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**Reducing Accent Discrimination in the Workplace:
How Accentedness in English Influences HR-Students and Working
People's Perceptions of Job Applicants and how to Reduce this
Influence**

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ABSTRACT

As the number of non-native speakers of English keeps increasing, the number of interactions between non-native speakers does so too. In the business context, this increase has led to a phenomenon called employment discrimination. The present research studied the effect of a written prejudice control measure (PCM) on the judgements regarding understandability, attitudes and hirability of Dutch listeners (HR-students and working people) towards Dutch non-native accented English speaking job applicants versus American native accented English speaking job applicants. A PCM was expected to make listeners more lenient towards non-native accented speakers and therefore potentially reduce employment discrimination. In an experiment, 142 Dutch HR-students and working people evaluated an audio fragment of a job pitch recorded by either a moderately Dutch-accented speaker or an American speaker. A PCM would either be present or not. Findings showed that, as expected, the non-native speaker of English was generally evaluated less positively than the native speaker of English. However, surprisingly, the written PCM did not make non-native listeners more lenient towards the non-native speaker. These findings indicate that a written PCM does not seem to have the positive effect a spoken, face-to-face PCM had in previous research. After the experiment, the speakers did seem to differ slightly in voice characteristics, which was not the case in the pretest. The present findings show how understandability and attitudinal evaluations are predictors of hirability and to decrease employment discrimination, individuals should be made aware of the biases they hold against non-native speakers, in which case, an implicit written PCM does not seem to have the desired effect.

INTRODUCTION

In modern society, globalisation has dramatically increased the exposure of people to individuals that speak a different language. As a consequence, English has seen an enormous increase of non-native speakers around the globe, functioning as a language that is commonly spoken by most people, especially in Europe (Beinhoff, 2014; Van Meurs, Hendriks & Planken, 2013). English as a lingua franca (ELF) offers individuals with varying linguistic backgrounds the ability to communicate in a language they are all comfortable with and proficient in. Following the increase of ELF, the amount of contact between people that are non-native speakers (NNS) of English rises too. Being a non-native speaker of a language generally causes a person to speak that second language with an accent, as the mode of sound production is unique because it is influenced by a speaker's dialect or native language (Edwards, 1992). Like many researchers have found (for example Charles, 2007; Nickerson, 2005; Van Meurs et al., 2013), the same is true for the interactions in business communication specifically. As a result of internationalisation, ELF is increasingly adopted as the common corporate language for external as well as internal communication, as organisations become more likely to employ foreign individuals (Deprez-Sims & Morris, 2010). However, extensive research has also shown that NNS of English tend to differ in their way of verbal communication, meaning they have a non-English accent, from the native speaker (NS) norm set by, for instance, Received Pronunciation and General American (Fuentes, Gottdiener, Martin, Gilbert & Giles, 2012; Hendriks, Van Meurs & Reimer, 2018; Nejari, Gerritsen, Van der Haagen & Korzilius, 2012; Nejari, Gerritsen, Van Hout & Planken, 2020; Roessel, Schoel, Zimmermann & Stahlberg, 2019; Van Meurs et al., 2013). More importantly, these studies indicate that, because of the increase of ELF, NNS are experiencing progressively more potential problems because of their non-native accent or inadequate language skills, as they are generally judged less positively on several dimensions (attitudinal and understandability dimensions) of perception than NS are. What is more, when people listen to a NNS of English with the same linguistic background as themselves, they experience a form of shame because they recognise the typicalities associated with their own non-native accent, which enhances negative judgement of the speaker (Hendriks et al., 2018, Roessel et al., 2019). In the business context, this negative judgement can, according to Deprez-Sims and Morris (2010), be described as discrimination, as a non-native accent apparently distinguishes a non-native speaker from a native speaker in a negative way. This

apparent negative differentiation can therefore lead to, as Deprez-Sims and Morris (2010) state, employment discrimination.

It has been suggested repeatedly that non-native accentedness of a speaker could influence the perception by a listener of that individual, as well as the understandability, with studies like Hendriks, Van Meurs & Hogervorst (2016), Hendriks et al. (2018), Nejari et al. (2012) Nejari et al. (2020) and Roessel et al. (2019) acknowledging that a non-native accent may negatively influence a NNS's understandability and the attitudes towards them. According to these studies, a non-native accent may arouse lesser understanding and more negative judgement in comparison to a native accent on intelligibility (recognition of utterance), comprehensibility (meaning of utterance) and interpretability (meaning behind utterance), a distinction proposed by Smith and Nelson (1985), as well as the status, likeability and competence of the speaker. However, traditionally, the implicitness of interpretability has not shown many controversial or striking results regarding understandability, potentially because most studies are done with similar groups of respondents with a Western linguistic background, which is why intelligibility and comprehensibility seem more relevant.

