content of these audio files was a motivational pep talk. The motivational pep talk was a response to the struggle of an employee with their career path. The employee felt stressed about the next steps within its career and came to its manager for some advice. The text of the fragments contains
the response of the manager to the problems of the employee. The written content of the audio file can be found in appendix A. All participants listened to one of the six speakers.

Pre-test

To include the best possible sound records for the current study, a pre-test was performed. The audio files of the pre-test were recorded by 19 female speakers (nine Dutch speakers, six Vietnamese speakers, and four British speakers), aged between 22 and 25. The choice for female speakers was to ease the fragment collection, since the personal network of British and Vietnamese people consisted mainly of females. Through personal contact, the speakers were asked whether they were willing to record a short transcript. This transcript was then sent to them, and after recording, the transcript was sent back.

In the pre-test, 19 participants rated all 19 speakers on speaking quality and accent strength. All the elements in the pre-test were measured on 7-point Likert scales, anchored by ‘totally disagree – totally agree (based on Bayard, Weatherall, Gallois, and Pittam, 2001).

The Likert scales for the questions on voice quality and speaker confidence were introduced by the statement ‘The speaker sounds:’. Voice quality was measured with five items: ‘clearness, pleasantness, cheerfulness, monotony, and naturalness’ (α = .86). The statement ‘The speaker speaks quickly’ measured speech rate. Accent strength was measured by the statements ‘The speaker sounds like a native speaker’ and ‘The speaker has a clear audible foreign accent in her English’ (α = .94). The last question was an open question, asking what the participant thought the nationality of the speaker was.

Pre-test results

For the main experiment, the Dutch speakers 1 and 6, the Vietnamese speakers 1 and 3, and the British speakers 1 and 4 were selected. A one-way analysis of variance showed a significant effect of speaker on accent strength ($F (18, 360) = 43.42, p < .001$), voice quality ($F (18, 360) = 17.72, p < .001$), speaker confidence ($F (18, 360) = 16.85, p < .001$) and speech rate ($F (18, 360) = 11.96, p < .001$). Dutch speaker 1 ($M = 1.73, SD = 0.63$), Dutch speaker 6 ($M = 2.05, SD = 0.74$), Vietnamese speaker 1 ($M = 2.16, SD = 0.96$), and Vietnamese speaker 3 ($M = 1.63, SD = 0.80$) all scored similarly on accent strength (Bonferroni correction, $p = 1.00$). British speaker 1 ($M = 6.21, SD = 0.92$), and British speaker 4 ($M = 6.34, SD = 0.71$)
scored similarly on accent strength, but higher than the Dutch and Vietnamese speakers (Bonferroni correction, $p < .05$).

Dutch speaker 1 ($M = 3.94$, $SD = 0.99$) scored similarly on voice quality as Dutch speaker 6 ($M = 4.05$, $SD = 1.02$), Vietnamese speaker 1 ($M = 4.59$, $SD = 0.85$), and Vietnamese speaker 3 ($M = 3.15$, $SD = 0.99$) (Bonferroni correction, $p > .798$). Vietnamese speakers 1 scored better on voice quality as Vietnamese speaker 3. British speaker 1 ($M = 5.83$, $SD = 0.55$), and British speaker 4 ($M = 6.34$, $SD = 0.88$) scored similarly on voice quality, but British speaker 1 scored higher on voice quality compared to both Dutch and Vietnamese speakers (Bonferroni correction, $p < .05$). British speaker 4 scored similarly in voice quality to the Dutch 1 and Vietnamese speaker 1 (Bonferroni correction, $p > .013$).

For speaker confidence, Dutch speaker 1 ($M = 4.11$, $SD = 1.73$) scored similarly to Dutch speaker 6 ($M = 4.84$, $SD = 1.58$), Vietnamese speaker 1 ($M = 4.58$, $SD = 1.61$), and Vietnamese speaker 3 ($M = 2.89$, $SD = 1.20$) (Bonferroni correction, $p > .724$). Dutch speaker 6 did not score similarly to Vietnamese speaker 3. British speaker 1 ($M = 5.83$, $SD = 0.55$) scored similarly to Dutch speaker 1, Dutch speaker 6, and British speaker 4 ($M = 5.83$, $SD = 0.55$). British speaker 4 scored similarly to Vietnamese speaker 1, and Dutch speaker 6 (Bonferroni correction, $p > .138$).

For speech rate, Dutch speaker 1 ($M = 3.11$, $SD = 1.33$) scored similarly to Dutch speaker 6 ($M = 4.11$, $SD = 1.63$), Vietnamese speaker 1 ($M = 3.63$, $SD = 1.42$), and Vietnamese speaker 3 ($M = 3.00$, $SD = 1.50$) (Bonferroni correction, $p = 1.00$). British speaker 1 ($M = 4.95$, $SD = 1.62$) scored similarly to British speaker 4 ($M = 5.53$, $SD = 1.26$), Dutch speaker 6, and Vietnamese speaker 1 (Bonferroni correction, $p > .224$). British speaker 4 did not score similarly to Vietnamese speaker 1.

Table 1: Means and standard deviations for the accent strength for the selected speakers (1 = very strong accent, 7 = no accent).

<table>
<thead>
<tr>
<th></th>
<th>Dutch speaker 1</th>
<th>Dutch speaker 6</th>
<th>Vietnamese speaker 1</th>
<th>Vietnamese speaker 3</th>
<th>British speaker 1</th>
<th>British speaker 4</th>
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<tbody>
<tr>
<td>Accent strength</td>
<td>1.73 (0.63)</td>
<td>2.05 (0.74)</td>
<td>2.16 (0.96)</td>
<td>1.63 (0.80)</td>
<td>6.21 (0.92)</td>
<td>6.34 (0.71)</td>
</tr>
<tr>
<td>Voice quality</td>
<td>3.94 (0.99)</td>
<td>4.05 (1.02)</td>
<td>4.59 (0.85)</td>
<td>4.59 (0.85)</td>
<td>5.83 (0.55)</td>
<td>5.83 (0.55)</td>
</tr>
<tr>
<td>Speaker confidence</td>
<td>4.11 (1.73)</td>
<td>4.84 (1.58)</td>
<td>4.58 (1.61)</td>
<td>2.89 (1.20)</td>
<td>5.83 (0.55)</td>
<td>5.83 (0.55)</td>
</tr>
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</table>
Participants

A total of 180 Dutch speaking respondents took part in the main experiment (age: $M = 30$, $SD = 10.23$; range 18 – 61; 62.2% female). The majority of the participants had a university degree (61.1%), overall ranging from secondary school to university. The average working experience of the participants was 8 years (range 0 – 40) and 48.9% had a fulltime job, 31.1% had a part-time job, 18.3% had a side job, and 1.7% indicated to work freelance. The participants on average used English 31.5% of the time during their normal workdays ($SD = 28.79$). The average English proficiency the participants assigned to themselves was almost advanced ($M = 3.64$, $SD = 0.95$).

