



## **Radboud Universiteit Nijmegen**

### **The Effects of Non-Native Accented English on Employability Decisions in Dutch and German Business Environments**

Studied on the basis of Spanish-accented English,  
Arabic-accented English, and Standard British English

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**Abstract**

In light of the economic globalization, the use of English as the lingua franca has become a crucial factor for effective interactions. Accordingly, the presence of non-native accented English in businesses is increasing, which may impact upon the speaker's perceived expertise. Particularly in job interviews, studies have shown that non-native English speakers tend to be downgraded and perceived as less employable when applying in a native English environment. However, hitherto very little is known about the impact of non-native accentedness on employability decisions evaluated by likewise non-native English speakers. Consequently, the purpose of the present study was to investigate the impact of Spanish-accented English, Arabic-accented English and Standard British English on employability decisions in Dutch and German business environments. In an online experiment, 131 Dutch and 80 German participants evaluated speech fragments recorded by Arabic-accented speakers, Spanish-accented speakers and Standard British English speakers. Findings showed, that applicants with an Arabic-accented English were perceived as the least employable, whereas Spanish-accented English applicants were evaluated to be equally eligible for the position as the British applicants. The outcome indicates that perceived foreignness of an accent may trigger negative associations with the applicant. Consequently, it would be recommended to develop cultural seminars for Dutch and German companies in order to counteract stereotypical associations with Arabic applicants.



## Introduction

Over the past decades, technological innovations have led to changes within global connectiveness. Beyond geographical borders, intercultural communication and immigration have been increasing worldwide (United Nations, 2006). Particularly in business contexts, individuals from various countries communicate with people who possibly speak different languages (Hosada & Stone-Romero, 2009). With the aim to prevent language impeding from interactions, English has been established as the *lingua franca* in international business (Nickerson, 2005). Recent statistics show that nowadays English is spoken worldwide more commonly as a FL or L2 than a L1 (Cheng, 1999). In verbal interactions, non-native English speakers tend to adopt speech characteristics of their native language, which may lead to variations of phonological (i.e. phonetic) and prosodic features (i.e. rhythm, stress patterns, speaking rate) in spoken language (Carlson & McHenry, 2006; Lippi-Green, 1997). These variations are defined as accents, which may allow listeners to identify the ethnicity of the speaker and, in turn, may trigger ethnic, regional or social recognition, leading to stereotypes associated with that particular ethnic group (Cargile, 2002; Cargile & Giles, 1998, Carlson & McHenry, 2006). Considering the fact that interactions between accented English speakers (non-native and native) prevail in global business (Cook, 1999), it is crucial to investigate the impact of accents on attitudinal and competence evaluations of non-native English speakers.

Previous studies have examined the impact of non-native accented English on interpersonal evaluations in various settings, such as the areas of sales, employment and education (Fuertes, Gottdiener, Martin, Gilbert, & Giles, 2012; Hendriks, Van Meurs, & Reimer, 2018; Trimming, 2017). In all fields, it has been shown that non-native accents lead primarily to negative social categorisation and downgraded competences (Fuertes et al., 2012; Hendriks et al., 2018; Russo, Islam, & Koyuncu, 2017; Trimming, 2017). Particularly in employment interviews, it has been shown that non-native accented applicants are evaluated as being less suitable for the offered positions than native speakers (e.g. Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Hosada & Stone-Romero, 2009; Trimming, 2017).

Although the use of English in business has been increasing worldwide, previous studies investigating employment interviews focused primarily on native English environments, especially the USA (Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Fuertes et al., 2012; Hosada & Stone-Romero, 2009; Trimming, 2017). Hitherto, there is little insight about the hiring success of non-native English accented applicants in other than native English-speaking countries. It has been shown that particularly countries with an economically strong international reputation, such as the Netherlands or Germany are highly attractive for



multinational firms having English as the lingua franca (Melitz, 2018). Hence, the current study examined job interviews in Dutch and German business environments with the aim to obtain insights into the evaluation of non-native English accented interviewees by likewise non-native accented interviewers.

### **Theoretical Framework**

#### **Non-native accented English evaluated by non-native English speakers**

The EU constitutes a multi-ethnic environment with currently 22.3 million people (4.4%) from non-EU Member States (Eurostat, 2019). Furthermore, migration flows of EU citizens to other EU Member States are observed, specifically with the purpose to study, work and live in a new environment. Primarily, highly developed and economic strong countries are the main target destinations for migrants. These include in particular western EU Member States, such as Germany, which is the EU's strongest economic member (Monetary Fund, 2018) and the Netherlands, which is highly developed in terms of globalizing its market orientation (see Nejari, Gerritsen, Van der Haagen, & Korzilius, 2012). Both countries record currently 11.1 migrants per 1000 inhabitants (Eurostat, 2019), which indicates that a diversity of ethnicities interact on a daily basis in both, formal and informal settings. Referring to formal contexts, both economically strong countries are highly attractive for multinational companies (Melitz, 2018). With the aim to assure successful interactions of all multicultural participants a common language, concretely English, is needed. Based on the previous statistics, it is assumed that the majority of all participants do not speak English as a L1, which leads to the presence of multiple non-native English accents.

In the domain of education, Hendriks et al. (2018) have examined the impact of non-native English accent strengths (slight and moderate) of Dutch and German university lecturers evaluated by likewise Dutch and German students. Contrary to this study's focus, the speaker and listener shared the same cultural backgrounds when evaluating non-native English-accented. Presently, it is the aim to analyse the impact of different non-native English-accented in the Dutch and German environment. As previously mentioned, migrants from other EU Member States, but also from non-EU Member States move to the Netherlands and Germany. Thus, it was considered as crucial to analyse one non-native accent per group (EU, non-EU).

In 2017, Germany was the most targeted destination with 395 thousand citizens of other EU Member States and the Netherlands had 72.6 thousand citizens from other EU-countries (Eurostat, 2019). Economic and social development in the Netherlands and Germany lead commonly to migration flows from EU countries with weaker economic situations (e.g.



Romania, Lithuania and Estonia or Portugal, Spain and Italy) (Latek, 2019). In terms of non-EU Member states, 391.5 thousand migrants in Germany and 68.6 thousand migrants in the Netherlands were registered in 2017 (Eurostat, 2019). In this case, forced migration, asylum and refugees from, for instance, war-torn countries (e.g. Syria, South Sudan and Afghanistan) or third world countries from Asia, Africa and Latin America, are frequent (Latek, 2019).

Based on this, Spanish-accented English representing an EU Member and Arabic-accented English representing a non-EU Member were chosen to be evaluated by Dutch and Germans. Previous studies have analysed how the Arabic accent is perceived in the Netherlands and Germany (Fiedler, Keller, & Hanulíková, 2019; Grondelaers & Van Gent, 2019). Grondelaers and Van Gent (2019) investigated the Moroccan-accented Dutch on perceived superiority and dynamism. Results show that Standard Dutch was preferred over the generally downgraded Moroccan-accented Dutch. Moreover, the study by Fiedler et al. (2019) shows that Germans perceive Arabic-accented speakers as less intelligible than Portuguese-accented speakers due to stronger stereotypical associations. However, both investigations have analysed the accents when speaking in the countries' native language (Dutch, German). Yet, there is no insight into the evaluation of Arabic-accented English in Dutch and German environments. Focusing on the Spanish accent, primarily the downgraded status perceptions of Hispanic Americans as a minority group in the USA have been investigated (Davila, Bohara, & Saenz, 1993; De la Zerda & Hopper, 1979; Giles, Williams, Mackie, & Roselli, 1995). However, similarly to the Arabic-accented English, there is scarcely any knowledge about the evaluation of Spanish-accented English in Dutch and German environments.

