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Reducing Accent Discrimination in the workplace: the effects of a prejudice control text in application procedures.

Bachelor's Thesis

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Abstract

The aim of this study was to determine whether there was a difference between the assessments of a non-native English speaker and a native speaker of English and whether these assessments could be influenced by a prejudice control text. The study was conducted by means of a questionnaire in which Dutch participants were asked to evaluate job pitches in English of either a Dutch speaker or an American speaker. The questionnaire focused on understandability, competence, likeability, and status. The results of this study indicate that there was a significant difference between the evaluations of the two speakers. The American speaker was evaluated significantly more positively than the Dutch speaker. In contrast to the expectations, the prejudice control text did not show a significant effect on the assessments of the speakers. The findings of this study might be relevant for working people performing job interviews.

Keywords: job pitch, Dutch, American, attitudinal evaluations, hireability, prejudice control

Introduction

Today's globalizing world has led to an increasing number of interactions between people with different linguistic backgrounds. This has resulted in more interactions between non-native speakers and native speakers, and between non-native speakers. Likewise, an increase in non-native speakers of English (NNE) has been observed since English has become a common language in international communication (Crystal, 2003). This has also been the case for businesses. An increasing number of businesses have implemented English as a common corporate language (CCL), or lingua franca. English as a lingua franca (ELF) refers to the use of English by non-native speakers of English. The term 'native speaker' will be used to describe a person who has acquired the language since birth, whereas a non-native speaker will be used to describe a person who has learned the language at a later age (Davies, 2013). Non-nativeness tends to go hand in hand with accentedness which is characterized by using elements of one's mother tongue in the foreign language, typically in terms of pronunciation (Jenkins, 2000; 2007).

In the literature on the effects of non-native accentedness, the relative importance of the native speaker norm is debated. Although several studies (Mahboob, 2005; Nejjari, Gerritsen, Van Der Haagen & Korzilius, 2012) argue the native-like speech is the objective of a language learner, Baker & Huttner (2012) have shown that multilingual students have a preference for being intelligible rather than speaking in native accents. Being understood is considered more important than speaking standard English. However, previous research has consistently shown that accentedness has an influence on attitudinal evaluations.

To demonstrate, the meta-analysis of Fuertes, Gottdiener, Martin, Gilbert, & Giles (2012) has shown that social evaluations are influenced by one's language use in terms of speech accents. The dominant and normative accent of the country in which the interaction takes place is taken into account by the listener. The stronger the perceived non-standard accent, i.e. generally considered a foreign accent or minority or used by a lower socioeconomic group, the more negative the social evaluations. Furthermore, the study has shown that the use of a non-standard accent can negatively affect employee evaluations and could lead to discriminatory decisions. In contrast, the use of a standard accent positively affects the listeners' evaluations of the speakers' education, success, social status, attractiveness, personality, and similarity with the listener. This raises the question of whether there is a possible manner to eliminate biases towards accentedness.

According to Roessel, Schoel, and Stahlberg (2020), prejudices which expressed through negative attitudes and expression of negative views that are justified by incomprehensibility and communication problems) can be categorized as modern prejudice. This study (Roessel et al., 2020), states that people's underlying associations need to be changed, and being unbiased toward nonnative-accented speech should become the social norm. In order to achieve this, bias awareness is essential. A study by Roessel, Schoel, Zimmermann, and Stahlberg (2019) has shown that intervention by means of prejudice control instruction can reduce discriminatory tendencies.

As mentioned before, a foreign accent can be considered to be a non-standard accent, which can be evaluated more negatively than a 'native' accent, or standard accent (Fuertes et al., 2012). However, it is important to consider that a standard accent, is difficult to learn and acquire. Whilst one might be able to acquire a near-native accent, another might transfer more of the mother tongue (Vermeulen and Kellerman, 1998). Therefore, a distinction can be made between slight accentedness and moderate accentedness.

Especially for moderate accentedness, the understandability of the speech is affected in terms of comprehensibility and intelligibility. Comprehensibility refers to the ability to understand the meaning of utterances whilst intelligibility refers to the ability to decipher the meaning of words (Hendriks et al., 2017; Nejjari et al., 2012). Comprehensibility can be measured by asking questions about the content of the utterances of the speaker (Kachru & Smith, 2008).

Research (e.g. Nejjari et al., 2012) has shown that better comprehensibility can lead to more positive evaluations of the speaker. In addition, using intelligible English can aid comprehensibility and lead to more 'affect' towards the speaker (Nejjari et al., 2012). More affect means that the speakers are considered to be more pleasant, friendly, and considerate. Due to the effect of comprehensibility on evaluations, it is crucial to investigate attitudinal evaluations of non-native speakers next to the understandability since negative evaluations could possibly lead to discriminatory behavior. Attitudinal evaluations can be categorized into three dimensions: competence, likeability (affect), and status (Bayard et al., 2001). Competence can be measured by means of perceived reliability, intelligence, education, and diligence. Likeability can be measured with e.g. perceived credibility, politeness, and friendliness. Status can be measured with e.g. perceived authority, trustworthiness, and confidence (Hendriks, Van Meurs & Reimer., 2018; Nejjari et al., 2012; Nejjari et al., 2020).

The negative effects of accentedness on attitudinal evaluation can be explained by stereotypes and biases. For example, nonstandard accents can be linked to lower-status

groups. e.g. Hispanic or Black English (Fuertes et al., 2012). However, the origin of non-native speakers can be more difficult to specify which suggests that the negative evaluations are based on the comprehensibility of the speaker.

The aim of this paper was to investigate whether a prejudice control condition could reduce biases towards non-native speakers of English in application processes. To date, several studies (Nejjari et al., 2020; Roessel et al., 2017) have focused on the effect of moderate accentedness in job pitches. However, far too little attention has been paid to the hirability of non-native speakers in which the respondents have an HR background.