There was no relation between accent variety and gender ($\chi^2 (10) = 10.17$, $p = .426$), accent variety and age ($F (5, 174) < 1$), accent variety and educational level ($\chi^2 (15) = 13.50$, $p = .564$), and accent variety and proficiency of English ($F (5, 174) < 1$).

Design

The design of this study was a between subject verbal guise design, with accent variety as factor. Every participant listened to only one condition.

Instruments

To measure the attitude towards the speakers, three variables were included, based on Hendriks et al. (2017) and Hendriks et al. (2016). The three variables of perceived attitude were status, competence, and likeability. All these elements were measured on 7-point Likert scales (based on Bayard et al., 2001; Hendriks et al., 2016; Hendriks et al., 2017; and Mumford, Zaccaro, Harding, Jacobs & Fleishman, 2000). These Likert scales were introduced by the statement ‘The manager sounds:’, and anchored by ‘totally disagree – totally agree’.

Status was measured with five items: ‘authoritative, assertive, confidence, risk taking, independent’ ($\alpha = .86$). Competence was measured with six items: ‘reliable, intelligent, self-competent, professional, convincing, ambitious’ ($\alpha = .85$). Likeability was measured with five items: ‘cheerful, friendly, warm, openness, tolerance’ ($\alpha = .86$).

Perceived comprehensibility of the speaker was measured by the statement ‘I found the manager difficult to understand’, followed by a 7-point Likert scale, anchored by ‘totally disagree – totally agree’ (Hendriks et al., 2017).
Communication effectiveness was measured with three statements: ‘After listening to the manager I feel positive and motivated towards my career again’, ‘In response to this pep talk, I feel good about any future conversations with this manager’, and ‘It feels like the manager is committed to my situation’ ($\alpha = .85$), all followed by a 7-point Likert scale and anchored by ‘totally disagree – totally agree’.

Accent familiarity was measured with the statements ‘The manager has an accent I am familiar with’, and ‘I have regularly met speakers with this accent’, both followed by a 7-point Likert scale: ‘totally disagree – totally agree’. The last question was an open question: ‘What is the mother tongue of this speaker?’. The reliability of the two statements was not good ($\alpha = .66$), and therefore it was decided to use the data of the first question for the analyses.

Demographic similarity was measured with the statement ‘This person is similar to myself’ (based on Deprez-Sims & Morris, 2010). Accent similarity was measured by the statement ‘My accent is similar to that of the manager’. All scales were followed by a 7-point Likert scale: ‘totally disagree – totally agree’.

Accent strength was measured with the statement ‘The manager has a foreign accent in her English’, and ‘The manager sounds like a native speaker of English’ ($\alpha = .89$), both followed by a 7-point Likert scale: ‘totally disagree – totally agree’ (based on Hendriks et al., 2017).

The English proficiency of the participants was measured through a self-assessment on reading, listening, speaking and writing, which was measured with the statement ‘Indicate how you estimate your English level for the following four skills’, followed by a 5-point Likert scale: ‘Basic knowledge – Expert’. The reliability of the four items measuring English proficiency was good ($\alpha = .94$).

The questionnaire ended with some questions concerning the background information of the participant, e.g. age, gender, educational background, nationality, working conditions, years of work experience, the use of English during a normal workday, and the English proficiency of the participant.

**Procedure**

The questionnaire was administered using the online survey tool Qualtrics. Participants first read a brief introduction explaining the context of the questionnaire, which was followed by one random speech sample out of the total of six. After listening to the sample, questions were answered on the attitude towards the speaker, communication
effectiveness, perceived comprehensibility, accent familiarity, similarity, and accent strength. After these questions, the participants answered some personal questions. Overall, the questionnaire took about 5 minutes to complete. The participants were mainly approached via social media and through personal contact.

**Statistical treatment**

To start, a one-way ANOVA was used to do a manipulation check for accent strength. For the main research question and the first sub-research question, a multivariate analysis was used. The second sub-research question was introduced with four single regression analyses, followed by four mediation analyses for perceived comprehensibility, accent variety, communication effectiveness, likeability, competence, and status. Finally, a multiple regression for likeability, perceived comprehensibility, competence, status, accent familiarity, accent similarity, and demographic similarity on communication effectiveness was performed, split for accent variety.

**Results**

**Accent strength manipulation check**

A one-way ANOVA with accent variety as factor and accent strength showed a violation of the assumption of homogeneity of variance. The Welch’s adjusted F ratio was used, which showed a significant effect of accent strength on accent variety \( F(2, 116.31) = 92.97, p < .001 \). The Dutch speakers \( M = 2.21, SD = 1.14 \) and Vietnamese speakers \( M = 2.59, SD = 1.55 \) were perceived as having similarly accented speech, which was significantly stronger than that of the British speakers \( M = 5.12, SD = 1.29 \) (Bonferroni correction, \( p < .05 \)). These results show that the manipulation for accent strength was successful.

Table 2: Means and standard deviations for the accentedness for the Dutch English, Vietnamese English, and the British English accents (1 = very strong accent, 7 = no accent).

<table>
<thead>
<tr>
<th></th>
<th>Dutch English</th>
<th>Vietnamese English</th>
<th>British English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accent strength</td>
<td>2.21 (1.14)</td>
<td>2.59 (1.55)</td>
<td>5.12 (1.29)</td>
</tr>
</tbody>
</table>
Main analysis

A one-way multivariate analysis for status, likeability, competence, perceived comprehensibility, accent familiarity, accent similarity, demographic similarity, and communication effectiveness, with accent variety as factor, found a significant multivariate effect of accent variety ($F(16, 340) = 7.91, p < .001 \eta^2 = .271$).