### **Accent strength of the applicant**

Non-native English applicants most probably speak with an accent, irrespective of fluency (Cook, 1999). Carlson and McHenry (2006, p. 1) refer to Edwards (1997) and define accent as the “unique mode of sound production that is influenced by a speaker's dialect or native language”. More particularly, accent is not solely influenced by a person's L1, but furthermore affected by origin and social status (Carlson & McHenry, 2006). Hence, through the accent's characteristics, it is possible to recognize ethnic, regional and/or social group-belongingness of the speaker (Cargile, 2002; Fuertes et al., 2012). Previous studies compared the effects of standard accent with non-standard accents (see Fuertes et al., 2012). Regarding the English language, a standard English accent, such as the Standard British English, General American and General Australian, is usually spoken by the majority of the population (Fuertes et al., 2012) and may be furthermore linked to ‘high socioeconomic status, power, and use in



the media in any given country' (Giles & Billings, 2004). On the other hand, a non-standard accent is any form deviating from the described standard accent (Fuertes et al., 2012).

In employment settings, speakers with non-native accents are generally evaluated more negatively than native-accented speakers (Fuertes et al., 2012). However, the accent strength is of importance (Carlson & McHenry, 2006; Hendriks et al., 2018; Nejari et al., 2012). Gluszek and Dovidio (2010) analysed prior literature and suggest that the stronger the non-native accent of the speaker, the more negative is the evaluation (see Fuertes et al., 2012). This indicates that slight non-native accents are often judged as similar to the standard accent, whereas moderate or strong accents provoke severe negative reactions (e.g. Fuertes et al., 2012; Gluszek & Dovidio, 2010; Hendriks et al., 2018).

### **Comprehensibility of the applicant**

Comprehensibility is the ability to not only identify the meaning of words uttered, but furthermore to recognize the intention expressed by the speaker in a distinct context (Nejjari et al., 2012). Prior research has shown that non-native accents generally do have an impact on comprehensibility, such that L1 speakers evaluate FL speech as more difficult to understand than L1 speech (Fayer & Krasinski, 1987). Additionally, Hendriks et al. (2018) draws attention to the 'native speech intelligibility benefit' which explains that native, as well as non-native evaluators perceive native accents easier to understand than non-native or accents (Major, Fitzmaurice, Bunta, & Balasubramanian, 2002).

### **Attitude toward the applicant related to accent**

Cargile and Giles (1998) show that a non-native accent influences L1 speakers' attitude towards the speaker. Particularly listeners' affect (feelings of pleasure) is more positive when listening to L1 speakers of their own language than to non-native speakers (see Nejari et al., 2012). Thus, these findings show that accentedness triggers social judgements.

Currently, three main dimensions are established to evaluate listeners' attitude towards the speaker, namely *status*, including variables such as competence, ambition, education, and social class; *solidarity*, for instance, similarity to the listener, attractiveness, benevolence, and trustworthiness and *dynamism*, viz. activity and liveliness (e.g. Giles & Billing, 2004; Zahn & Hopper, 1985). Based on these dimensions, studies show that standard-accented English is preferred over non-standard accents (Fuertes et al., 2012). A possible explanation might be that non-standard accents are often confounded with proficiency, which leads to a perceived lack of



fluency and, in turn, may affect the speaker's impression negatively (Gluszek & Dovidio, 2010).

Specifically, in formal settings it has been shown that accent is a crucial factor for ratings of non-native applicants. Gluszek and Dovidio (2010) show that US-American participants evaluated speakers with a non-standard accent significantly lower on traits of success and self-confidence, rated them as less preferable than speakers with standard accents and finally, were less willing to employ them. Thus, social judgements based on accentedness stimulate stereotypes associated with a specific ethnic group and may even provoke discrimination against non-standard accented speakers (Gluszek & Dovidio, 2010; Hosada & Stone-Romero, 2009). These findings exhibit that accentedness influences attitude towards the applicant, which in turn has a significant influence on the final hiring success (Hosada & Stone-Romero, 2009).

### **Familiarity with the applicant's accent**

Nejjari et al. (2012, p. 250) defines familiarity with an accent "as knowing the accent and having been exposed to it for some considerable time". Several studies have shown that familiarity with an accent assists the process of understanding the speaker (Carlson & McHenry, 2006; Kachru, 2008; Nejjari et al., 2012). In this manner, listeners' familiarity with a presented non-native accent may influence the perceived comprehensibility in English positively (Major, Fitzmaurice, Bunta, & Balasubramanian, 2005). However, Hendriks et al. (2018) found that familiarity neither facilitates nor impedes comprehension. In their study, familiarity with the non-native English accent did not impact the applicant's comprehensibility.

Furthermore, familiarity with an accent may lead to attitudinal change when evaluating non-native accented applicants (Deprez-Sims & Morris, 2010; Hendriks et al., 2018; Nejjari et al., 2012). Nejjari et al. (2012) show that familiarity with a foreign accent may affect attitude perceptions negatively. The study found that native speakers of British English who were familiar with Dutch-accented English evaluated Dutch speakers significantly lower on status than native speakers of British English who were not familiar with the Dutch accent (Nejjari et al., 2012). In addition, Milroy and McClenaghan (1977) revealed that the listener does not necessarily need to identify the speakers accent correctly in order to develop a negative attitude towards the non-native accented speaker. This indicates, that the perception of foreignness per se has a detrimental effect on attitude perceptions and that familiarity may not be such an important factor for attitude evaluations.



Other studies, by contrast, show positive attitudinal reactions towards familiar accents (Hendriks et al., 2018; Russo et al., 2017). Hendriks et al. (2018) investigated Dutch and German student evaluations of Dutch- and German-accented English professors on competence and likeability, teaching quality and intelligibility. The study found that the more familiar Dutch and German participants were with each other's accent in English, as the more competent and likeable they evaluated the professors with the Dutch- or German-accented English. A possible explanation is suggested by Russo et al. (2017) with the finding that the high exposure to a non-native accent reduces its perceived foreignness which, in turn, minimize the negative connotations associated with the accent.

### **Similarity with the applicant's accent**

Besides familiarity, perceived similarity with the accent is a crucial factor when evaluating the speaker. Russo et al. (2017) indicates that foreign accents trigger negative connotations among listeners who perceive a deviation between the speaker's accentedness and their own national identity. This suggests, that perceived similarity in accent has a positive effect on speakers' evaluation. The similarity-attraction theory supports this assumption by stating that social categorization based on demographic similarities affects the final evaluation of an applicant positively (Turban & Jones, 1988). In other words, perceived similarity in personal attitudes, background, and demographic variables may increase the sensed interpersonal attraction of the evaluator toward the applicant which, in turn, leads finally to a more positive attitude (Deprez-Sims & Morris, 2010).

In addition, the social identity approach (Tajfel, Billig, Bundy, & Flament, 1979) defines how people think of themselves and others as a group. More precisely, the approach states that individuals seek to establish a positive self-image by associating themselves with positively perceived individuals. Correspondingly, with regard to social comparisons the out-group is evaluated as more negatively than the in-group (Deprez-Sims & Morris, 2010). Fiedler et al. (2019) showed that this approach is applicable to accent evaluations. It was shown that people associated a recognized accent to in- or outgroups they interact with. More familiar accents are typically perceived as more similar and related to ingroups of interaction, such as border countries of the home country, whereas less familiar accents are related to outgroups of one's network due to lack of knowledge or relations (Fiedler et al., 2019). It has been found that these perceived out-group associations towards a specific group may lead to negative judgements based on devaluations and stereotypes (Fiedler et al., 2019).



### **Relevance of the nature of the job on non-native accent evaluations**

With the aim to analyse the impact of accents on employment evaluations, Hosada and Stone-Romero (2009) distinguished between four jobs, which differed in status (high, low) and communication demand (high, low). The results of this study, which was conducted in the USA, show that generally, there is no significant impact of foreign accents on high status jobs. However, when communication demands were required, standard-accent (US-American English) was preferred over non-standard accents (Japanese-accented English; French-accented English).