HR students are expected to have expertise in application processes and will further in their career be involved in application processes. Therefore, especially for this group, it is important to become aware of possible biases towards accentedness. Moreover, Roessel, Schoel & Stahlberg (2020) have emphasized the prominent social norm of being tolerant and unbiased in the workplace. Consequently, finding an effective manner to reduce biases and reduce negative evaluations is necessary.

The negative attitudinal evaluations towards speakers with a non-native or nonstandard accent can interfere with the hirability ratings of speakers which results in a lack of diversity within a company (Roessel, Schoel, Zimmermann, & Stahlberg, 2017). Apart from this, it is now well established that non-native speech is as salient as ethnicity, age, gender, and skin color and could likewise lead to employment discrimination (Deprez-Sims, 2010). Consequently, there is an urgent need to address the biases towards accentedness.

It has been recommended (e.g. Roessel et al., 2017) for future studies to investigate prejudice control conditions. It is still up for discussion whether a prejudice control condition could influence attitudinal evaluations or hireability. So far a limited number of studies (e.g. Hansen, Rakić, & Steffens, 2013; Roessel et al., 2017) have provided positive results of the use of a prejudice control condition have shown that the use of a prejudice control text provided before listeners have to evaluate the audio fragments can positively influence the evaluations. Hansen et al. (2013) have shown that when participants talked to a confederate in a foreign language before the experiment they changed their evaluations. The job candidate was considered to be similarly competent.

This study was built further upon the research of Roessel et al. (2019) in which job candidates with a strong non-native accent and a native-like accent were evaluated. In addition, an intervention was introduced to reduce discriminatory tendencies.

Since a limited amount of research has been conducted on the use of prejudice control conditions, this study provides an important contribution to the field of biases control by investigating a possible way to create more equal job opportunities.

This study investigates the use of a prejudice control condition on the evaluations of a moderate Dutch English accent and an American English accent. Nejjari et al., (2012), have observed that moderate accents are more difficult to understand than slight accents. In addition, moderate accents are rated more negatively on attitudinal evaluations than speakers with a slight accent. More specifically, in Nejjari's et al. (2012), Dutch non-native speakers were evaluated as less friendly when having a moderate accent rather than weak by native speakers. However, there is still uncertainty whether a prejudice control condition could result in a less negative evaluation.

Therefore, this present study seeks to examine the effect of a moderate Dutch accent on social evaluations in business settings. It is necessary here to clarify exactly what is meant by a moderate Dutch accent. The Dutch are known for having their own pronunciation of English characterized by Dutch phonological features in a combination with British and American phonological features. Some typical features of a moderate Dutch accent are /æ/pronounced as/e/ and /θ/pronounced as/t/ (Gussenhoven & Broeders, 1997; Van den Doel, 2006). These features can interfere with successful communication.

The study of Hendriks et al. (2017) has shown that non-native listeners did not evaluate speakers with a Dutch accent in English differently than a speaker with a native accent, except when the speaker had a moderate accent. A strong Dutch accent was evaluated more negatively on competence than the speaker with a slight or native accent. For this reason, the present study will be focusing on moderate Dutch accentedness in English and a native English accent.

Moreover, American English speakers rather than Standard British English will be used in this experiment. There is a growing body of literature that recognizes Standard American English to have more positive effects on speakers' evaluations than non-standard accents in the US. Standard American English speakers were perceived as more job competent than speakers of non-standard accented speakers due to the stimulation of stereotypes (Fuertes et al., 2012). In addition, there is evidence that General American English has surpassed Standard British English in other English-speaking countries (Giles & Billings, 2004) even though Standard British English has been considered as the norm for a long time. In the Netherlands, the variety of English that is taught is mainly Standard British English. In contrast, advertisements, movies, and series are more often provided in American English.

The present study will be conducted on the basis of the following research questions:

RQ1: To what extent are non-native moderately accented Dutch job applicants evaluated differently than native English accented job applicants by non-native listeners?

Hypothesis 1: The findings of this study will be in line with previous research (Fuentes et al., 2012; Hendriks et al., 2018; Nejjari et al., 2012; Nejjari et al., 2020; Roessel et al., 2019). The moderate accented Dutch job applicant is expected to be evaluated more negatively than the native American English speaker on competence. A positive correlation between intelligibility, comprehensibility, and status is expected. In addition, a lower hirability rating is expected to be assigned to the non-native speakers in contrast to the native speakers.

RQ2: To what extent can the possible effects of non-native accentedness on hiring success be reduced by raising awareness among non-native listeners?

Hypothesis 2: The prejudice control condition will have a positive effect on the attitudinal evaluations and on the hirability of the non-native speaker. The attitudinal evaluations and hirability prospects will be more positive when a prejudice control text is provided compared to the listeners, than when no bias control conditions are provided. This will be in line with the findings of Roessel et al. (2019).

Method

A verbal-guise experiment was conducted in which native Dutch listeners evaluated recordings of a job pitch (Appendix 2) made by a Dutch female with moderate accentedness and a native female speaker of American English.

Materials

In order to investigate the effects of the accentedness and prejudice control on the job pitch evaluations, two audio files were recorded. For the variable 'accentedness' a Dutch speaker with a moderate English accent was recorded, and a native American speaker was recorded. For both the Dutch speaker and American speaker audio recordings of the same text was made. Content and structure wise, the job pitch was in line with the study of Nejari et al. (2020). Following Nejari's et al. (2020) study, the present study made use of a job pitch for a retail management position. In line with the study of Roessel et al. (2019), both of the speakers were female which eliminated the confounding variable of gender. In addition, no visuals of the speaker were provided to the listeners in order to exclude confounding variables of visual elements.

A limitation to Roessel et al.'s (2019) study was that the questionnaire was provided in German to German participants. However, studies have shown that processing and responding in foreign languages may reduce biases (Caldwell-Harris, 2015; Keysar, Hayakawa & An, 2012). In addition, it has been shown that scale responses are more intense in a foreign language (De Langhe et al., 2011). Therefore a questionnaire (Appendix 1) was provided in English to our Dutch participants.