The univariate analyses showed an effect of accent variety on status ($F(2, 177) = 19.75, p < .001, \eta^2 = .182$), competence ($F(2, 177) = 27.26, p < .001, \eta^2 = .236$), likeability ($F(2, 177) = 5.35, p = .006, \eta^2 = .057$), perceived comprehensibility ($F(2, 177) = 17.77, p < .001, \eta^2 = .167$), accent familiarity ($F(2, 177) = 8.29, p < .001, \eta^2 = .086$), accent similarity ($F(2, 177) = 18.55, p < .001, \eta^2 = .173$), demographic similarity ($F(2, 177) = 3.84, p = .023, \eta^2 = .42$), and communication effectiveness ($F(2, 177) = 6.57, p = .002, \eta^2 = .69$).

Both the Dutch speakers ($M = 3.61, SD = 1.03$) and the Vietnamese speakers ($M = 3.14, SD = 1.14$) scored similarly on status, and the British speakers scored higher ($M = 4.38, SD = 1.08$) compared to both the non-native accented speakers. For competence, both the Dutch speakers ($M = 3.87, SD = 0.92$) and the Vietnamese speakers ($M = 3.31, SD = 0.98$) scored similarly, and the British speakers scored higher ($M = 4.69, SD = 1.16$). For likeability, both the Dutch speakers ($M = 3.97, SD = 1.16$) and the Vietnamese speakers ($M = 4.09, SD = 1.24$) scored similarly, and the British speakers scored higher ($M = 4.66, SD = 1.27$). Finally, the Dutch speakers ($M = 3.63, SD = 1.21$) and the Vietnamese speakers ($M = 3.42, SD = 1.44$) scored similarly on communication effectiveness, and the British speakers scored higher ($M = 4.28, SD = 1.43$). (Bonferroni correction, $p < .05$).

Table 3. Means and standard deviations for status, likeability, competence, and communication effectiveness for Dutch English, Vietnamese English, and British English speakers ($1 = \text{very negative}, 7 = \text{very positive}$).

<table>
<thead>
<tr>
<th></th>
<th>Dutch English</th>
<th>Vietnamese English</th>
<th>British English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>3.61 (1.03)</td>
<td>3.14 (1.14)</td>
<td>4.38 (1.08)</td>
</tr>
<tr>
<td>Likeability</td>
<td>3.97 (1.16)</td>
<td>4.09 (1.24)</td>
<td>4.66 (1.27)</td>
</tr>
<tr>
<td>Competence</td>
<td>3.87 (0.92)</td>
<td>3.31 (0.98)</td>
<td>4.69 (1.16)</td>
</tr>
<tr>
<td>Communication effectiveness</td>
<td>3.63 (1.21)</td>
<td>3.42 (1.44)</td>
<td>4.28 (1.43)</td>
</tr>
</tbody>
</table>
The Dutch speakers ($M = 4.13, SD = 1.59$) and Vietnamese speakers ($M = 4.62, SD = 1.64$) were scored as equally comprehensible, but harder to comprehend than the British speakers ($M = 2.87, SD = 1.75$). The Dutch accent ($M = 4.83, SD = 1.44$) was equally familiar to the participants as the British accent ($M = 4.82, SD = 1.54$), and both were more familiar than the Vietnamese accent ($M = 3.82, SD = 1.70$). The Dutch speakers ($M = 3.10, SD = 1.59$) scored higher on accent similarity compared to both the British speakers ($M = 2.15, SD = 1.09$) and the Vietnamese speakers ($M = 1.67, SD = 1.43$), who scored similarly on accent similarity. The Dutch speakers ($M = 3.28, SD = 1.54$) and the British speakers ($M = 3.77, SD = 1.68$) scored similarly on demographic similarity, and both scored higher than the Vietnamese speakers ($M = 2.98, SD = 1.46$) (Bonferroni correction, $p < .05$).

Table 4. Means and standard deviations for the familiarity with the Dutch English, Vietnamese English, and British English accents (1 = very unfamiliar, 7 = very familiar), means and standard deviations for the perceived comprehensibility of the Dutch English, Vietnamese English, and British English accents (1 = very easy to comprehend, 7 = very hard to comprehend), and means and standard deviations for accent and demographic similarity with the Dutch English, Vietnamese English, and British English accents (1 = very dissimilar, 7 = very similar).

<table>
<thead>
<tr>
<th></th>
<th>Dutch English</th>
<th>Vietnamese English</th>
<th>British English</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
</tr>
<tr>
<td>Accent familiarity</td>
<td>4.83 (1.44)</td>
<td>3.82 (1.70)</td>
<td>4.82 (1.54)</td>
</tr>
<tr>
<td>Perceived comprehensibility</td>
<td>4.13 (1.59)</td>
<td>4.62 (1.64)</td>
<td>2.87 (1.75)</td>
</tr>
<tr>
<td>Accent similarity</td>
<td>3.10 (1.59)</td>
<td>1.67 (1.43)</td>
<td>2.15 (1.09)</td>
</tr>
<tr>
<td>Demographic similarity</td>
<td>3.28 (1.54)</td>
<td>2.98 (1.46)</td>
<td>3.77 (1.68)</td>
</tr>
</tbody>
</table>

Since the pre-test showed that not all the individual speakers were equal on voice quality, speaker confidence, and speech rate, it was tested whether the results were qualified for the individual speakers. A similar univariate analysis was executed, but with speaker and
accent variety as factors. This analysis found a significant multivariate effect of accent variety 
\((F (16, 336) = 8.14, p < .001 \, \eta^2 = .283)\), and speaker \((F (8, 167) = 2.47, p = .015 \, \eta^2 = .106)\). The results also showed an interaction effect between speaker and accent variety \((F (16, 334) = 2.19, p = .005 \, \eta^2 = .095)\).

The univariate analyses showed an interaction effect of speaker and accent variety on perceived comprehensibility \((F (2, 174) = 4.63, p = .011 \, \eta^2 = .051)\), accent similarity \((F (2, 174) = 3.79, p = .024 \, \eta^2 = .042)\), and status \((F (2, 174) = 4.18, p = .017 \, \eta^2 = .046)\). The analyses showed that for all accent varieties, the two speakers were evaluated differently, namely that the first speaker was evaluated more positively. To some extent, this was already partly shown in the results of the pre-test. The interaction effect for perceived comprehensibility can be explained due to the fact that for the British speakers, the second speakers scored better than the first speaker. For accent similarity, this was the case with the Vietnamese speakers, and for status, this was true for the Dutch speakers. These analyses showed that the findings of the first multivariate test might be slightly qualified by the differences between the two speakers per accent variety. However, since this pattern is displayed in most variables, this should not create problems for the overall analysis.