Further investigations by Trimming (2017) focus on the impact of foreign accents on employability in the US-American aesthetic labour market. The findings indicate that when communication and service demands are high, foreign accents (Mexican-, Chinese-, and Indian-accented English) are rated lower and native accents are preferred (US-American English).

With regard to both studies, it is very evident that the nature of job is a crucial factor when investigating non-native English accents on employability decisions. However, as mentioned previously, limited research has been done outside of native-English environments. By focusing on two European countries (the Netherlands and Germany), the current study analyses whether the previous findings for the US-American market (Hosada & Stone-Romero, 2009; Trimming, 2017) are applicable to non-native English environments.

### **Research Questions**

The main purpose of this study is to investigate the extent to which non-native accented English affects employability decisions in a non-native English business environment. More specifically, it is analysed whether Spanish-accented English, Arabic-accented English and British Standard English applicants with the same professional background were evaluated differently on a high-status job with great communication demands by Dutch and German listeners.

Based on the previously discussed factors, the following research questions will be posed.

RQ1: To what extent do Arabic-accented English, Spanish-accented English and British Standard English affect employability decisions in Dutch and German business settings?

RQ2: To what degree are the accents evaluated differently in terms of:

2A: Attitude towards the speaker



2B: Perceived comprehensibility

2C: Employability

Additionally, based on previous findings on perceived comprehensibility, attitude, familiarity and similarity, the following hypotheses have been formulated.

H1: The Standard British English applicant is evaluated to be the most suitable candidate.

H2: The Spanish-accented applicant is evaluated to be a more suitable candidate than the Arabic-accented applicant.

## **Methodology**

### **Materials**

The present study has selected three different types of accented-English, including a standard accent as the control group, in order to investigate the impact of different English accents on employability decisions:

1. Spanish-accented English
2. Arabic-accented English
3. Standard British English

A prewritten elevator pitch for a job application as a junior communication analyst was recorded by male speakers with strongly accented English (see Appendix I). With the purpose to avoid any fluctuations in their proficiency, all speakers had the same level of fluency, namely B2 (based on IELTS-test). Moreover, each accent was represented by two speakers, who recorded one speech sample for the respective job offer. A total of six speech samples (two samples for each accent: Spanish-accented English, Arabic-accented English and British Standard English) formed the study's material.

As previous studies show, origin-specific personal information, such as name and picture affect employment-related decisions significantly (Fiedler et al., 2019; Hosada & Stone-Romero, 2009). To solely focus on accentedness influencing decisions on employability, all personal information about the speakers was identical. Pictures were excluded to avoid any visual confounds and no names were mentioned when introducing the applicants. Furthermore, applying the verbal-guise technique (see Cooper, 1974), similar voice characteristics were important to prevent confounds. By including both genders in the speech samples, the voice



profiles would vary significantly and the verbal-guise technique was not applicable. Thus, exclusively male voices with similar voice characteristics were considered with a similar nature in pitch, intonation and slowness.

**Selection of materials.** In a pre-test, a total of 12 speakers (four Spanish-accented speakers, four Arabic-accented speakers and four Standard British speakers) recorded one speech fragment which was a prepared elevator pitch to prevent any possible confound. All speech samples were presented to a total of 14 expert judges. Two judges were trained specialists in investigating non-native English accentedness and 12 judges were undergraduate students from the Bachelor's programme International Business Communication at the Radboud University, the Netherlands. In addition, all speech samples were evaluated on perceived comprehensibility, accent strength and voice characteristics (see Appendix II). The two most similar speakers of each accent condition were chosen.

**Table 1.** Mean scores and standard deviations of accent strength, comprehensibility, voice characteristics, pitch and slowness in function of selected speakers for all three accent conditions (1 = very weak, very low, 7 = very strong, very high).

	Spanish		Arabic		British	
	Sp. 1	Sp. 2	Sp. 1	Sp. 2	Sp. 1	Sp. 2
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Accent strength	6.33 (0.76)	6.43 (0.64)	6.20 (0.61)	5.82 (0.69)	5.81 (0.84)	5.52 (0.76)
Comprehensibility	4.59 (1.55)	3.53 (1.42)	4.25 (1.71)	5.15 (1.35)	4.51 (1.68)	5.00 (1.54)
Voice characteristics	3.97 (0.89)	3.46 (0.85)	3.02 (0.85)	3.89 (0.83)	3.99 (0.81)	4.34 (0.61)
Pitch	3.29 (1.47)	2.95 (1.19)	2.53 (1.21)	2.62 (1.47)	2.62 (1.61)	3.18 (1.44)
Slowness	3.83 (1.47)	5.30 (1.31)	5.19 (1.35)	3.73 (1.51)	3.70 (1.96)	3.21 (1.72)

## Design

The study used a 3 (applicant accent: Spanish-accented English, Arabic-accented English, and Standard British English) x 2 (evaluator's native language: Dutch, or German) between-subject verbal-guise experimental design.



## Subjects

A total of 131 Dutch participants (age:  $M = 31.72$ ,  $SD = 14.38$ ; range 17-63; 56.5% female) and 80 German participants (age:  $M = 28.71$ ,  $SD = 12.46$ ; range 20-67; 63.8% female) took part in the experiment.

The highest obtained educational level for Dutch and German participants was a university degree (German: 60.8%; Dutch: 48.9%; including both bachelor and master), followed by a high-school diploma (German: 22.8%; Dutch: 28.2%). The participants' highest level of obtained education ranged from a high school diploma to a university degree. Furthermore, 52.7% of all Dutch participants and 62.5% of all German participants indicated to be currently enrolled in a higher education institute.

With regard to the participants' English proficiency, Dutch participants ( $M = 5.28$ ,  $SD = 1.04$ ) did not assess their proficiency differently to German participants ( $M = 5.46$ ,  $SD = 1.17$ ). In addition, the results of the LexTALE test confirmed the participants' self-assessment and showed that the actual English proficiency of Dutch participants ( $M = 72.65$ ,  $SD = 14.12$ ) and German participants ( $M = 74.52$ ,  $SD = 13.24$ ) was similarly high.

In job application settings, the Dutch participants had more experience in being a job applicant ( $M = 5.08$ ;  $SD = 1.64$ ) than being a job interviewer ( $M = 3.26$ ;  $SD = 2.14$ ). Likewise, the German participants showed more experience as job applicants ( $M = 4.88$ ;  $SD = 1.76$ ) than as job interviewers ( $M = 2.93$ ;  $SD = 2.13$ ).

**Distribution.** Nationality ( $F(2, 208) < 1$ ), gender ( $\chi^2(6) = 7.86$ ,  $p = .248$ ), age ( $F(2, 207) = 1.63$ ,  $p = .198$ ), educational level ( $\chi^2(8) = 9.57$ ,  $p = .297$ ), LexTALE score ( $F(2, 208) < 1$ ), English self-assessment ( $F(2, 208) = 1.63$ ,  $p = .198$ ), and job interview experience ( $F(2, 208) < 1$ ) were equally distributed among all three accent conditions and therefore did not influence possible differences.

Gender ( $t(209) = 1.08$ ,  $p = .283$ ), age ( $t(185.39) = 1.06$ ,  $p = .111$ ), educational level ( $t(209) = .90$ ,  $p = .372$ ), LexTALE score ( $t(209) = .95$ ,  $p = .342$ ), English self-assessment ( $t(208) = 1.14$ ,  $p = .254$ ), and job interview experience ( $t(209) = 1.27$ ,  $p = .206$ ) were equally distributed among Dutch and German listeners and therefore did not influence possible differences.

## Instrumentation

For the study's instrumentation, dependent variables, background variables and manipulation variables are discussed.



### ***Dependent Variables***

Participants evaluated the speech sample on attitude towards the speaker, perceived comprehensibility, and perceived employability of the speaker. The following operationalization was based on Fuertes et al. (2012), Giles and Billings (2004), and Hendriks et al. (2018).