A pre-test, based on Jesney (2004), was conducted in order to audit the authenticity of the speakers. The pre-test included 20 participants who had to listen to ten audio recordings of different speakers, 5 of which were Dutch and 5 which were American. This was followed by an evaluation of the fragments by means of a short questionnaire. A drop-down menu was included with the question 'which country do you think the speaker is from?'. Furthermore, the statements 'the speaker sounds like a native speaker of American English' and 'this speaker has a strong foreign accent in her English' were tested by means of 7-point Likert scales with the anchor points 'completely agree - completely disagree' in order to measure the nativeness. The reliability of 'nativeness' comprising of three items was good: $\alpha = .90$. Consequently, the mean of all three items to calculate the compound variable 'nativeness', which was used in the further analyses. Based on Hendriks et al., (2018) voice characteristics of the speaker in the fragments were measured using three 7-point Likert scales using the

anchor points ‘completely agree - completely disagree’, ‘this speaker sounds confident’, ‘this speaker sounds natural’, ‘this speaker sounds pleasant’. The reliability of ‘voice characteristics’ comprising of six items was adequate: $\alpha = .78$. Consequently, the mean of all three items to calculate the compound variable ‘voice characteristics’, which was used in the further analyses.

The best audio fragments were chosen based on the significant difference between the native speaker and the non-native speaker with regard to accent strength. In addition, the audio fragment per category (non-native vs. native) were chosen based on similar voice characteristics. The selected Dutch speaker was assessed as a non-native speaker of American English, and was considered to have a strong foreign accent. The selected American speaker was assessed as a native speaker of American English with no strong foreign accent. In addition, the country of origin was defined correctly for both of the speakers. Moreover, the pretest showed no significant differences in the voice characteristics for the American speaker and Dutch speaker.

Subjects

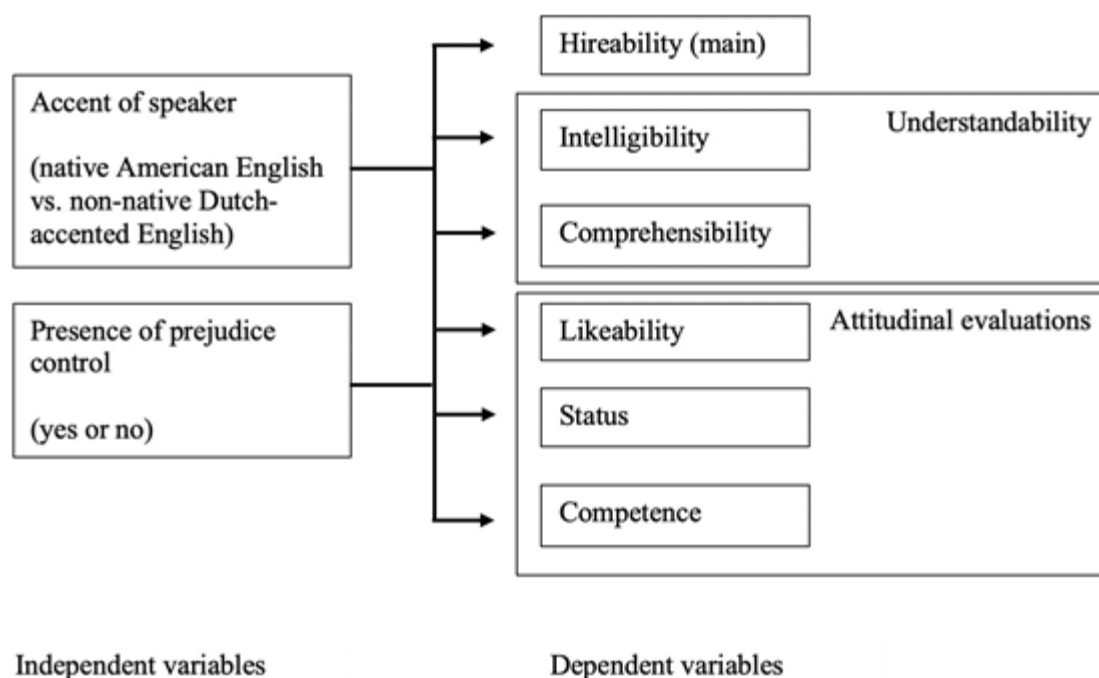
The primary inclusion criteria for the respondents were that they were either Dutch HR students (Applied Sciences/University) or working people. Furthermore, the participants were asked to specify whether they were HR students and/or working as well as their self-assessed level of English ($M = 5.54$, $SD = .85$). Bilinguals were excluded from this study. The ages ranged between 18-67 ($M = 29.73$, $SD = 13.01$). In addition, 65.5% of the respondents was female.

Moreover, the sample was reached via mailing lists of Dutch research universities and applied sciences universities and social media. A total of 142 participants were included.

Design

In this verbal guise experiment, the participants were randomly but evenly be assigned to one of four conditions. The study was a 2 (accent: non-native vs. native) x 2 (instruction: regular vs. prejudice control) between-subjects design (see Figure 1). The participants were made aware of the variety in conditions.

Figure 1. Analytical model of the present study



Instrumentation

The listeners filled in an online questionnaire (Appendix 1) in Qualtrics in which they were to evaluate the job pitches on the understandability of the message, on the basis of attitudinal evaluations, and of voice characteristics. Based on Hendriks et al. (2016), Munro et al (2006), Nejjari et al. (2020) the understandability was measured by means of comprehensibility and intelligibility. The intelligibility of the speaker was measured with six statements on a 7-point Likert scale with anchor points ‘completely disagree – completely agree’. The statements are: ‘I have to listen very carefully to the speaker.’, ‘The speaker speaks clearly.’, ‘The speaker is barely intelligible.’, ‘The speaker is difficult to comprehend.’, ‘I have problems understanding what the speaker is talking about.’, ‘I do not understand what the speaker means.’. The reliability of ‘intelligibility’ comprising of six items was good: $\alpha=.92$. Consequently, the mean of all six items to calculate the compound variable ‘intelligibility’, which was used in the further analyses. The understandability was measured by means of five 7-point semantic differential scales. The statement was ‘I think this speaker is...’ and the anchor points were: ‘very easy to understand – very difficult to understand’, ‘hard to understand – effortless to understand’, ‘uncomplicated to understand – complicated to understand’, ‘rather simple to understand – rather tough to understand’, ‘demanding to understand – undemanding to understand’ (Hendriks et al., 2018; Munro et al., 2006). The reliability of ‘comprehensibility’

comprising of six items was good: $\alpha=.83$. Consequently, the mean of all six items to calculate the compound variable ‘comprehensibility, which was used in the further analyses.