To try and reduce the effects of accentedness on attitudes and understandability, Hendriks et al. (2018) proposed that NNS's ideas of pronunciation standards should be challenged. However, hardly any forms of accent effect reduction have been tested. Examples of studies that have done this are Hansen, Rakić & Steffens (2014), Roessel et al. (2019) and Roessel, Schoel & Stahlberg (2020). In these studies, the researchers made use of, respectively, an intervention against accent-based discrimination and a prejudice control measure (PCM): respondents were told that speakers were not using their native language and that research shows that could evoke negative bias, so they were asked to take this into account when partaking in the experiment. The intervention used by Hansen et al. (2014) was meant to place participants in the position of the non-native accented speaker to make them realise the discrimination they might face if it were them that had a non-native accent. Hansen et al. (2014) and Roessel et al. (2019) showed that an intervention or PCM making respondents aware of their negative bias or discrimination had a positive effect on the judgements they had of NNS. Roessel et al. namely showed that affect (likeability), competence and hirability evaluations were less negative when respondents were made aware of potential prejudice and were asked to not be led by any biases. As there are only few studies that have attested the proposition of accent effect reduction, which do have positive findings, the present study could add to the promising results while they argue that raising

awareness of negative or discriminatory reactions is a prerequisite for correcting personal evaluations. To add to the results, the present study could use a third form of accent effect reduction, different from the ones previously used by Hansen et al. (2014) and Roessel et al. (2019), by testing whether a written text instead of a face-to-face conversation or exercise, would have the same effect. In addition, the present study could make use of respondents with a different linguistic background than the ones used by Hansen et al. (2014) and Roessel et al. (2019), to increase generalizability of the results or show differences in effect between languages.

Related to the linguistic background of speakers, research indicates that stronger non-native, and even regional, accents could lead to negative effects for listeners with the same background (Grondelaers, Van Hout & Van Gent, 2019; Hendriks et al., 2016; Hendriks et al., 2018; Roessel et al., 2019), as well as for listeners with a different linguistic background (Hendriks et al., 2018). The meta-analysis by Fuertes et al. (2012) confirms the propositions of influence of accentedness on the perception of non-native speakers by non-native and native listeners. However, more recent research by Nejjari et al. (2020) did showcase non-concurring results, with non-native listeners with a different background from the NNS tolerating a non-native accent much more and even judging it more positively on several evaluations than a native English accent. Nonetheless, the study did not research degree of accentedness, so it might have been the case that the non-native accents used in the study were not strong enough, as multiple studies (for instance Hendriks et al., 2016; Hendriks et al., 2018) show that slight non-native accents tend to not have the same detrimental effects as stronger, moderate accents. Still, Nejjari et al.'s (2020) study does show that using other linguistic backgrounds as listener groups (Singaporean, most studies use Western listener groups), might already lead to different results.

With regards to studying accentedness of English, traditional research has mainly made use of Received Pronunciation (British English) as the benchmark for native English pronunciation (Fuertes et al., 2012). However, a shift towards General American is noticeable, with more recent studies focusing, and proposing to focus, on American English (AE) too (Hendriks et al., 2018; Roessel et al., 2019; Nejjari et al., 2020). This shift seemed to be suggested by Fuertes et al.'s (2012) meta-analysis, which showed results that AE generates more positive attitudes than Received Pronunciation compared to non-standard accents in modern research. Additionally, General American seems to have become the standard of English in increasingly more English-speaking countries (Bayard, Weatherall, Gallois & Pittam, 2001; Giles & Billings, 2004).

Next to the apparent focus on Received Pronunciation instead of General American, it seems that many of the studies researching the effects of non-native English are primarily concerned with the impact of accentedness or degrees of accentedness in EMI (English as a medium of instruction) in higher education and focus less on business contexts. The few studies that do focus extensively on accentedness of English in business contexts are, for instance, Deprez-Sims and Morris (2010), Nejari et al. (2012) and, more recently, Nejari et al. (2020) and Roessel et al. (2019). The latter even combining the business and educational context. Among studies that research the business context, however, most studies use participants without specific theoretical or practical knowledge. No study that used stimulus material meant to fit in business conversations or job application contexts, made use of, for instance, specifically working people and Human Resource students, who have knowledge of these contexts and processes.

Besides, Roessel et al. (2019) introduced the hirability variable for the business context, that tests whether respondents would actually hire the speakers they have heard based on variables like understandability and attitudinal evaluations. This hirability variable presented results that concur with the general consensus on non-native accentedness in English, being that a strong accent generates lower ratings. However, as mentioned before, it also seemed to be affected positively when a PCM was used. Therefore, the hirability measure seems like a rather usable variable that the present research could use to add to the Roessel's results and is for that reason incorporated in the research questions of the present study, which are to be found below.