In order to examine the attitude towards the speaker, three factors, viz. status, solidarity and dynamism were measured (Giles & Billing, 2004; Zahn & Hopper, 1985). Status was measured with four items: confident, ambitious, competent and intelligent ( $\alpha = .793$ ), solidarity was measured with four items: reliable, attractive, benevolent and like me ( $\alpha = .682$ ) and dynamism was measured with four items: enthusiastic, active, chatty and lively ( $\alpha = .873$ ). All items were introduced with the phrase ‘The speaker sounds’.

Perceived employability of the speaker was measured with three 7-point differential scales: ‘I think the speaker is suitable for this position’, ‘I would hire the speaker’ and ‘I would recommend hiring the speaker’ anchored by ‘strongly disagree – strongly agree’ ( $\alpha = .929$ ) (based on Carlson & McHenry, 2006; Hosada & Stone-Romero, 2009).

Perceived comprehensibility of the speaker was measured by using a 7-point differential scale introduced by ‘I found the speaker easy to understand’ and anchored by ‘strongly disagree– strongly agree’ (based on Munro et al., 2006).

### ***Background variables***

The following variables were examined with the aim to obtain background information about the participants. Later, these variables were considered for the study’s conclusion and discussion.

The variable stereotypes about the speaker’s ethnicity was introduced to further examine if stereotypical associations affect listeners’ attitude towards the applicant and the final employability evaluation. Based on the Stereotype-Content model by Fiske, Cuddy, Glick, and Xu (2002) a total of four factors, each assessed with two items, measured perceived characteristics of the presented ethnic group. The factors competence, warmth and status were each measured with each two 7-point Likert scales anchored by ‘strongly disagree – strongly agree’ following the statement ‘Arabs/Spaniards/Britons are’ (for competence: ‘confident, competent’, for warmth: ‘sincere, warm’ and for status: ‘well educated, economically successful’). In addition, the factor perceived competition was measured by using a 7-point Likert scale anchored by ‘strongly disagree – strongly agree’, following the statements ‘If Arabs/Spaniards/Britons get special breaks, this is likely to make things more difficult for



people like me' and 'Resources that go to Arabs/Spaniards/Britons are likely to take away from the resources of people like me'. The overall reliability of all factors describing stereotypes towards the speaker's ethnicity was acceptable ( $\alpha = .634$ ).

The experience in job interviews was examined by using two 7-point differential scales anchored by 'strongly disagree – strongly agree', 'I have experience being a job applicant' and 'I have experience being a job interviewer' (Deprez-Sims & Morris, 2010). Both items were analysed independently due to a very low reliability ( $\alpha = .378$ ).

Additionally, based on Hendriks et al. (2018), the participant's self-assessed English proficiency was tested using a 7-point Likert scale anchored by 'extremely bad – extremely good' following the statement 'Please indicate how you would assess your English for the following skills': 'writing, reading, speaking, listening' ( $\alpha = .909$ ). Moreover, a LexTALE test was imbedded to examine the actual proficiency of participant.

In the final part of the questionnaire, demographic information about the participants' age, gender, nationality, mother tongue, highest completed educational level and current occupation were asked (based on Hendriks et al., 2018).

### ***Manipulation check***

In the manipulation check, the speaker's perceived origin, accent strength and voice characteristics were examined to assure that these factors did not confound the study's investigation.

Identification of origin of the speaker was measured by posing the polar question 'Are you able to identify the speaker's origin' (based on Hendriks et al., 2018), followed by the question 'If yes, where do you think the speaker is from?'. The participant was able to choose one out of a dropdown list including all 195 possible countries. For the Arabic-accented speech samples all officially Arabic speaking were considered correct (see Appendix III). Furthermore, due to the possible unfamiliarity with the accent, Turkey as the accent's origin was considered correct as well. For the Spanish-accented speech samples, all officially Spanish speaking countries were considered correct (see Appendix III). For the Standard British accent, all inner-circle countries were accepted (see Appendix III).

Based on Deprez-Sims and Morris (2010), perceived accent strength was measured using two 7-point differential scales anchored by 'strongly disagree – strongly agree', 'This speaker has a strong foreign accent in his English' and 'This speaker sounds like a native speaker of English' ( $\alpha = .683$ ). The second item was reverse coded.



Voice characteristics were examined by implementing a 7-point Likert scale and anchored by ‘totally disagree – totally agree’ following the statement: ‘The speaker sounds/speaks’ ‘high-pitched, fluent, monotonous, pleasant, natural, slowly, hesitant’ (based on Hendriks et al., 2018). A reliability analysis revealed an unacceptable reliability among all items ( $\alpha = .343$ ), when ‘high-pitched’ and a ‘slowness’ were included. Hence, the two items were analysed independently as pitch and slowness next to voice characteristics with the items ‘fluent, monotonous, pleasant, natural, hesitant’ ( $\alpha = .607$ ).

## Procedure

Convenience sampling was applied with the aim to approach participants with Dutch or German origin. The created questionnaire was distributed online (see Appendix IV). At the beginning, a short introduction informed the volunteering participants about their anonymity in this study, followed by a description of the experiment’s procedure and the general goal to investigate job-application settings. The exact aim of the study was not revealed. Additionally, one given speech sample was presented as an elevator pitch for the specific job application as a junior communication analyst.

The participants were asked to listen and evaluate the presented speech sample of the randomly assigned speaker. All questions had to be answered in order to submit the questionnaire. Besides the speaker’s evaluation, the participants were requested to indicate their job interview experiences and an additional evaluation was introduced to analyse the participants’ stereotypical associations towards one of the speakers’ ethnicity. Later, the participants had to self-assess their English aptitude, and a LexTALE language test was imbedded to measure the participants’ actual proficiency. In the end, the participants were asked about their demographic information. The average amount of time needed to complete the questionnaire was around 18 minutes ( $M = 18.24$ ,  $SD = 23.32$ ).

## Statistical treatment

SPSS was used to conduct all analyses. Both independent variables were on a nominal level (type of speaker’s accent, & listener’s country of origin) and all dependent variables were interval (perceived comprehensibility, attitude towards the speaker, and perceived employability). First, multiples two-way analyses of variance and several t-tests analysed the equal distribution of the participants (gender, age, education, interview experiences, and English proficiency) among the three accent conditions. In addition, two Chi-square analyses were carried out for Dutch and German listeners separately to analyse the speakers’



identification of origin. Later, several two-way analyses of variance with two factors (accent condition and participant nationality) were performed in order to analyse the attitude towards the speakers, the speakers' perceived accent strength, voice characteristics, stereotypical associations, comprehensibility, and employability among all three accent conditions.

## Results

The main purpose of this study was to investigate the effect of job applicants with a non-native English accent on Dutch and German listeners' evaluation of attitude towards the applicant (perceived status, solidarity, and dynamism), perceived comprehensibility and employability of the applicant.

### Manipulation check

The chosen speech fragments were intended to be evaluated as very similar by the Dutch and German participants among all three accent conditions with regard to perceived accent strength and voice characteristics. Moreover, all speakers of the three accent conditions were meant to be relatable to specific countries of origin (see Appendix III).

### *Perceived accent strength*

A two-way analysis of variance with type of listener and type of accent as factors showed a significant main effect of type of accent on perceived accent strength ( $F(2, 205) = 12.98, p < .001$ ; see Table 2). The accent strength of the Spanish-accented English ( $M = 6.38, SD = 0.70$ ) was perceived as stronger than the Arabic-accented English ( $p = .020$ , Bonferroni-correction;  $M = 6.05, SD = 0.67$ ) and the Standard British English ( $p < .001$ , Bonferroni-correction;  $M = 5.68, SD = 0.82$ ). The Arabic-accented English was evaluated as stronger than the Standard British English ( $p = .016$ , Bonferroni-correction). However, there was no significant main effect found of type of listener on perceived accent strength ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) = 2.28, p = .105$ ).