Based on Bayard et al. (2001), Nejari et al. (2012), Hendriks et al. (2018), Nejari et al. (2020), the attitudinal evaluations was measured with the items likeability, status, and competence on 7-point Likert scales with the anchor points ‘completely disagree – completely agree’. Likeability was measured with the statement ‘In my opinion, the speaker sounds...’ followed by the eight items (credible, sympathetic, warm, humoristic, tactful, polite, irritating, unfriendly). . The reliability of ‘likeability’ comprising of eight items was adequate: $\alpha=.78$. Consequently, the mean of all eight items to calculate the compound variable ‘likeability’, which was used in the further analyses. Status was measured with the items authoritative, trustworthy, self-confident, influential, has a powerful voice. The reliability of ‘status’ comprising of six items was acceptable: $\alpha=.78$. Consequently, the mean of all six items to calculate the compound variable ‘status’, which was used in the further analyses. Competence was rated with the following items: reliable, intelligent, competent, hardworking, educated. The reliability of ‘competence’ comprising of five items was good: $\alpha=.89$. Consequently, the mean of all six items to calculate the compound variable ‘comprehensibility, which was used in the further analyses.

In order to measure the hireability of the speaker a 7-point Likert scale was used, based on Roessel et al. (2019) with anchor points ‘completely disagree - completely agree’. The statements were: ‘I would recommend employing this job applicant.’, ‘I have a very positive impression of the job applicant.’, ‘I have a very negative impression of the job applicant.’, ‘The job applicant is professionally qualified.’, ‘The job applicant is not professionally qualified’. . The reliability of ‘hireability’ comprising of six items was good: $\alpha=.88$. Consequently, the mean of all six items to calculate the compound variable ‘hireability, which was used in the further analyses.

Based on the study of Krishna & Alhuwalia (2008) participants were expected to indicate a self-assessed level of English on the basis of four competencies (i.e. reading, writing, speaking, and listening) using 7-point Likert scales with the anchor points ‘poor-excellent’. The reliability of ‘self-assessed level of English’ comprising of four items was good: $\alpha=.88$. Consequently, the mean of all four items to calculate the compound variable ‘self-assessed level of English’, which was used in the further analyses.

Lastly, the voice characteristics of the speaker were evaluated by means of the three 7-point Likert scales identical to the pretest.

Procedure

Participants were gathered by five different researchers via either social media or mailing lists. During this process, no explicit information on the aim of the study was provided. Each participant was assigned randomly to a group (non-native vs. native; prejudice control vs. no prejudice control). Once the participant accessed the questionnaire, a general introduction was given and participants were asked for informed consent. The introduction did not explicitly include the purpose of the study but merely mentioned the interest in evaluations of job pitches by HR students and/or working people. This was succeeded by a cover story in order to create a clear setting for the recordings. The cover story was based on Roessel et al. (2019) and Nejjarri et al. (2020). The cover story read: “You will be listening to an audio recording of a job applicant, who is applying for a retail manager position at a multinational with its headquarters located in the Netherlands. For reasons of internationalization, the process was conducted in English.”. For the prejudice control condition, the participants were instructed to acknowledge the possible biases that come with non-nativeness. This text was based on an HR policy text of Microsoft (n.d.). The policy text read as follows: “The following organization stresses a diverse workforce and working environment. All qualified applicants will receive consideration for employment without regard to age, gender identity or expression, ethnicity, and accentedness. Please consider this when listening to the following audio recording and try not to base your evaluations on feelings or stereotypes that might be evoked during the audio fragment.”. Afterward, participants were asked to fill in their age, gender, nationality, study progress, internship experience, and self-assessed English proficiency on a 7-point Likert scale (Appendix 1). Subsequently, the participants heard the audio file and were then directed to the questionnaire. The mean time participants spent on filling in the questionnaire was $M = 16.52$ minutes ($SD = 41.10$). Finally, the participants were dismissed and thanked.

Statistical treatment

Once all the data had been gathered it was all be assembled into one file in order to compare the results in SPSS 27.0. In order to investigate the differences between the evaluations of the speakers, t-tests were carried out for the manipulation check and background variables. In addition, two-way ANOVA's were performed for understandability, likeability, status competence, and hireability.

Results

The main purpose of this study was to investigate whether there was a difference between the ratings of a non-native English speaker and a native speaker of English and whether these ratings could be influenced by means of a prejudice control condition. The first set of results (Table 1, Table 2) provide the results of the manipulation check showing the evaluations of the voice characteristics, nativeness and the country of origin. The next set of tables (Table 3, Table 4, Table 5) illustrate the assessments on understandability, likeability, status, competence and hireability. The last set of tables (Table 6, Table 7) show the distribution of the background variables among the conditions.

Table 1. Means (*M*), standard deviations (*SD*) and number of participants (*n*) for perceived nativeness and voice characteristics evaluations per accent type (1 = low, 7 = high).