Summarizing, the main analysis showed that for status, likeability, competence, communication effectiveness, and perceived comprehensibility, the Vietnamese speakers scored similarly to the Dutch speakers, and both scored less positively than the British speakers.

**Regression analysis for perceived comprehensibility on attitude towards the speaker and communication effectiveness**

The multivariate analysis showed that attitudes towards the speakers differ between accent varieties. To test whether the differences in attitudes emanate from the different accent varieties or from the differences in perceived comprehensibility, four single regression analyses were executed.

The single regression analysis for perceived comprehensibility on competence showed that perceived comprehensibility explained 16% of the variance in competence \((F (1, 178) = 35.75, p < .001)\). Perceived comprehensibility was shown to be a significant predictor \((B = - .263, p < .001)\) for the competence of the speakers. When perceived comprehensibility increased with 1 score on the scale, competence decreased with 0.263 on the scale, given that all other factors are kept constant. This means that when the speakers were harder to comprehend, the perceived competence decreased.
The single regression analysis for perceived comprehensibility on communication effectiveness showed that perceived comprehensibility explained 11% of the variance in communication effectiveness ($F(1, 178) = 22.01, p < .001$). Perceived comprehensibility was shown to be a significant predictor ($B = -.258, p < .001$) for the communication effectiveness of the speakers. When perceived comprehensibility increased with 1 score on the scale, communication effectiveness decreased with 0.190 on the scale, given that all other factors are kept constant. This means that when the speakers were harder to comprehend, the effectiveness of the message decreased.

The single regression analysis for perceived comprehensibility on likeability showed that perceived comprehensibility explained 7% of the variance in likeability ($F(1, 178) = 14.51, p < .001$). Perceived comprehensibility was shown to be a significant predictor ($B = -.190, p < .001$) for the likeability of the speakers. When perceived comprehensibility increased with 1 score on the scale, likeability decreased with 0.190 on the scale, given that all other factors are kept constant. This means that when the speakers were harder to comprehend, the perceived likeability decreased.

The single regression analysis for perceived comprehensibility on status showed that perceived comprehensibility explained 5.6% of the variance in status ($F(1, 178) = 11.72, p = .001$). Perceived comprehensibility was shown to be a significant predictor ($B = -.164, p = .001$) for the status of the speakers. When perceived comprehensibility increased with 1 score on the scale, status decreased with .164 on the scale, given that all other factors are kept constant. This means that when the speakers were harder to comprehend, the perceived status decreased.

The analyses showed that comprehensibility was a significant predictor for competence, communication effectiveness, likeability, and status, and thus explained to some extent the variance in these variables.

**Mediation analysis for perceived comprehensibility and accent variety on attitudinal evaluations and communication effectiveness**

In the previous regression analyses, it was shown that perceived comprehensibility explained some of the differences between attitudinal evaluations and communication effectiveness of the accent varieties. Mediation analyses were executed to test whether the differences in perceived comprehensibility mediated the relationship between accent variety and attitudinal evaluations, and accent variety and communication effectiveness.
Mediation perceived comprehensibility and accent variety on attitude

The relationship between accent variety and competence was slightly mediated by perceived comprehensibility. As Figure 2 illustrates, the standardized regression coefficient between accent variety and perceived comprehensibility was statistically significant, as was the standardized regression coefficient between perceived comprehensibility and competence. The standardized indirect effect was (-.287)*(-.408) = .117. The Sobel test for the mediation of perceived comprehensibility was significant (Sobel Z = 2.00, p = .045), showing the effect of accent variety on competence was mediated by perceived comprehensibility. However, since the relationship between accent variety and competence was still significant and the Sobel test was nearly insignificant, this relationship was only slightly mediated.

\[ \beta = -0.663 \]
\[ \beta = -0.287 \quad (p < .001) \]

\[ \beta = -0.263 \]
\[ \beta = -0.408 \quad (p < .001) \]

\[ \beta = 0.264 \]
\[ \beta = 0.185 \quad (p = .009) \]

Figure 1: Standardized regression coefficients for the direct relationship between accent variety and competence, and the standard regression coefficients for the indirect relationship between accent variety and competence as mediated by perceived comprehensibility.

The relationship between accent variety and likeability was mediated by perceived comprehensibility. As Figure 1 illustrates, the standardized regression coefficient between
accent variety and perceived comprehensibility was statistically significant, as was the standardized regression coefficient between perceived comprehensibility and likeability. The standardized indirect effect was \((-0.287) \times (-0.275) = 0.079\). The Sobel test for the mediation of perceived comprehensibility was significant (Sobel Z = 2.30, p = .021), showing the effect of accent variety on likeability was mediated by perceived comprehensibility. However, since the relationship between accent variety and likeability was still significant, this relationship was not fully mediated.
Figure 2: Standardized regression coefficients for the direct relationship between accent variety and likeability, and the standard regression coefficients for the indirect relationship between accent variety and likeability as mediated by perceived comprehensibility.

The relationship between accent variety and status was mediated by perceived comprehensibility. As Figure 3 illustrates, the standardized regression coefficient between accent variety and perceived comprehensibility was statistically significant, as was the standardized regression coefficient between perceived comprehensibility and status. The standardized indirect effect was \((-0.287) \times (-0.249) = 0.071\). The Sobel test for the mediation of perceived comprehensibility was significant (Sobel Z = 2.51, \(p = 0.012\)), showing the effect of accent variety on status was mediated by perceived comprehensibility. However, since the relationship between accent variety and status was still significant, this relationship was not fully mediated.
Figure 3: Standardized regression coefficients for the direct relationship between accent variety and status, and the standard regression coefficients for the indirect relationship between accent variety and status as mediated by perceived comprehensibility.