**Table 2.** Mean scores and standard deviations of perceived accent strength in function of accent conditions (1 = very weak, 7 = very strong).

	Spanish	Arabic	British
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Accent Strength	6.38 (0.70)	6.05 (0.67)	5.68(0.82)



### *Voice characteristics*

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of accent on perceived voice characteristics ( $F(2, 205) = 11.61, p < .001$ , see Table 3). The voice characteristics of the Standard British Accent were evaluated higher ( $M = 4.14, SD = 0.75$ ) than the voice characteristics of the Arabic accent ( $p < .001$ , Bonferroni-correction;  $M = 3.39, SD = 0.94$ ) and the Spanish accent ( $p = .008$ , Bonferroni-correction;  $M = 3.71, SD = 0.90$ ). There was no significant difference between the voice characteristics of the Spanish and Arabic accent ( $p = .074$ , Bonferroni-correction). Moreover, there was a significant main effect of type of listener on the perceived voice characteristics among all accent conditions ( $F(1, 205) = 11.80, p = .001$ ; see Table 3). Dutch participants evaluated the speakers' voice characteristics differently ( $M = 3.59, SD = 0.87$ ) than German participants ( $M = 4.01, SD = 0.92$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) < 1$ ).

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of listener on perceived speakers' pitch ( $F(1, 205) = 14.07, p < .001$ ). As shown in Table 3, Dutch participants evaluated all accents as higher pitched ( $M = 3.17, SD = 1.38$ ) than German participants ( $M = 2.40, SD = 1.35$ ). There was no significant main effect of type of accent on perceived pitch ( $F(2, 205) = 1.72, p = .181$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) = 1.77, p = .172$ ).

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of accent on perceived slowness ( $F(2, 205) = 7.49, p = .001$ , see Table 3). The Standard British accent ( $M = 3.52, SD = 1.86$ ) was evaluated as being faster than the Arabic accent ( $p = .001$ , Bonferroni correlation,  $M = 4.58, SD = 1.58$ ) and the Spanish accent ( $p < .001$ , Bonferroni correlation,  $M = 4.58, SD = 1.57$ ). There was no significant difference in the evaluation of slowness between the Spanish and the Arabic accent ( $p = 1.000$ , Bonferroni correction). In addition, there was no significant main effect of type of listener on perceived slowness ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) = 1.04, p = .355$ ).

**Table 3.** Means, standard deviations and  $n$  for voice characteristics in function of nationality of participant and accent conditions (1 = very weak, very low, 7 = very strong, very high).

Dutch	German	Total
$n = 131$	$n = 80$	$N = 211$



		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Spanish	Voice Characteristics	3.58 (0.87)	3.98 (0.92)	3.71 (0.90)
	Pitch	3.37 (1.29)	2.59 (1.31)	3.12 (1.34)
	Slowness	4.65 (1.49)	4.44 (1.74)	4.58 (1.57)
Arabic	Voice Characteristics	3.17 (0.84)	3.69 (0.99)	3.39 (0.94)
	Pitch	2.67 (1.24)	2.42 (1.42)	2.56 (1.31)
	Slowness	4.69 (1.53)	4.42 (1.68)	4.58 (1.58)
British	Voice Characteristics	4.00 (0.72)	4.33 (0.76)	4.14 (0.91)
	Pitch	3.34 (1.53)	2.19 (1.33)	2.86 (1.55)
	Slowness	3.32 (1.77)	3.81 (1.96)	3.53 (1.86)

### *Identification of origin of the speaker*

A chi-square test showed significant relation between type of accent and listeners' ability to identify the speaker's origin ( $\chi^2 (2) = 8.15, p = .017$ ). Generally, 51.2% of all participants could not recognize the speaker's origin. However, 48.8% indicated that they recognized the speaker's country of origin for the speakers of each accent condition. For the Spanish accent, 60.7% of the participants indicated that they recognized the speaker's origin, whereas 39.3% of the participants could not identify the origin. When listening to the Arabic accent, 38.7% of the applicants thought they could identify the speaker's origin and 61.3% indicated that they did not know the origin. Finally, 43.1% of the participants who were exposed to the British accent indicated to recognize the speaker's origin, whereas 56.9% of participants indicated that they were not able to name the speaker's origin. Table 4 shows absolute numbers and percentages of the ability to identify the origin of the speakers by all listeners.

**Table 4.** Participants' ability to identify origin of speaker in function of accent conditions.

Identification of origin		Spanish	Arabic	British
Yes	n	51 <sub>a</sub>	24 <sub>b</sub>	28 <sub>a, b</sub>
	%	60.7%	38.7%	43.1%
No	n	33 <sub>a</sub>	38 <sub>b</sub>	37 <sub>a, b</sub>
	%	39.3%	61.3%	56.9%

*Note.* Different subscript letters denote subsets of accent condition categories whose column proportions differ significantly from each other at the 0.05 level.



In addition, following the lenient approach to country of origin identification, a chi-square test showed a significant relation between type of accent and listeners' correct identification of origin ( $\chi^2(2) = 22.60, p < .001$ ; see Table 5). Overall, there were relatively more incorrect (53.6%) than correct (46.4%) responses. 38.2% of the participants who indicated that they knew the speaker's origin were able to identify the origin of the Spanish accent correctly. When exposed to the Arabic accent, 23.1% of the participants recognised the origin correctly, whereas 76.9% of the participants were not able to associate the accent to an Arabic country. The origin of the Standard British accent was identified correctly by 82.8% of the participants.

**Table 5.** Participants' correct identification of speaker origin in function of accent condition.

Identification of origin		Spanish	Arabic	British
Correct	n	21 <sub>a</sub>	6 <sub>a</sub>	24 <sub>b</sub>
	%	38.2%	23.1%	82.8%
Incorrect	n	34 <sub>a</sub>	20 <sub>a</sub>	5 <sub>b</sub>
	%	61.8%	76.9%	17.2%

*Note.* Different subscript letters denote subsets of accent condition categories whose column proportions differ significantly from each other at the 0.05 level.

### Evaluation of the applicant

Several two-way analyses of variances were carried out to analyse the Dutch and German evaluations of the accented speakers on attitude (status, solidarity, dynamism), comprehensibility and employability. Table 6 shows the means and standard deviations of the discussed variables for all three accent conditions. In addition, a two-way analysis of variance was carried out for the background variable stereotypes towards the speaker's ethnicity.

#### *Attitude towards the speaker: Status, Solidarity, Dynamism*

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of accent on status evaluations ( $F(2, 205) = 8.13, p < .001$ ). The Arabic accented speakers ( $M = 4.15, SD = 1.09$ ) were evaluated less on status than the Spanish accented speakers ( $p = .001$ , Bonferroni correction;  $M = 4.83, SD = 1.12$ ) and Standard British speakers ( $p = .002$ , Bonferroni correction;  $M = 4.83, SD = 1.06$ ). There was no difference in status evaluations of the Spanish-accented English and Standard British



speakers ( $p = 1.000$ , Bonferroni correction). There was no significant difference between the status evaluations by Dutch and German participants ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) < 1$ ).

A two-way analysis of variance with type of accent and type of listener as factors showed no significant main effect of solidarity evaluations of the three accent conditions ( $F(2, 205) = 1.51$ ,  $p = .224$ ). Moreover, there was no significant difference between solidarity evaluations by Dutch and German participants ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) < 1$ ).

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of dynamism evaluations of the three accent conditions ( $F(2, 205) = 7.02$ ,  $p = .001$ ). The Arabic-accented speakers ( $M = 3.00$ ,  $SD = 1.26$ ) were evaluated as less dynamic than the Spanish-accented speakers ( $p < .001$ , Bonferroni correction;  $M = 3.93$ ,  $SD = 1.26$ ). There was no significant difference on perceived dynamism of Spanish-accented speakers and Standard British speakers ( $p = .238$ , Bonferroni correction,  $M = 3.55$ ,  $SD = 1.44$ ) and Arabic-accented speakers and Standard British speakers ( $p = .061$ , Bonferroni correction). There was no significant difference between the dynamism evaluations by Dutch and German participants ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) < 1$ ).