	<i>M</i>	<i>SD</i>	<i>n</i>
<i>Nativeness</i>			
American English	5.38	0.98	72
Dutch English	1.71	1.20	70
<i>Voice Characteristics</i>			
American English	5.27	.92	72
Dutch English	3.52	1.07	70

Table 1 shows an independent samples t-test was between type of accent, nativeness, and voice characteristics. The independent samples t-test showed a significant difference between the assessment of nativeness and the type of speaker ($t(140) = 19.88, p < .001$). The American English speaker ($M = 5.38, SD = 1.20$) was evaluated as significantly more nativelike than the Dutch English speaker ($M = 1.71, SD = .98$). The independent samples t-test showed a significant difference between the Dutch accent and the American accent with regard to evaluated voice characteristics ($t(140) = 10.43, p < .001$). The Dutch English speaker ($M = 3.52, SD = 1.07$) was rated significantly less positive than the American English speaker ($M = 5.27, SD = .92$).

Table 2. Absolute (*n*) and relative frequencies (%) for the correctly and incorrectly identified country of origin.

Dutch			AmE		
Correct	Incorrect	Total	Correct	Incorrect	Total
<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
68 (97.1%)	2 (2.9 %)	70 (100%)	44 (61.1%)	28 (38.9%)	72 (100%)

Table 2 illustrates the distribution of correctly and incorrectly identifications of the country of origin of the speaker. The chi-square analysis showed a significant difference in the pattern of the distribution of correct and incorrect identifications ($\chi^2 (1) = 21.654, p < .001$). Participants who listened to the Dutch speaker (97.1%) identified the country of origin significantly more often correctly than the participants who listened to the American speaker (39.3%). Vice versa, participants who listened to the American English speaker (38.9%) identified the country of origin more often incorrectly than the participants who listened to the Dutch English speaker (2.9%).

Table 3. Means (*M*), standard deviations (*SD*) and number of participants (*n*) for perceived comprehensibility and intelligibility in function of accent type and presence of a prejudice control text (1 = low, 7 = high)

	Prejudice control condition			No prejudice control condition			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
<i>Comprehensibility</i>									
American English	5.71	0.79	31	5.30	0.91	41	5.48	0.88	72
Dutch English	4.45	1.16	40	4.30	1.09	30	4.39	1.12	70
Total	5.00	1.19	71	4.88	1.10	71	4.94	1.14	142
<i>Intelligibility</i>									

American English	4.93	1.08	31	4.36	1.39	41	4.60	1.29	72
Dutch English	4.14	1.24	40	4.15	1.57	30	4.15	1.38	70
Total	4.48	1.23	71	4.27	1.46	71	4.38	1.35	142

Table 3 presents the results that were obtained from two-way ANOVA's to determine the effect of the prejudice control condition on understandability in terms of comprehensibility and intelligibility. A two-way ANOVA was performed with accentedness and presence of a prejudice control text as factors which showed a significant main effect of accentedness on perceived comprehensibility ($F(1, 138) = 44.14, p < .001$). The American English accent ($M = 5.48, SD = 0.88$) was perceived to be significantly more comprehensible than the Dutch English accent ($M = 4.39, SD = 1.12$). However, there was no significant main effect of presence of a prejudice control text on perceived comprehensibility ($F(1, 138) = 2.70, p = .103$). The interaction effect between accentedness and presence of a prejudice control text was not significant ($F(1,138) < 1$).

A two-way ANOVA with accentedness and presence of a prejudice control text as factors showed a significant main effect of accentedness on perceived intelligibility ($F(1,138) = 4.87, p = .029$). The American English accent ($M = 4.60, SD = 1.29$) was judged as significantly more intelligible than the Dutch English accent ($M = 4.15, SD = 1.38$). However, there was no significant main effect of presence of a prejudice control text on perceived intelligibility ($F(1,138) = 1.55, p = .215$). There was no interaction effect between the two independent variables accentedness and prejudice control text ($F(1,138) = 1.70, p = .194$).

Table 4. Means (*M*), standard deviations (*SD*) and number of participants (*n*) for the two-way analyses of variance for likeability, status and competence with the type of accent and presence of prejudice control measure as independent variables.

	Prejudice control condition			No prejudice control condition			Total		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
<i>Likeability</i>									
American English	4.94	1.00	31	4.77	0.85	41	4.84	0.91	72
Dutch English	4.39	0.78	40	4.26	0.77	30	4.33	0.77	70
Total	4.63	0.92	71	4.55	0.85	71	4.59	0.88	142
<i>Status</i>									
American English	5.12	0.64	31	5.00	0.89	41	5.05	0.79	72
Dutch English	3.58	0.86	40	3.70	0.73	30	3.63	0.80	70
Total	4.25	1.10	71	4.45	1.04	71	4.35	1.07	142
<i>Competence</i>									
American English	5.81	0.69	31	5.72	0.69	41	5.76	0.69	72
Dutch English	4.24	0.99	40	4.19	1.12	30	4.21	1.04	70
Total	4.92	1.17	71	5.07	1.17	71	5.00	1.17	142

Table 4 shows the results obtained from two-ways ANOVA's with type of accent and prejudice control condition as factors on likeability, status and competence.

A two-way ANOVA with type of accent and presence of prejudice control measure as independent variables showed a significant main effect of type of accent on likeability of the speaker ($F(1, 138) = 13.49, p < .001$). The American English accent ($M = 4.84, SD = 0.91$) was judged significantly more likeable than the Dutch English accent ($M = 4.33, SD = 0.77$).

There was no main effect of presence of prejudice control on the likeability of the speaker ($F(1, 138) = 1.06, p = .306$). The interaction effect between the two independent variables was not significant ($F(1, 138) < 1$).

Another two-way ANOVA with type of accent and prejudice control condition as independent variables showed a significant main effect of type of accent on status of the speaker ($F(1, 138) = 109.09, p < .001$). The American English accent ($M = 5.05, SD = 0.79$) was judged to have significantly more status than the Dutch English accent ($M = 3.63, SD = 0.80$). There was no main effect of presence of prejudice control on the status of the speaker ($F(1, 138) < 1$). The interaction effect between the two independent variables was not significant ($F(1, 138) < 1$).