Mediation perceived comprehensibility and accent variety on communication effectiveness

The relationship between accent variety and communication effectiveness was fully mediated by perceived comprehensibility. As Figure 4 illustrates, the standardized regression coefficient between accent variety and perceived comprehensibility was statistically significant, as was the standardized regression coefficient between perceived comprehensibility and communication effectiveness. The standardized indirect effect was (-.287)*(-.332) = .095. The Sobel test for the mediation of perceived comprehensibility was significant (Sobel Z = 3.16, p < .001), showing the effect of accent variety on communication effectiveness was fully mediated by perceived comprehensibility, since the relationship between accent variety and communication effectiveness was not significant anymore.
Figure 4: Standardized regression coefficients for the direct relationship between accent variety and communication effectiveness, and the standard regression coefficients for the indirect relationship between accent variety and communication effectiveness as mediated by perceived comprehensibility.

Summarizing, comprehensibility did for some part mediate the relationship between accent variety and status, likeability, and competence. Comprehensibility did fully mediate the relationship between accent variety and communication effectiveness.

**Regression analysis split for accent variety for all factors on communication effectiveness**

The previous regression analysis showed that the variables entered, accent variety and perceived comprehensibility, explained 11% of the variance in communication effectiveness ($F (2, 172) = 12.07, p < .001$). Since 11% is only a small percentage, additional multiple regression analyses were executed. These multiple regression analyses tested whether perceived comprehensibility, likeability, status, competence, accent familiarity, accent similarity, and demographic similarity predicted communication effectiveness.
The multiple regression analyses, split for accent variety, showed that the variables entered, perceived comprehensibility, likeability, status, competence, accent familiarity, accent similarity, and demographic similarity explained 59% of the variance in communication effectiveness for the Dutch speakers ($F(7, 52) = 13.30, p < .001$), 64% for the Vietnamese speakers ($F(7, 52) = 15.67, p < .001$), and 69% for the British speakers ($F(7, 52) = 19.78, p < .001$).

For the Dutch speakers, perceived comprehensibility ($B = -.143, p = .048$), competence ($B = .518, p = .003$), likeability ($B = .325, p = .004$), and demographic similarity ($B = .287, p = .002$) were shown to be significant predictors for communication effectiveness. When perceived comprehensibility increased with 1 score on the scale, communication effectiveness decreased with 0.143 on the scale, given that all other factors are kept constant. This means that when the Dutch speakers were harder to comprehend, communication effectiveness decreased. When competence increased with 1 score on the scale, communication effectiveness increased with 0.518 on the scale, given that all other factors are kept constant. When likeability increased with 1 score on the scale, communication effectiveness increased with 0.325 on the scale, given that all other factors are kept constant. When demographic similarity increased with 1 score on the scale, communication effectiveness increased with 0.287 on the scale, given that all other factors are kept constant. Status ($B = -.219, p = .139$), accent familiarity ($B = .034, p = .678$), and accent similarity ($B = -.022, p = .781$), were no significant predictors for communication effectiveness.

For the Vietnamese speakers, perceived comprehensibility was not shown to be a significant predictor ($B = .013, p = .874$) for communication effectiveness. Competence ($B = .518, p = .017$), likeability ($B = .271, p = .026$), and demographic similarity ($B = .379, p < .001$) were significant predictors for communication effectiveness. When competence increased with 1 score on the scale, communication effectiveness increased with 0.518 on the scale, given that all other factors are kept constant. When likeability increased with 1 score on the scale, communication effectiveness increased with 0.271 on the scale, given that all other factors are kept constant. When demographic similarity increased with 1 score on the scale, communication effectiveness increased with 0.379 on the scale, given that all other factors are kept constant. Status ($B = .012, p = .934$), accent familiarity ($B = -.108, p = .133$), and accent similarity ($B = -.035, p = .750$) were no significant predictors for communication effectiveness.

For the British speakers, perceived comprehensibility was not shown to be a significant predictor ($B = .018, p = .798$) for communication effectiveness. Competence ($B =
.335, p = .047), likeability (B = .416, p = .001), and demographic similarity (B = .291, p = .002) were significant predictors for communication effectiveness. When competence increased with 1 score on the scale, communication effectiveness increased with 0.335 on the scale, given that all other factors are kept constant. When likeability increased with 1 score on the scale, communication effectiveness increased with 0.416 on the scale, given that all other factors are kept constant. When demographic similarity increased with 1 score on the scale, communication effectiveness increased with 0.291 on the scale, given that all other factors are kept constant. Status (B = .017, p = .905), accent familiarity (B = -.063, p = .436), and accent similarity (B = .083, p = .388) were no significant predictors for communication effectiveness.

Summarizing, for all accent varieties competence, likeability, and demographic similarity were significant predictors for communication effectiveness. Comprehensibility was a significant predictor for the Dutch speakers, but not for the Vietnamese and English speakers.

Discussion and Conclusion

This study aimed to identify differences between the attitudinal evaluations, communication effectiveness, and perceived comprehensibility for Dutch English, Vietnamese English, and British English speakers in the context of interpersonal leadership for Dutch listeners. The first point of interest was to investigate if Dutch listeners differed in their evaluations of Dutch English, Vietnamese English, and British English accented managers in the context of interpersonal leadership. The second point of interest to examine if Dutch listeners differed in their evaluations of the perceived effectiveness of the message by Dutch English, Vietnamese English, and native English accented managers in the context of interpersonal leadership. Additionally, it was investigated whether accent familiarity, demographic similarity, and accent similarity influenced the attitudinal evaluations and communication effectiveness. The third point of interest was to investigate if perceived comprehensibility mediated the relationship between accent variety and attitudinal evaluations, and accent variety and communication effectiveness. The last point of interest was to examine to what extent attitudinal evaluations, perceived comprehensibility, accent familiarity, demographic and accent similarity predicted communication effectiveness.

Firstly, the findings of the current study showed that the Dutch and Vietnamese speakers scored similarly on status, likeability, competence, comprehensibility, and communication effectiveness. The British speakers scored more positively on all variables.
The findings for accent familiarity showed that the British and Dutch English accents were similarly familiar to the listeners, and the Vietnamese English accents were less familiar. This confirms that the manipulation was successful, and the two non-native accents were different in terms of accent familiarity. Nonetheless, the findings did not show any differences between the evaluations of the Dutch English and the Vietnamese English accents for status, likeability, competence, communication effectiveness, or even comprehensibility. This indicates that accent familiarity did not influence the evaluations of non-native and native speakers.