### ***Perceived comprehensibility of the speaker***

A two-way analysis of variance with type of accent and type of listener as factors showed no significant main effect of type of accent on comprehensibility ( $F(2, 205) = 2.82$ ,  $p = .062$ ). In addition, there was no significant difference between the Dutch and the German evaluations of the speakers' comprehensibility ( $F(1, 205) < 1$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) = 2.10$ ,  $p = .125$ ).

### ***Employability of the speaker***

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of accent on perceived employability ( $F(2, 205) = 5.32$ ,  $p = .006$ ). There was no significant difference between the evaluations between Dutch and German participants evaluations of the speakers' employability ( $F(1, 205) = 2.03$ ,  $p = .156$ ). The interaction effect between type of listener and type of accent was not statistically significant ( $F(2, 205) < 1$ ). The Arabic-accented speakers ( $M = 3.38$ ,  $SD = 1.35$ ) were evaluated as less employable than the Spanish-accented speakers ( $p = .006$ , Bonferroni correction;  $M =$



4.07,  $SD = 1.28$ ) and Standard British speakers ( $p = .043$ , Bonferroni correlation;  $M = 3.96$ ,  $SD = 1.36$ ). There were no differences between the employability evaluation of the Spanish-accented speakers and Standard British speakers ( $p = 1.000$ , Bonferroni correlation).

**Table 6.** Mean scores and standard deviations of perceived status, solidarity, dynamism, comprehensibility and employability in function of accent conditions (1 = very low, 7 = very high).

	Spanish	Arabic	British
	$M (SD)$	$M (SD)$	$M (SD)$
Status	4.83 (1.12)	4.15 (1.09)	4.83 (1.06)
Solidarity	3.97 (0.95)	3.67 (0.99)	3.89 (0.96)
Dynamism	3.93 (1.26)	3.00 (1.26)	3.55 (1.44)
Comprehensibility	4.05 (1.57)	4.63 (1.62)	4.72 (1.63)
Employability	4.07 (1.28)	3.83 (1.35)	3.96 (1.36)

#### *Stereotypes towards the speaker's ethnicity*

A two-way analysis of variance with type of accent and type of listener as factors showed a significant main effect of type of accent on stereotypical associations ( $F (2, 205) = 10.94$ ,  $p < .001$ ; see Table 7). Participants had more negative stereotypes associated to Arabs ( $M = 4.18$ ,  $SD = 0.79$ ) than to Spaniards ( $p = .002$ , Bonferroni correction;  $M = 4.58$ ,  $SD = 0.65$ ) or Britons ( $p < .001$ , Bonferroni correlation;  $M = 4.76$ ,  $SD = 0.64$ ). However, the degree of stereotypical associations did not differ between Arabs and Britons ( $p = .466$ , Bonferroni correlation). There was no significant difference between the type of listener on the perceived stereotypes per ethnicity ( $F (1, 205) < 1$ ). The interaction effect between type of listener and type of ethnicity was not statistically significant ( $F (2, 205) = 1.143$ ,  $p = .321$ ).

**Table 7.** Means, standard deviations and n for stereotypes towards the speaker's ethnicity in function of nationality of participant and accent conditions (1 = more negatively, 7 = more positively).

	Dutch	German	Total
	$n = 131$	$n = 80$	$N = 211$
	$M (SD)$	$M (SD)$	$M (SD)$
Spanish	4.64 (0.65)	4.50 (0.64)	4.58 (0.65)
Arabic	4.11 (0.78)	4.30 (0.80)	4.18 (0.79)



British	4.71 (0.61)	4.84 (0.72)	4.76 (0.64)
Total	4.44 (0.74)	4.51 (0.75)	4.47 (0.74)

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### Discussion and Conclusion

The present investigation was designed to determine the effect of Spanish-accented English, Arabic-accented English, and Standard British English on employability evaluations in Dutch and German business environments. Generally, it was found that the Spanish-accented speakers were evaluated as equally employable as the Standard British speakers, whereas the Arabic-accented speakers seemed to be less employable than the Spanish-accented speakers and the Standard British speakers. However, the findings clearly show that this was not due to the speakers' perceived accent strength or comprehensibility. A possible explanation may be the in-group and out-group associations participants could have had in relation with the presented accents, which, in turn, may have affected the attitudinal perceptions and final employability evaluations.

Interestingly, all results regarding employability evaluations are consistent with the findings for the attitudinal evaluations of perceived status and dynamism. This suggests that perceived status and dynamism have an impact on the overall hiring success of the applicant.

With regard to the employability of the speakers, it was hypothesised that the Standard British speakers are evaluated to be the most suitable candidates (H1). Surprisingly, the findings show that the Spanish-accented speakers were perceived as equally employable as the Standard British speakers. Furthermore, no differences were found between the Spanish-accented English speakers and the Standard British English speakers on the attitudinal evaluations of status, solidarity and dynamism. These outcomes are contrary to previous studies which suggest that Standard British English speakers are perceived as having a higher social status than non-standard accented English speakers, leading to a more favourable employability (Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Fuertes et al., 2012; Gluszek & Dovidio, 2010; Hosada & Stone-Romero, 2009; Trimming, 2017). This outcome may be explained by the similarity-attraction theory (Turbon & Jones, 1988) which suggest that the British and Spanish accents are equally preferred and evaluated more positively due to possibly perceived demographic, cultural or linguistic similarities (i.e. European countries). This, in turn, might have evoked a feeling of group belongingness (Fiedler et al., 2019), which would align with the social identity approach (Tajfel et al., 1979) explaining that ingroup perceptions lead to more positive attitudinal evaluations (Deprez-Sims & Morris, 2010).



In addition, it was hypothesized that the Standard British speakers and Spanish-accented speakers are preferred candidates over the Arabic-accented speakers (H2). Regarding the results of the attitude towards the speaker and employability, the hypothesis was supported, because the Arabic-accented speakers were perceived as having a lower status, being less dynamic and less employable in comparison to the Spanish-accented speakers and Standard British speakers. This aligns with previous findings showing that in professions with high communication demands, non-standard accents trigger negative attitudinal perceptions, which lead to a significantly lower evaluation on the final employability (Gluszek & Dovidio, 2010; Hosada & Stone-Romero, 2009; Trimming, 2017). However, in terms of solidarity and comprehensibility no differences were perceived between the speakers. Referring to solidarity, all speakers were evaluated as similarly attractive, benevolent and trustworthy regardless of their type of accent. Although the meta-analyses by Fuertes et al. (2012) indicates that previous studies have obtained mixed findings for perceived solidarity, the current study's result would align with the findings by Hosada & Stone-Romero (2009) showing that non-native speakers are perceived as equally high or even higher on this attitudinal dimension. With regard to comprehensibility, it has been found that both non-native accents are as comprehensible as the Standard British accent. This outcome contradicts the 'native speech intelligibility benefit' (Major et al., 2002) describing that native, as well as non-native evaluators perceive native accents easier to understand than non-native accents (Carlson & McHenry, 2006; Kachru, 2008; Nejari et al, 2012).