A two-way ANOVA was performed with type of accent, competence and presence of a prejudice control text as factors. This showed a significant main effect of accentedness on perceived competence ($F(1, 138) = 107.89, p < .001$). The American English speaker ($M = 5.76, SD = 0.69$) was perceived to be significantly more competent than the Dutch English speaker ($M = 4.21, SD = 1.04$). However, there was no significant main effect of presence of a prejudice control text ($F(1, 138) < 1$) on perceived competence. The interaction effect between competence and presence of a prejudice control text was not significant ($F(1, 138) < 1$).

Table 5. Means (M), standard deviations (SD) and number of participants (n) for perceived hireability in function of accent type and presence of a prejudice control text (1 = low, 7 = high)

	Prejudice control condition			No prejudice control condition			Total		
	M	SD	n	M	SD	n	M	SD	n
Hireability									
American English	4.12	.35	31	4.15	.47	41	4.14	.42	72
Dutch English	3.80	.37	40	3.77	.29	30	3.78	.34	70
Total	3.94	.40	71	3.99	.45	71	3.96	.42	142

Table 5 presents the results that were obtained from a two-way ANOVA to determine the effect of the type of accent and prejudice control condition on hireability. The two-way ANOVA was performed with hireability and presence of a prejudice control text as factors. This showed a significant main effect of accentedness on perceived hireability ($F(1, 138) = 29.60, p < .001$). The American English speaker ($M = 4.14, SD = .42$) was perceived to be significantly more hireable than the Dutch English speaker ($M = 3.78, SD = .34$). However, there was no significant main effect of presence of a prejudice control text ($F(1, 138) < 1$) on perceived hireability. The interaction effect between accentedness and presence of a prejudice control text was not significant ($F(1,138) < 1$).

Table 6. Means (M), standard deviations (SD) and number of participants (n) for self-assessed level of English proficiency per accent type and prejudice condition (1 = low, 7 = high).

	M	SD	n
<i>Self-assessed level of English</i>			
American English	5.57	0.79	72
Dutch English	5.51	.91	70
Prejudice control condition	5.55	.83	71
No prejudice control condition	5.53	.86	71

Table 6 shows an independent samples t-test between the self-assessed level of English proficiency and type of accent, and between the self-assessed level of English and prejudice control condition. The independent samples t-test showed no significant difference between the Dutch ($M = 5.51, SD = .91$) and American accent ($M = 5.57, SD = .79$) with regard to the participants' English proficiency ($t(140) = .39, p = .699$).

The independent samples t-test between the self-assessed level of English proficiency and prejudice control condition showed no significant difference in the mean level of English

proficiency between the prejudice control condition and no prejudice control condition ($t(140) = .148, p = .882$).

Table 7. Means (M), standard deviations (SD) and number of participants (n) for hireability of English proficiency per gender (1 = low, 7 = high).

	M	SD	n
<i>Hireability</i>			
Male	3.97	0.50	48
Female	3.95	.38	93

Table 7 shows an independent samples t-test between the evaluated hireability and gender. The independent samples t-test showed no significant difference in the hireability assessments between male and female ($t(139) = .155, p = .358$).

Discussion/conclusion

The present study was designed in order to determine the effect of a prejudice control condition on the ratings of a non-native speaker of English and a native speaker of English in terms of hireability, understandability, and attitudinal evaluations. The first research question was aimed at investigating whether a non-native moderately accented Dutch job applicants would be evaluated differently, in terms of understandability, attitudinal evaluations, and hireability than the native English accented job applicants by non-native listeners.

One unanticipated finding was that in the study the two speakers were assessed as significantly different in voice characteristics even though there were no significant differences found in the pre-test. The manipulation check showed that the American English speaker was evaluated significantly more positively in terms of voice characteristics than the Dutch English speaker. The American English accent was regarded as sounding more natural, pleasant, and confident. The more positive evaluations of the American English accent are in line with the findings of Hendriks et al. (2018), who found that non-native accents tend to be evaluated more negatively.

The inconsistency may be due to the size of the sample group of the pretest which consisted of only 20 participants. The differences in voice characteristics could be considered to be a limitation to this study as this might have caused the Dutch speaker to be assessed more poorly. It is therefore recommended that future studies will make use of experts, as done by Hendriks et al., (2018) in order to reduce ambiguity.

In addition, the respondents rated the American English as sounding more native-like than the Dutch English speaker, as expected. Even though the American English speaker was rated as a native speaker, the respondents did have more trouble working out the country of origin compared to the Dutch English speaker. In line with Hendriks, van Meurs, and Hogervorst (2016), almost all respondents were able to recognize the Dutch accent. A possible explanation could be due to all Dutch participants who were familiar with the Dutch pronunciation. Moreover, it could be that the American accent was not considered to be a typical American accent. People tend to characterize the American accent as sounding nasal and having a lot of intonation. It is possible that the American English speaker used in this study did not incorporate sufficient of these characteristics.

Supporting Hypothesis 1, the results of this study indicated that there were significant differences between the ratings of the Dutch English speaker and the American English speaker. This study has found that the participants rated the American English speaker as more understandable in terms of intelligibility and comprehensibility. It is important here to

mention that the self-assessed level of English proficiency was relatively high and the level of English proficiency was distributed equally across conditions. The high level of English proficiency might have attributed to the high score of comprehensibility and intelligibility of the American speaker.

Additionally, the American English speaker received more positive attitudinal evaluations than the Dutch English speaker in terms of likeability, status, and competence. This also accords with earlier observations (Fuertes et al., 2012; Hendriks et al., 2018; Nejjari et al., 2012; Nejjari et al., 2020; Roessel et al., 2019), which showed that a stronger perceived non-standard accent results in more negative social evaluations. A possible explanation of the more positive attitudinal evaluations is that using more intelligible English leads to more affect towards the speaker (Nejjari et al., 2012).