The findings of the current study showed that the Dutch and the British speakers scored similarly on demographic similarity, and the Vietnamese speakers scored lower. This means that the participants felt more similar to the Dutch and British speakers, compared to the Vietnamese speakers. For accent similarity, the Dutch speakers scored highest, and the British and Vietnamese speakers scored similarly, below the Dutch speakers. This indicates that the participants perceived the accent of the Dutch speakers as similar to their own accent, compared to the Vietnamese and British accents. Even though the non-native speakers scored different on demographic and accent similarity, they scored similarly on attitudinal evaluations, communication effectiveness, and comprehensibility, and demographic and accent similarity thus did not influence these evaluations.

Secondly, four regression analyses for perceived comprehensibility on attitude and communication effectiveness showed that perceived comprehensibility explained 16% of the variance in competence, 11% of the variance in communication effectiveness, 7% of the variance of likeability, and 5.6% of the variance in status. These results indicated that perceived comprehensibility explained a small portion of the differences for status, competence, likeability and communication effectiveness.

Since perceived comprehensibility did for some part explain the variances, four mediation analyses were performed. This was done to test to what extent perceived comprehensibility mediated the effects of accent variety on attitudinal evaluations and communication effectiveness. The three mediation analyses for perceived comprehensibility and accent variety on attitudinal evaluations showed that perceived comprehensibility did mediate the effect of accent variety on attitudinal evaluations, however, accent variety was still a significant predictor. This means that perceived comprehensibility decreased the effect of accent variety on attitudinal evaluations, but it did not nullify this effect.

The mediation analysis for perceived comprehensibility and accent variety on communication effectiveness showed that perceived comprehensibility fully mediated the
effects of accent variety on communication effectiveness. In other words, the Dutch and Vietnamese speakers were evaluated more negatively on communication effectiveness than the British speakers, because the non-native speech was harder to comprehend, and not because they were listening to non-native English.

Finally, three regression analyses showed that for the Dutch speakers perceived comprehensibility, competence, likeability, and demographic similarity were significant predictors for communication effectiveness. For both the Vietnamese and British speakers’ competence, likeability, and demographic similarity were significant predictors. For all three varieties, status, accent familiarity, and accent similarity were insignificant predictors for communication effectiveness.

The most remarkable conclusion that can be drawn from this is that although the Dutch and the Vietnamese speakers scored similarly on perceived comprehensibility, for the Dutch speakers this did influence the communication effectiveness, and for the Vietnamese speakers this did not. It shows that if a Dutch speaker is harder to comprehend, the effectiveness of the communication decreased. Since this was not found for the Vietnamese of British speaker, it might suggest that, although accent similarity was no significant predictor, vicarious shame may have played a role here. As has been states before, vicarious shame ensues from the tendency that people loathe anything that will confirm negative stereotypes of their social in-group (Schmader & Lickel, 2006). Because the study showed that perceived comprehensibility was a significant predictor for communication effectiveness for the Dutch speakers, but not for the Vietnamese speakers, this indicates that the negative feeling towards the Dutch speakers were more intense, which agrees with the theory of vicarious shame. It is also noteworthy, that for all three varieties, of all attitudinal evaluations, only status did not predict communication effectiveness. This indicates that perceived status was not important for the communication effectiveness, while likeability and competence were.

**Theoretical contributions**

**Speaker evaluations**

Findings of the current study that the two non-native English speakers scored more negatively on attitudinal evaluations compared to the native English speakers concur with the social identity theory (Dragojevic & Giles, 2014; Tajfel et al., 1971), which suggests that language is closely related to the social identity of a person, and speaking with an accent might therefore lead to social categorization. Because non-nativeness is accompanied by a stigma and could be a powerful cue for categorizing a non-native speaker into the out-group,
which is evaluated more negatively (Deprez-Sims & Morris, 2010; Gluszek & Dovidio, 2010).

Furthermore, the studies of Butler (2007), and Dalton-Puffer et al. (1997) found that non-native listeners scored non-native accents more negatively compared to native speakers. The studies were similar to the current study to the extent that both used the evaluations of non-native listeners for native speakers, and non-native speakers with the same L1. Although the setup of these studies were similar to the present study, these studies were conducted in the teaching context. This study adds a verification for the more negative evaluations for non-native speakers in the professional context of interpersonal leadership communication.

Tsalikis et al. (1991) and Nejjari et al. (2012) found that non-native speakers were evaluated more negatively compared to native speakers, however, they studied the evaluations of native listeners. This suggests that it does not matter whether the listener is native or non-native, in the end the non-native speaker will be expected to be rated more negatively on attitudinal evaluations.

The findings also showed that non-native speakers scored more negatively on communication effectiveness, compared to native speakers. This supports the findings Tsalikis et al. (1991), who argued that a non-native salesperson scored lower on sales capabilities compared to a native salesperson.

**Comprehensibility**

The findings that perceived comprehensibility for the Dutch speakers and the Vietnamese speakers were similar, and that of the British speakers was better, supported the findings of Munro et al. (2006) and Nejjari et al. (2012), that non-native accents scored lower on perceived comprehensibility. Nevertheless, Wingstedt and Schulman (1984), Fayer and Krasinksi (1987), and Nejjari et al. (2012) all found that familiarity with an accent increased perceived comprehensibility. This did not concur with the current findings, since the Dutch speakers were not better comprehended than the Vietnamese speakers, although the Dutch speakers scored higher on familiarity.

The finding of low comprehensibility for the Dutch speakers might be explained by the fact that comprehensibility was measured as perceived comprehensibility. This indicates that the comprehensibility was subjective to the listener, which might have been influenced by vicarious shame. If a Dutch listener hears a strongly accented Dutch English speaker, this might trigger negative associations for the communication, since low comprehensibility might be connected to the inability of the speaker, especially when it is a speaker of the same L1.
(Dragojevic et al., 2017). This would mean that maybe the Dutch speakers were not hard to comprehend, but the participants only felt like they were hard to comprehend.

The findings that the perceived comprehensibility slightly mediated the effect of accent variety on status, likeability, and competence, and fully mediated the effects of accent variety on communication effectiveness concur with the findings of Dragojevic et al. (2017), that strong accented speakers were evaluated more negatively than slightly accented speakers because the speaker was harder to comprehend, and not because the speaker had a stronger accent. Although the current study found no different accent strengths, it is shown that the non-native speakers were harder to comprehend, and scored more negatively than the native speakers. This indicates that the findings of Dragojevic et al. (2017) do not only apply to strong and slight accent strengths, but also to non-native and native speech.