Clearly, the negative effects of non-native accentedness in education and business contexts have been relatively well documented. The effects of accentedness on non-native listeners with the same and different linguistic background as the speaker have been researched too. However, almost no research has been done into the effect of challenging beliefs about non-native and native accentedness in English, specifically General American, among people with practical experience and theoretical knowledge about business contexts. By focusing on the job application process, this study would add to the already existing research by most notably Deprez-Sims and Morris (2010) and Nejari et al. (2020). Additionally, there is only little research into which techniques of accent effect reduction are effective. The face-to-face instruction by Roessel et al. (2019) and the exercise used by Hansen et al. (2014) both rely on real-time conversations between the respondents and researchers. What has not been tested yet is whether a PCM in other forms, for example a written text or audio-visual footage of instructions, has the same effects as Hansen et al. and

Roessel et al. found. Along with the fact only few measures of prejudice control have been studied yet, both Hansen et al. and Roessel et al. make use of German participants. No research had been done into whether these measures have an effect outside of the German language.

Following the research gaps, the purpose of the present study is to determine the effect of non-native accented English, specifically Dutch-accented, versus native accented American English on hirability, understandability and attitudinal evaluations of listeners with the same non-native linguistic background and practical experience as well as theoretical knowledge and whether an effect could be reduced by the use of a written PCM. Dutch people are chosen as the non-native speakers and listeners because of the accessibility the researchers have to Dutch respondents. Taking into account results by, among others, Hendriks et al. (2016), Hendriks et al. (2018) and Nejari et al. (2012), about the differences in effect between slight and moderate non-native accentedness in English, and slight being judged generally equal to native accentedness, the stimulus material of the non-native condition in the present study will consist of a moderate Dutch accent. The research questions that the proposed study will try to answer are the following:

RQ1: To what extent are non-native moderately Dutch-accented English speaking job applicants evaluated differently on hirability, understandability and attitudinal evaluations than native American English-accented job applicants by Dutch Human Resource students and working people?

RQ2: To what extent are possible effects of accentedness on hirability, understandability and attitude reduced by using a written prejudice control measure?

For the first research question, it could be expected that, based on research by Nejari et al. (2012), Nejari et al. (2020), Nickerson (2005) and Roessel et al. (2019), the Dutch-accented English speakers are judged less positively on hirability, understandability and attitudinal evaluations than the AE speakers. This apparent discrimination between accents would also be in line with the results depicted by Deprez-Sims and Morris (2010). As the listeners have the same linguistic background as the non-native speakers, like in Hendriks et al. (2016) and Hendriks et al. (2018), it is expected that judgements are even more negative than previous research with listeners from a different background has shown, which would be in line with Hendriks' findings. With regards to the second research question, expectations

are that the respondents in the conditions with a PCM are more lenient towards the non-native accented speakers, as this is in line with Hansen et al. (2014) and Roessel et al.'s (2019) results.

The results of this study would add to the existing literature about the negative effects of accentedness in the workplace and could replicate the already existing suggestions that accentedness discrimination happens, specifically during job applications. Therefore, this study could be of significant importance for creating awareness about discrimination among applicants and employers, which means that this research could help with the creation of equal chances for job applicants all round.

METHOD

Materials

The independent variables in the present study were the type of accent of the speaker and the presence of a PCM. Type of accent consisted of two levels, non-native moderate Dutch-accented English and native General American. This variable was operationalised by means of a verbal-guise technique, in which one female speaker per accent with similar voice characteristics read a short text concerning a personal pitch that would fit a job interview. Reasons for the use of female speakers were replication of earlier research by Roessel et al. (2019) and the study by Bayard et al. (2001) which showed that female accented speakers, especially in varying types of English, are more favourably rated than males. To determine whether the two recordings of speakers that would be used in the experiment sounded American and Dutch respectively and were similar in voice characteristics, a pretest was conducted. Twenty individuals who did not partake in the actual experiment were asked to listen to five recordings of American speakers and five recordings of Dutch speakers, and judge those on the nativeness of the speech and voice characteristics. The recordings that were judged most native for AE and most non-native for Dutch English (DE) and most similar in voice characteristics were chosen as the recordings that would be used in the actual experiment. If recordings were judged as fitting to use in the experiment but significantly different in speech rate, the researchers would try and find the second-best pair of recordings that was more similar in speech rate. The nativeness statements the respondents in the pretest had to answer were, 'This speaker sounds like a native speaker of English', 'This speaker has a strong foreign accent in English' and 'This speaker sounds like a native speaker of American English'. These statements were answered via 7-point Likert scales, anchored by

‘completely agree’ and ‘completely disagree’, a technique taken from Jesney (2004). The voice characteristic statements were taken from Hendriks et al. (2018) and were as follows, ‘This speaker sounds confident’, ‘... natural’ and ‘... pleasant’. These statements were anchored similarly to the nativeness statements. Additionally, they were asked to select the country they thought the speaker was from in a drop-down menu.