Furthermore, the American English speaker was more likely to be hired than the Dutch English speaker. This could be explained by reason of the lower attitudinal evaluations as well as the lower understandability rating which could have aroused negative associations. In line with the findings of Roessel et al. (2019), the accent outweighed the argumentation quality. There was no significant difference found in the assessment between males and females.

The second research question (RQ2) sought to determine whether a prejudice control condition would have an effect on the hiring success of a non-native speaker among non-native listeners. Contrary to expectations (Hypothesis 2), this study did not find a significant difference in the evaluations when a prejudice control text was provided to the listeners. The results of this study did not find an interaction effect between the prejudice control condition and likeability, status, competence, nor hireability. Overall, the evaluations of the Dutch speakers in the prejudice control condition were equivalent to the evaluations without the prejudice control conditions.

The insignificant difference is contrary to previous studies (Hansen et al., 2014; Roessel et al., 2017; Roessel et al., 2020) which have suggested that the use of intervention can reduce arising biases when evaluating a non-native speaker. Therefore, the bias control text was expected to influence the ratings positively. The discrepancy could be attributed to the fact that previous research made use of a verbal prejudice control condition instead of a textual prejudice control condition. It may be that the participants spent less attention on the text than they would when hearing it. In addition, it could be possible that a more direct message could raise more bias awareness. In the present study, the participants were indirectly made aware of the bias control by means of an HR policy text. Due to the indirect message participants might not have been fully aware of what might have been expected from them.

In addition, the type of setting could have influenced the evaluations. It could be argued that the ecological validity of this study was rather low since job applications are generally speaking not evaluated at home. Roessel et al., (2020) has mentioned that respondents are prone to negative biases when responding spontaneously, but in a controlled condition, respondents could be more without prejudice. The questionnaire provided a less controlled setting than a job interview in a company would. In the present study, participants were able to spend unlimited time evaluating the speakers which could have resulted in participants pausing the questionnaire. Discontinuing the questionnaire could have caused participants to have forgotten the strength of the accent. Therefore, further studies should implement a time limit on the questionnaire.

In contrast to earlier findings of Roessel et al. (2017) in which German listeners showed a significant difference in evaluations after a prejudice control intervention, the Dutch listeners were not affected by the prejudice control text. It seems possible that these results are due to German listeners having a more vicarious own-accent shame. German speakers were found to evaluate compatriots more negatively than Dutch speakers did (Hendriks et al., 2017). Therefore, a prejudice control condition could be more effective for Germans than for Dutch. It is recommended that future studies will focus on non-native speakers with a different L1 than the listener, which could eliminate the confounding variable of own-accent shame.

Moreover, the survey was distributed amongst International Business Communication who study the effects of accentedness thoroughly. Therefore these respondents could have already been aware of the prejudice one could have towards non-native speakers. In this case, a prejudice control condition could be considered to be redundant. To add, respondents sent the questionnaires to their peers, creating a snowball effect and causing selection bias.

There are still a lot of unanswered questions with regard to the use of prejudice control conditions and the effect on (job applicant) evaluations. Since this study did not conform with previous studies which have shown a positive effect of prejudice control conditions further research should be undertaken. A further study with more focus on the types of prejudice control conditions and the effect on biases is therefore suggested. It could be interesting to include both a vocal prejudice control condition and a textual prejudice control condition in order to define the most effective condition.

Even though this study was initially focusing on both HR students and working people, the gathered sample group did not obtain enough HR students in order to run the analyses. However, it could still be interesting for future studies to investigate the effect of a

prejudice control condition on people who are experienced in HR or who have led a job interview since it is crucial for this group to attain awareness of possible biases that might occur in application processes.

The findings of this study showed that a moderate non-native Dutch accent could lead to more negative evaluations on important factors (i.e. likeability, competence, status) in job applications, resulting in a low hireability rate. This implies that companies should not merely focus on eliminating discrimination on basis of skin color, gender, or ethnicity. More awareness of discrimination on the basis of accentedness is necessary. This could be achieved by offering a diversity training focusing on communication, and more specifically linguistics.

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Appendix 1

Questionnaire

Informed consent text

Instruction

We are interested in the evaluation of human resource students on job pitches. It is important that you turn on the sound of your device to make sure you are able to hear the audio fragment. Furthermore, it is advised to wear headphones.

Cover story

You will be listening to an audio recording of a job applicant, who is applying for a retail manager position at a multinational with its headquarters located in the Netherlands. For reasons of internationalization, the process was conducted in English.

Prejudice control for 2 out of 4 conditions

The following organization stresses a diverse workforce and working environment. All qualified applicants will receive consideration for employment without regard to age, gender identity or expression, ethnicity, and accentedness. Please consider this when listening to the following audio recording and try not to base your evaluations on feelings or stereotypes that might be evoked during the audio fragment.”

Background variables

Age

Gender

Nationality

Confirmation HR student

Working

Self-assessed English proficiency level (7-point semantic differentials)

Reading

1. Poor 1 2 3 4 5 6 7 Excellent

Writing

2. Poor 1 2 3 4 5 6 7 Excellent

Speaking

3. Poor 1 2 3 4 5 6 7 Excellent

Listening

4. Poor 1 2 3 4 5 6 7 Excellent

Audio recordings

Understanding of the message

Intelligibility (7-point semantic differentials)

‘I think this speaker is...’

- | | | |
|--|---------------|------------------------------|
| 1. Very easy to understand | 1 2 3 4 5 6 7 | Very difficult to understand |
| 2. Hard to understand | 1 2 3 4 5 6 7 | Effortless to understand |
| 3. Uncomplicated to understand | 1 2 3 4 5 6 7 | Complicated to understand |
| 4. Rather simple to understand | 1 2 3 4 5 6 7 | Rather tough to understand |
| 5. Demanding to understand
understand | 1 2 3 4 5 6 7 | Undemanding to
understand |

Comprehensibility (7-point Likert scales)

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

1. ‘I have to listen very carefully to the speaker.’
2. ‘The speaker speaks clearly.’
3. ‘The speaker is barely intelligible.’
4. ‘The speaker is difficult to comprehend.’
5. ‘I have problems understanding what the speaker is talking about.’
6. ‘I do not understand what the speaker means.’