**Accent familiarity**

The findings showed that the Dutch accent and the Vietnamese accents were not similar on accent familiarity, but did score similarly on all variables, and thus familiarity did not influence attitudinal evaluations, comprehensibility, or communication effectiveness. This concurs with the studies of Huang (2013) and Huang et al. (2016) who found no differences in terms of perceived comprehensibility for familiar and non-familiar accents, and Fayer and Krasinsks (1987), who found that there was no relationship between accent familiarity and attitudinal evaluations. It also supports the findings of Milroy and McClenaghan (1977), who found that merely the non-nativeness of an accent seems to be enough to create negative attitudinal evaluations, indicating that familiarity has no influence on the evaluations, but that non-nativeness does. Though, the findings do contradict the findings of Nejjari et al. (2012), that higher familiarity of a native listener with a non-native accent enhanced negative connotations, and the findings of Russo et al. (2016), that accent familiarity moderates the negative stigma’s, since the current findings displayed no difference for the evaluations of familiar and non-familiar accents.

A possible explanation for the non-apparent results for accent familiarity might be that the accent familiarity scores of all the speakers were not extremely high. The scores for the Dutch and British speakers were around 5, out of the scale of 7. This indicates that there were indeed similarities between familiarity with the Dutch and the British and the significantly different familiarity with the Vietnamese accents, but overall accent familiarity for all accents was still not high. This is peculiar, since this means that the Dutch listeners did not fully recognize their own accent, or the British accent, which would be expected with the frequency
of the use of English by the participants in daily life. Correspondingly, the English proficiency of the participants indicated that they were skilled in the use of English, and it thus would be expected that the participants are using English more frequently, and would be able to recognize accents more easily.

**Demographic and accent similarity**

The findings that the Vietnamese speakers were shown to be scored lower on demographic similarity compared to the Dutch speakers, but there was no difference in the attitudinal evaluations did not concur with the findings of Goldberg (2005), Turban & Jones (1988), and Deprez-Sims and Morris (2010), that when individuals feel demographically similar, this can create some interpersonal attraction, which can lead to more positive evaluations.

The findings that there was a significant difference for the Dutch and Vietnamese speakers on accent similarity, but there was no difference in the attitudinal evaluations did not concur with the findings of Dahlbäck et al. (2007), that listeners preferred non-native speakers with the same L1 over a non-native speaker with another L1. On the other hand, it does support the findings of Chiba et al. (1995), that because of vicarious shame (Schmader and Lickel, 2006) listeners did not prefer their own accent over a native accent, since the British speakers in the current study did score lower on accent similarity, but higher on attitudinal evaluations. Vicarious shame ensues from the tendency that people loathe anything that will confirm negative stereotypes of their social in-group, which means that when the participants heard the Dutch speakers speak English, this confirmed the negative stereotypes of Dutch English, and the speaker was evaluated more negatively.

Finally, overall findings that the non-native speakers scored more positive on all variables compared to the British speakers concur with the findings of Setter and Jenkins (2005) and Chiba et al. (1995), that British English is the target model language in the Netherlands, and thus is evaluated more positively. The present study showed that, irrespectively of accent familiarity, accent similarity, and demographic similarity, the British speakers scored better than both non-native accents on attitudinal evaluations and communication effectiveness. This indicates that the British native accent was preferred, even when the accent was not seem as similar to the participants. Concluding, for the Dutch listeners in this study, British English was the target model for English speakers.
An explanation for the non-apparent results for accent similarity and demographic similarity might be that there were significant differences between the Dutch speakers and the Vietnamese speakers, but the average score for both similarities were relatively low. On average, the participants scored the Dutch speakers a 3.10 on the scale of 7 on accent similarity, and a 3.28 on the scale of 7 for demographic similarity. Looking at the scales, this can be translated into “somewhat disagree”. This means that when the Dutch listeners were asked if they felt similar to the speaker, or felt like the accent of the speaker was similar to their own accent, they responded with “I somewhat disagree”. Concluding, since there were no positive scores on the scale for the similarities, it can be established that the participants felt dissimilar to all accent varieties, but a little less dissimilar to the Dutch speakers, which explained why accent similarity and demographic similarity might have had no influence on the evaluations.

The lack of perceived similarity of the participants with the Dutch speakers might be explained by several factors. Firstly, as has been shown, the perceived accent strength of the Dutch speakers was strong. This was already found in the pre-test, but to keep the accent strength similar to that of the Vietnamese speakers, the strong Dutch accented speakers were selected for the main experiment. This might have caused for low scores on similarity, since 61% of the participants had a university degree, and overall the participants scored their English proficiency as advanced. These characteristics might cause for the participants not feeling similar to a strongly accented Dutch English speaker, since the participants might have felt that they had a better accent in their English. The vicarious shame theory might also have played a role in the lack of accent and demographic similarity. Since all participants were highly educated and more experienced with the use of English, they might have felt vicarious shame towards the strongly displayed accent of their own L1, and thus no similar feeling towards the speakers.

**Practical implications**

The findings of this study have some practical implications for MNCs. It was discussed that MNCs more often adopt English as a Lingua Franca, which in turn leads to more non-native speaking managers. The current study showed that speaking with a non-native accent can lead to more negative evaluations for managers. Consequently, MNCs with non-native English speaking managers should be aware of these effects. It also showed that comprehensibility is an important variable that influences the evaluations, and it is even
shown that for communication effectiveness, perceived comprehensibility is more important than accent variety.

Since non-native speakers will always speak with some degree of an accent (Lippi-Green, 1997), it is recommended for MNCs to educate managers on reducing their accent strength and increasing comprehensibility. Training on accent strength and comprehensibility will likely reduce negative evaluations for non-native speaking managers, and it will trigger more effective communication.