The different evaluations of the Arabic speakers may be related to the findings of the embedded Stereotype Content Model (Fiske et al., 2002), which show that participants did not differ in their stereotypical associations towards Britons and Spaniards, whereas they had significantly stronger stereotypical connections towards Arabs. A possible explanation for this finding may be that Arabs form a minority group in both analysed countries associated with forced migration (Fiedler et al., 2019; Grondelaers & Van Gent, 2019). As Hosada & Stone-Romero (2009) indicate, minority groups may seem less employable due to increased negative associations and stereotypes. The appearance of stereotypical associations may be further related to the social identity approach (Tajfel et al., 1979) stating that out-group associations with a particular group may lead to negative judgements. Out-group relations, in turn, may be triggered by perceived foreignness evoking devaluations and stereotypes (Deprez-Sims & Morris, 2010; Fiedler et al., 2019). Possible evidence for the perceived foreignness of the Arabic-accented speakers may be provided by the outcomes for the identification of origin, which indicate that participants had difficulties identifying the Arabic-accented speaker



correctly or at all. Milroy and McClenaghan (1977) have demonstrated that the listener does not necessarily need to identify the speaker's accent correctly in order to develop a negative attitude based on perceived foreignness towards the non-native accented speaker. Hence, the results of the current study may show that perceived foreignness could lead to negative connotations when evaluating the speaker on attitudinal reactions (Deprez-Sims & Morris, 2010; Fiedler et al., 2019; Milroy & McClenaghan, 1977; Russo et al., 2017), which, on the other hand, may have an adverse effect on the final hiring success.

### **Theoretical implications**

Hitherto, previous studies have focused primarily on native English environments when analysing the impact of non-native accentedness on hiring success (Carlson & McHenry, 2006; Deprez-Sims & Morris, 2010; Fuertes et al., 2012; Hosada & Stone-Romero, 2009; Trimming, 2017). By investigating employability decisions in non-native environments, the current study has provided new insights into the employability of non-native accented English applicants evaluated by likewise non-native English interviewers.

In application settings, previous findings have shown that non-native English applicants were mostly downgraded and perceived as less employable than native English speakers (Fuertes et al., 2012). Particularly the applicant's perceived accent strength may provoke negative reactions impairing the hiring success (e.g. Fuertes et al, 2012; Hendriks et al., 2018; Trimming, 2017). Interestingly, the findings of this investigation show that the Spanish-accented speakers were evaluated as positively and employable as the Standard British speakers, even though the Spanish speakers were perceived to have the strongest accent. In contrast, the Arabic-accented applicants were perceived as less positively and employable even though their accent strength was perceived as rather weak.

These findings may provide a new insight into the hiring success of non-native English applicants in non-native English environments showing that irrespectively the accent strength, some non-native accents are downgraded, whereas other non-native accents may be perceived more positively by non-native evaluators.

### **Practical implications**

The current investigation has clear practical implications for Dutch and German application settings. The findings show that Arabic-accented applicants were evaluated as less employable than Spanish-accented and British applicants, even though the accent strength of the Arabic speakers was perceived as less strong than of the Spanish speakers. Moreover,



findings showed the Arabic applicants were confronted with significantly stronger stereotypical associations than Spanish or British applicants. This implies that it may be useful to establish cultural seminars for Dutch and German companies with the aim to reduce stereotypical associations specifically with Arabic applicants.

### **Limitations and suggestions for future research**

The current study has several limitations. First of all, despite the conducted pre-test to select speakers with similar voice characteristics and accent strength, the results of the manipulation check showed significant differences in accentedness and voice characteristics of the speakers. Correspondingly, these discrepancies may have confounded the final evaluation of the accented-applicants. Future research should select more similar speakers in order to prevent confounding results. In addition, this research focused exclusively on the evaluation of male speakers, even though other studies have shown differences on attitudinal evaluations of male and female accented-speakers (Grondelaers, Van Hout, & Van Gent, 2018; Smakman, 2006). Thus, the current study's analysis of exclusively male speakers limits the generalizability of the results obtained. As a consequence, future work is required to examine the effect of both female and male accented-speakers on employability decisions.

The different evaluations of Arabic-accented applicants on status, dynamism and the final employability were explained on the basis of the social identity approach (Tajfel et al., 1979) and examined by means of the Stereotype Content Model (Fiske et al., 2002). However, the participants' group perceptions (in-group vs. out-group) of the three presented ethnicities could have been examined as a separate variable to obtain more profound insights. Furthermore, the Stereotype Content Model has never been implemented before to investigate employability evaluation of accented-applicants. Considerably, more work will need to be done to determine the validity of the Stereotype Content Model in order to explain the different evaluations for specific accented-English applicants. Future studies should focus on perceived similarity, familiarity and group relations of multiples non-native accents in relation with stereotypical associations towards the speakers' ethnicities aiming to provide evidence for the current study's assumptions.

Regarding the participants, solely Dutch and Germans were analysed, who are geographically, culturally and linguistically very close (Hendriks et al., 2018). As a result, all participants may have had similar perceptions concerning attitude, comprehensibility and employability evaluations on the presented accents. This, in turn, may decrease the generalizability of the obtained evaluations on the chosen ethnicities leading to a rather low



external validity. Future research should therefore focus on listeners with more geographical, cultural and typological distance.

Moreover, a large number of students took part in the experiment who showed little experience in being a job interviewer. This does not correspond to the analysed real life setting and leads consequently to a low ecological validity. Future experiments using a sample that is more familiar with employment interviews could shed more light on employability evaluations of accented applicants.

Finally, many participants did not complete the questionnaire because it was found to be very long and exhausting. Future research could motivate the participants to complete the questionnaire by offering a financial reward.



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## **Appendices**

### **Appendix I - Script of the speech sample**

#### *Script*

Well, I'd like to start by telling you something about my career. After I finished high school, I directly went to university to study Communication and Information Studies. I graduated in three years. The programme included an internship in a large organisation. I learnt a lot about marketing and other aspects of communication. I want to get more experience, so I am looking for a job.

A little bit about myself... I can work well in teams and by myself. I have a great sense of responsibility and I always want to learn more. I think I am a team player and I can work with everyone.

If I had to describe myself in three words, I would say "responsible, open-minded, happy". I am a quick learner and open for everything. I push myself to the limits and I like to get to know other cultures. I like to make others enthusiastic and I think outside the box. In that sense, you could say I am creative as well.

That is why I think I am a good candidate for the position of junior communication analyst in your organisation.



## **Appendix II – Pre-test**

### *Pre-test Questionnaire*

Dear Participants,

We would be grateful if you could help us select the most suitable speech fragments for an experiment. In the experiment, listeners will be asked to evaluate an applicant for a job with a high communication demands based on a speech sample spoken in English.

In this pre-test, we would kindly like to ask you as language professionals to assess the accent strength and other speech characteristics of the speakers in the following speech samples.

Thank you for your help!

---

### INFORMATION AND CONSENT

The procedure involves filling out an online survey. The questions concern the reliability and the accent strength of the speakers. Filling out the survey will take approximately 15 minutes.

What will happen to my data?

The research data we collect during this study will be used by scientists as part of data sets, articles and presentations. The anonymized research data are accessible to other scientists for a period of at least 10 years. When we share data with other researchers, these data cannot be traced back to you.

Voluntary participation

Your participation in this research study is voluntary. This means that you can withdraw your participation and consent at any time during the research, without giving a reason. All data we have collected from you will be deleted permanently.

More information?

Should you want more information on this research study, please contact Mylène van de Wouw (telephone: 0637386076; email: m.vandewouw@student.ru.nl).

Should you have any complaints regarding this study, please contact the researcher.

CONSENT: Please select your choice below.

Clicking on the “Agree” button below indicates that:



- you have read the above information
- you voluntarily agree to participate
- you are at least 16 years of age

If you do not wish to participate in the research study, please close this window and do not continue. If you wish to participate, continue with the questions on the next page.

---

**Every audio fragment is accompanied by the following set of questions:**

Speaker evaluation

The speaker has a strong foreign accent

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

The speaker sounds like a native speaker of English

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

Where do you think the speaker is from?

- Dropdown list of countries-

The speaker has a high-pitched voice

- ☐ Strongly disagree
- ☐ Disagree



- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker is speaking fluently

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker sounds monotonous

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker has a pleasant voice

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker sounds natural



- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker speaks slowly

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker is hesitant

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

The speaker is easy to understand

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree



### Familiarity with the Genre

I have experience in being a job interviewee

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

I have experience in being a job interviewer

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

### Background Characteristics

What is your age?