Attitudinal evaluations (7-point Likert scales)

Likeability

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

‘In my opinion, the speaker sounds...’

1. Credible
2. Sympathetic
3. Warm

4. Humoristic
5. Tactful
6. Polite
7. Irritating
8. Unfriendly

Status

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

‘In my opinion, the speaker sounds...’

1. Authorative
2. Trustworthy
3. Self-confident
4. Influential
5. Like they have a powerful voice

Competence

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

‘In my opinion, the speaker sounds...’

1. Reliable
2. Intelligent
3. Competent
4. Hardworking
5. Educated

Hireability (7-point Likert scales)

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

1. ‘I would recommend employing this job applicant.’
2. ‘I have a very positive impression of the job applicant.’
3. ‘I have a very negative impression of the job applicant’
4. ‘The job applicant is professionally qualified.’

5. 'The job applicant is not professionally qualified.'

Voice Characteristics (7-point Likert scales)

Completely disagree, Mostly, Somewhat, Neutral, Somewhat, Mostly, Completely agree

1. 'This speaker sounds natural.'
2. 'This speaker sounds monotonous.'
3. 'This speaker sounds pleasant.'

Appendix 2

Audio fragment text

I am a seasoned Retail Manager with lots of experience in the development of employee training programs and loss prevention techniques which have resulted in savings of over 3 Million during the past decade of my career. The greatest strengths I possess are my endurance and willpower. I never give up. In the many years, I have worked in this industry, I found that my work is most successful when I am involved in every step of the product cycle, from the initial contact to the closing speech and congratulatory handshakes at the end of a project. In my previous positions, I have always tried to be as involved with the project as I am with the employees that contribute to it. However, a weakness of mine is that I have the tendency to overanalyze a situation or product. Sometimes, I take too much time trying to find the right strategy for a sale, and in the end, find that my initial plan was the one to go for. I am rather enthusiastic about your company and the position that has become vacant, as I think I could learn a lot as well as add a lot to your company.

Appendix 3

Checklist EACH (version 1.6, november 2020)

You fill in the questions by clicking on the square next to the chosen answer

After clicking, a cross will appear in this square

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

Explanation: A health care institution is involved if one of the following (A/B/C) is the case:

- A. One or more employees of a health care institution is/are involved in the research as principle or in the carrying out or execution of the research.
- B. The research takes place within the walls of the health care institution and should, following the nature of the research, generally not be carried out outside the institution.
- C. Patients / clients of the health care institution participate in the research (in the form of treatment).
 - No → continue with questionnaire
 - Yes → Did a Dutch Medical Institutional Review Board (MIRB) decide that the Wet Medisch Onderzoek (Medical Research Involving Human Subjects Act) is not applicable?
 - Yes → continue with questionnaire
 - No → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch [CMO Regio Arnhem Nijmegen](#) → end of checklist

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

- No → continue with questionnaire
- Yes → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch [CMO Regio Arnhem Nijmegen](#) → end of checklist

3. Does the research include [medical-scientific research](#) that might carry risks for the participant?

- No → continue with questionnaire
- Yes → This application should be reviewed by a Medical Institutional Review Board, for example, the Dutch [CMO Regio Arnhem Nijmegen](#) → end of checklist

Standard research method

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

- Yes → standard experimental research into linguistic judgement of language fragments, 4 → continue with questionnaire
- No → assessment necessary, end of checklist

Participants

5. Is the participant population a healthy one?

Yes → continue with questionnaire

No → assessment necessary, end of checklist → [go to assessment procedure](#)

6. Will the research be conducted amongst minors (<16 years of age) or amongst (legally) incapable persons?

Yes → assessment necessary, end of checklist → [go to assessment procedure](#)

No → continue with questionnaire

Method

7. Is a method used that makes it possible to produce a coincidental finding that the participant should be informed of?

Yes → assessment necessary, end of checklist → [go to assessment procedure](#)

No → continue with questionnaire

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

Yes → assessment necessary, end of checklist → [go to assessment procedure](#)

No → continue with questionnaire

9. Are the estimated risks connected to the research minimal?

No → assessment necessary, end of checklist → [go to assessment procedure](#)

Yes → continue with questionnaire

10. Are the participants offered a different compensation than the usual one?

Yes → assessment necessary, end of checklist → [go to assessment procedure](#)

No → continue with questionnaire

11. Should [deception](#) take place, does the procedure meet the standard requirements?

No → assessment necessary, end of checklist → [go to assessment procedure](#)

Yes → continue with questionnaire

12. Are the standard regulations regarding [anonymity and privacy](#) met?

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → continue with questionnaire

Conducting the research

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

- No → continue with questionnaire
- Yes → Do you have/will you receive written permission from this institution?
 - No → assessment necessary, end of checklist → [go to assessment procedure](#)
 - Yes → continue with questionnaire

14. Is there a contact person to whom participants can turn to with questions regarding the research and are they informed of this?

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → continue with questionnaire

15. Is it clear for participants where they can file complaints with regard to participating in the research and how these complaints will be dealt with?

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → continue with questionnaire

16. Are the participants free to participate in the research, and to stop at any given point, whenever and for whatever reason they should wish to do so?

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → continue with questionnaire

17. Before participating, are participants informed by means of an information document about the aim, nature and risks and objections of the study? (zie [explanation on informed consent](#) and [sample documents](#)).

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → continue with questionnaire

18. Do participants and/or their representatives sign a consent form? (zie [explanation on informed consent](#) and [sample documents](#)).

- No → assessment necessary, end of checklist → [go to assessment procedure](#)
- Yes → checklist finished

If you want to record the results of this checklist, please save the completed file.

If you need approval from the EACH due to the requirement of a publisher or research grant provider, you will have to follow the formal assessment procedure of the EACH.