Contributions of this study

Compared with previous studies about the effect of non-native speech on attitudinal evaluations, comprehensibility, communication effectiveness, accent familiarity, accent similarity, and demographic similarity, this study has provided some additional insights. Overall, it was shown that the non-native speakers scored lower on attitudinal evaluations, comprehensibility, and communication effectiveness. This has been found in several previous studies, this study however validates that these negative effects of non-native speech also exist in a professional context, especially when the employees of the company are advanced in their English and they are listening to a strongly accented speaker. In addition, it provided some important insights on the role of comprehensibility on speaker evaluations. For a large part in previous research, differences between speaker evaluations have been explained by social categorizing because of the accent someone has. This study showed that comprehensibility partially mediates the effects of accent variety on attitudinal evaluations, and even fully mediated the effects of accent variety on communication effectiveness. This indicates that, in this study, the social categorization of speakers into the in- or out-group was not the main explanatory reason for the differences in evaluations, but that the comprehensibility of the speech is a very important variable, complementing accented speech, or even substituting accented speech.

Limitations and future research

The current study did have some limitations. Firstly, the study used sound fragments of female speakers aged 22-25 years. This profile is not the general profile of a manager, which consequently might have influenced the evaluations of the participants, since the speakers might not have been fully perceived as managers. For future research, it is advised to use speakers that are more similar to how employees see a manager. This would mean that the
speakers should be at least aged above 35, since it normally takes some years of working experience to achieve the management level, and assuming that the average person starts working in their twenties, at least 10 years of experience should be taken into account for this development. It is also possible to use speakers that facilitate a management role in real life. Since these speakers are more experienced with management, it might cause for more natural recordings, and thus responses that might be more representative for the reality.

Secondly, the initial aim of this study was to include analyses for degrees of accent strengths. But the pre-test data showed that all the Vietnamese speakers were perceived as having a strong accent, and therefore with this data it was not possible to include several accent in the main experiment. Based on these findings, it was decided to exclude accent strength as a factor, and using only strong accented speakers for both the Dutch and the Vietnamese groups.

Previous studies showed that additionally to non-native English accents being evaluated more negatively than native speakers, listeners evaluated stronger non-native even more negatively than slightly non-native accents (Hendriks et al., 2017; Hendriks et al., 2016). Studies also showed that speakers with strong non-native accents have been found to be more difficult to comprehend than speakers with a slight accent (Stibbard & Lee, 2006) and slightly accented speakers are equally evaluated on comprehensibility as native speakers (Munro & Derwing, 1995a; Munro & Derwing, 1995b; Nejjari et al., 2012).

The use of relatively strong non-native accents might therefore have caused for some unexpected results, for example, that accent familiarity did not influence the attitudinal evaluations and the lack of accent and demographic similarity. For future research, it is therefore recommended to include several degrees of accent strengths in the analysis, to test which differences are triggered by accent strength. To ensure that differences in accent strength for several non-native accents are found in the pre-test, and can thus be included in the main experiment, it is recommended to have the pre-test fragments analysed by participants of the same L1 as the speakers of the experiment.

The pre-test showed that there were only slight differences between the accents strengths of the Vietnamese speakers, but there were significantly large differences between the accent strengths of the Dutch speakers. This suggests that it was hard for the Dutch listeners to score the Vietnamese speakers on accent strength, probably because they have different expectations for the Vietnamese speakers compared to the Dutch speakers. The Dutch participants are expected be more familiar with the different degrees of accentedness of Dutch English, and thus it would be easier to recognize different accent strengths in Dutch
English. Dutch listeners however do not have this same experience with the Vietnamese English accent, because this is a different L1, and thus the lexical items of the different degrees of Vietnamese English accents are not known to Dutch listeners. Therefore, to correctly identify accent strengths of speakers in the pre-test, for future research it is recommended to have the speakers pre-tested by listeners of the same L1, meaning that for the current study, Vietnamese participants should have scored the Vietnamese speakers, Dutch participants the Dutch speakers, and ideally British participants the British speakers.

It was also noteworthy that the participants scored the Dutch speakers equally on comprehensibility as the Vietnamese speakers. It would be expected, that due to the familiarity of the Dutch listeners with the Dutch English accent, this would be easier to comprehend compared to the Vietnamese English (Fayer and Krasinksi, 1987; Nejjari et al., 2012; Wingstedt and Schulman, 1984). An explanation for this was that because comprehensibility was a subjective measure, this could have been influenced by vicarious shame. For future research, it is recommended to amplify the current study, by doing more research on the comprehensibility of the speakers. It is recommended to not use subjective comprehensibility, but to focus more on objective comprehensibility, and perhaps also expand to intelligibility. This might shed more light on the relationship between vicarious shame and perceived comprehensibility, and thus of the effect of vicarious shame of attitudinal evaluations. In addition, it might provide insights whether perceived comprehensibility is more negative than actual comprehensibility, when listeners are evaluated a speaker of the same L1, and what the role of vicarious shame is in this difference.

Lastly, the participants in this study might have been a limitation. It has been discussed that the participants were overall highly educated and advanced in their level of English. This might have triggered vicarious shame towards the strongly Dutch accented speakers. For future research, it is therefore recommended to include different degrees of accent strengths, and to gather participants that are more differentiated in language proficiency. When there is more diversity between the participants, and more degrees of accent strengths included, it is more likely that there is more demographic and accent similarity found, because participants differ in their proficiency of English, and their expectations of non-native speech in their own L1. Some participants might identify with a strongly accented speaker, because they have a strong accent themselves, or because they have social circles or are working in an organisation where the overall level of English is low. On the other hand, Dutch listeners with a good proficiency in English might not identify with
a strongly accented Dutch speaker, due to vicarious shame, but do identify with a slightly accented speaker, for the same reason.

The diversification of accent strengths and proficiency in English of the participants might also shed more light on the influence of vicarious shame on evaluations. As mentioned, it would be expected that highly fluent Dutch English participants identify with slightly accented speakers, and participants with a lower proficiency might identify with strongly accented speakers. However, even when there is a wide diversification of English proficiency between the participants in the experiment, and there are several degrees of accent strengths, it might show that, irrespectively of proficiency of English, strongly accented English is connected to vicarious shame.
References


Appendix A

The content of the sound fragment was as followed:

“I've spent most of my adult life feeling quite lost with respect to my career path. I have never felt as though I fully grew up. But it's okay to feel a little lost, and to feel a little sad from time to time, because the older I got, the more I saw that no one knows what they're doing, and a lot of people are faking the hell out of it. Don't be so hard on yourself if you're not in a certain place by some arbitrary age. Just do what feels right and you will get there eventually.”