-Open question-

What is your gender?

- ☐ Male
- ☐ Female
- ☐ I would rather not say

What is your highest education completed?

- ☐ Less than high school
- ☐ High school graduate
- ☐ Some college



- ☐ 2-year degree
- ☐ 4-year degree
- ☐ Professional degree
- ☐ Doctorate
- ☐ Other

How long have you been teaching English?

- ☐ Less than 1 year
- ☐ 1 to 3 years
- ☐ 3 to 5 years
- ☐ More than 5 years
- ☐ I have not taught English

What is your current position?

-Open question-

Are you a native speaker of English?

- ☐ Yes
- ☐ No

Where are you from?

-Dropdown list of countries-

---

We thank you for your time spent taking this survey. Your response has been recorded.

---



### **Appendix III – Accepted countries of origin**

For the Arabic-accented English, the following countries have been considered correct when asking for the speaker's ethnicity; Algeria, Bahrain, Comoros, Djibouti, Egypt, Eritrea, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, Yemen.

For the Spanish-accented English, the following countries have been considered correct when asking for the speaker's ethnicity; Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Equatorial Guinea, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Spain, Uruguay, and Venezuela.

For the Standard British English, the following countries have been considered correct when asking for the speaker's ethnicity; UK, US, Australia, Canada, and New Zealand.



## **Appendix IV – Experiment**

### *Official Questionnaire*

Dear Participant,

Thank you for taking part in this study. You will be asked questions about an audio fragment in which you will hear a job applicant. While completing the questionnaire you cannot return to the audio fragment. Therefore, try to listen carefully. Filling out the survey will take approximately 15 minutes.

Your data will be processed confidentially and anonymously. The research data we collect during this study will be used by scientists as part of data sets, articles and presentations. The anonymized research data is accessible to other scientists for a period of at least 10 years. When we share data with other researchers, these data cannot be traced back to you.

Your participation is voluntary. This means that you can withdraw your participation at any time during the research, without giving a reason. If you withdraw your participation, all data we have collected from you will be deleted permanently.

Should you want more information on this study, please contact Mylène van de Wouw (telephone: 0637386076; email: m.vandewouw@student.ru.nl).

Should you have any complaints regarding this study, please also contact the researcher.

Clicking on the "Agree" button below indicates that:

- you have read the above information
- you voluntarily agree to participate
- you are at least 16 years of age

If you do not wish to participate in the research study, please decline participation by clicking on the "I do not want to participate" button.

Kind regards,

Manou, Lina, Debora, Ainokaisa and Mylène

---







I think the speaker is suitable for this position

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

I would hire the speaker

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

I would recommend hiring the speaker

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

I found this speaker easy to understand

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree



- Agree
- Strongly agree

This speaker has a strong foreign accent in his English

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

This speaker sound like a native speaker of English

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree or disagree
- Somewhat agree
- Agree
- Strongly agree

Are you able to identify the speaker's origin?

- Yes
- No

If yes, where do you think the speaker is from?

-Dropdown list of countries-

The speaker sounds/speaks

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
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---



High-pitched	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fluent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monotonous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slowly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hesitant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### Job interview experiences

I have experience in being a job applicant

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree

I have experience in being a job interviewer

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree

#### Stereotype- Content Model

We are interested in how Arabs/Spaniards/Britons are seen in your country.

We are not interested in your personal beliefs, but in how you think they are viewed by others.

---

**Each participant was randomly asked about one of the analysed ethnicities with the following set of questions.**



Arab/Spanish/British people are:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sincere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Well educated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economically successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If Arab/Spanish/British people get special breaks, this is likely to make things more difficult for people like me.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree

Resources that go to Arab/Spanish/British people are likely to take from the resources of people like me.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree or disagree
- ☐ Somewhat agree
- ☐ Agree

LexTALE

The final part consists of a vocabulary test. The instructions are presented below.



The following test consists of about 60 trials, in each of which you will see a string of letters. Your task is to decide whether this is an existing English word or not. If you think it is an existing English word, you click on "yes", and if you think it is not an existing English word, you click on "no".

If you are sure that the word exists, even though you do not know its exact meaning, you may still respond "yes", but if you are not sure if it is an existing word, you should respond "no".

In this experiment, we use British English rather than American English spelling. For example: "realise" instead of "realize"; "colour" instead of "color", and so on. Please do not let this confuse you. This experiment is not about detecting such subtle spelling differences anyway. You have as much time as you like for each decision. This part of the experiment will take about 5 minutes.

If everything is clear, you can now start the experiment below:

	No	Yes
Platery	<input type="radio"/>	<input type="radio"/>
Denial	<input type="radio"/>	<input type="radio"/>
Generic	<input type="radio"/>	<input type="radio"/>
Mensible	<input type="radio"/>	<input type="radio"/>
Scornfum	<input type="radio"/>	<input type="radio"/>
Stoutly	<input type="radio"/>	<input type="radio"/>
Ablaze	<input type="radio"/>	<input type="radio"/>
Kermshaw	<input type="radio"/>	<input type="radio"/>
Moonlit	<input type="radio"/>	<input type="radio"/>
Hurricane	<input type="radio"/>	<input type="radio"/>
Flaw	<input type="radio"/>	<input type="radio"/>
Alberation	<input type="radio"/>	<input type="radio"/>
Unkempt	<input type="radio"/>	<input type="radio"/>
Breeding	<input type="radio"/>	<input type="radio"/>
Festivity	<input type="radio"/>	<input type="radio"/>
Screech	<input type="radio"/>	<input type="radio"/>
Savoury	<input type="radio"/>	<input type="radio"/>
Plaudate	<input type="radio"/>	<input type="radio"/>
Shin	<input type="radio"/>	<input type="radio"/>
Fluid	<input type="radio"/>	<input type="radio"/>



Spaunch	○	○
Allied	○	○
Slain	○	○
Recipient	○	○
Exprate	○	○
Eloquence	○	○
Cleanliness	○	○
Dispatch	○	○
Rebondicate	○	○
Ingenious	○	○
Bewitch	○	○
Skave	○	○
Plaintively	○	○
Kilp	○	○
Interfate	○	○
Hasty	○	○
Lengthy	○	○
Fray	○	○
Crumper	○	○
Upkeep	○	○
Majestic	○	○
Magrity	○	○
Nourishment	○	○
Abergry	○	○
Proom	○	○
Turmoil	○	○
Carbohydrate	○	○
Scholar	○	○
Turtle	○	○
Fellick	○	○
Destription	○	○
Cylinder	○	○
Censorship	○	○
Celestial	○	○



Rascal	<input type="radio"/>	<input type="radio"/>
Purage	<input type="radio"/>	<input type="radio"/>
Pulsh	<input type="radio"/>	<input type="radio"/>
Muddy	<input type="radio"/>	<input type="radio"/>
Quirly	<input type="radio"/>	<input type="radio"/>
Pudour	<input type="radio"/>	<input type="radio"/>
Listless	<input type="radio"/>	<input type="radio"/>
Wrought	<input type="radio"/>	<input type="radio"/>

#### Self-assessed Proficiency of English

Please indicate how you would assess your English for the following skills

	Extremely bad	Moderately bad	Slightly bad	Neither good nor bad	Slightly good	Moderately good	Extremely good
Writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speaking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### Background variables participant

What is your age?

-Open question-

What is you gender?

- ☐ Male
- ☐ Female
- ☐ I would rather not say
- ☐ Other:

What is your highest completed or current education?

- ☐ Less than high school
- ☐ High school
- ☐ University of Applied Sciences



- University
- Other, namely:

What is your current position?

-Open question-

Are you currently a student?

- Yes
- No

Are you a native speaker of English?

- Yes
- No

Which country are you from?

-Dropdown list of countries-

What is your mother tongue?

- Dutch
- German
- Other, namely:

---

We thank you for your time spent taking this survey. Your response has been recorded.

---