The second independent variable, presence of a PCM, was operationalised by means of a short text featured at the start of the survey in which it was explained that the speaker might not be talking in their native language, a technique taken from Roessel et al. (2019). Meaning, for the two conditions in which the PCM is present, the respondents were instructed to not let feeling or stereotypes evoked during the recording influence their evaluations. The text used as a PCM was the following,

***Attention:** The following organisation values a diverse workforce and working environment. All qualified applicants will receive consideration for employment without regard to age, gender identity or expression, ethnicity and accent. Please keep this in mind when listening to the following audio recordings and try not to base your evaluations on feelings or stereotypes that might be evoked during the audio recording.*

The job pitch participants were listening to consisted of strong arguments for why the speaker should get the job they were applying for, to make sure that the qualities of the speaker were not the reason for negative judgements by the listeners, following Roessel et al. (2019). The text that was be used in the stimulus material was based on the recordings used by Nejari et al. (2020) and can be found in the questionnaire in Appendix A, as well as the cover story which is in the introduction of the questionnaire.

Instrumentation

The dependent variables in the experiment, measured by ways of a questionnaire, were categorised into hirability, understandability and attitudinal evaluations. Understandability consisted of the variables intelligibility and comprehensibility and the attitudinal evaluations were likeability, status and competence. Intelligibility of the speaker was measured through five 7-point semantic differentials, based on Hendriks et al. (2018) and Munro, Derwing and Morton (2006). Reliability of the variable intelligibility consisting of five items was

excellent, $\alpha = .92$. The scales were introduced by ‘I think this speaker is...’ and anchored by ‘very easy to recall – very difficult to recall’, ‘hard to recall – effortless to recall’, ‘uncomplicated to recall – complicated to recall’, ‘rather simple to recall – rather tough to recall’ and ‘demanding to recall – undemanding to recall’. Comprehensibility of the speaker was measured through six 7-point Likert scales anchored by ‘completely agree’ and ‘completely disagree’, based on Hendriks et al. (2016), Munro et al. (2006) and Nejari et al. (2020). Reliability of the variable comprehensibility consisting of six items (‘I have to listen very carefully to the speaker’, ‘The speaker speaks clearly’, ‘The speaker is barely understandable’, ‘The speaker is difficult to comprehend’, ‘I have problems understanding what the speaker is talking about’ and ‘I do not understand what the speaker means’) was good, $\alpha = .83$. The attitudinal evaluations were recorded through 7-point Likert scales, similar to techniques in Bayard et al. (2001), Hendriks et al. (2018), Nejari et al. (2012) and Nejari et al. (2020). Likeability consisted of eight items (credible, sympathetic, warm, humorous, tactful, polite, irritating, unfriendly) presented in the following manner, ‘In my opinion, the speaker sounds...’. Reliability of the variable likeability was adequate, $\alpha = .78$. Status (authoritative, trustworthy, self-confident, influential, has a powerful voice) and competence (reliable, intelligent, competent, hardworking, educated) each consisted of five items, presented in the same manner as the likeability items. Reliability of the variable status was adequate, $\alpha = .78$, and of the variable competence was good, $\alpha = .89$. Hirability, like the previous variables, consisted of five 7-point Likert scale questions anchored by ‘completely disagree’ and ‘completely agree’, based on Roessel et al. (2019). Reliability of the variable hirability consisting of five items (‘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’ and ‘The job applicant is not professionally qualified’) was good, $\alpha = .88$.

To again test whether the two speakers in the experiment were perceived similarly regarding voice characteristics, as well as native AE and non-native DE, the questions from the pretest (to be found in Materials) were also asked to the respondents in the experiment as a manipulation check. Reliability of the variable nativeness consisting of three items was excellent, $\alpha = .90$, and of the variable voice characteristics consisting of three items was adequate, $\alpha = .76$.

Next to their judgements with regards to the speaker, respondents were also asked about their study and work experience and their self-assessed proficiency in English. As the respondents were working people and HR-students, the knowledge about the job application

process could differ among them because of, for example, more years of studying, working experience and internships. Significant differences in experiences between conditions could affect the results in the analyses, which is why experience was recorded in the questionnaire. Self-assessed English proficiency was measured with a technique from Krishna & Alhuwalia (2008), using four 7-point semantic differentials (poor – excellent), regarding speaking, writing, reading and listening. The English proficiency of respondents was relevant as it could affect their comprehensibility, intelligibility and act as a background variable, as they may not have been able to understand a speaker because of their self-reported lower level of proficiency instead of as a result of an accent or vice versa. Reliability of the variable self-assessed English proficiency consisting of four items was good, $\alpha = .86$.

Subjects

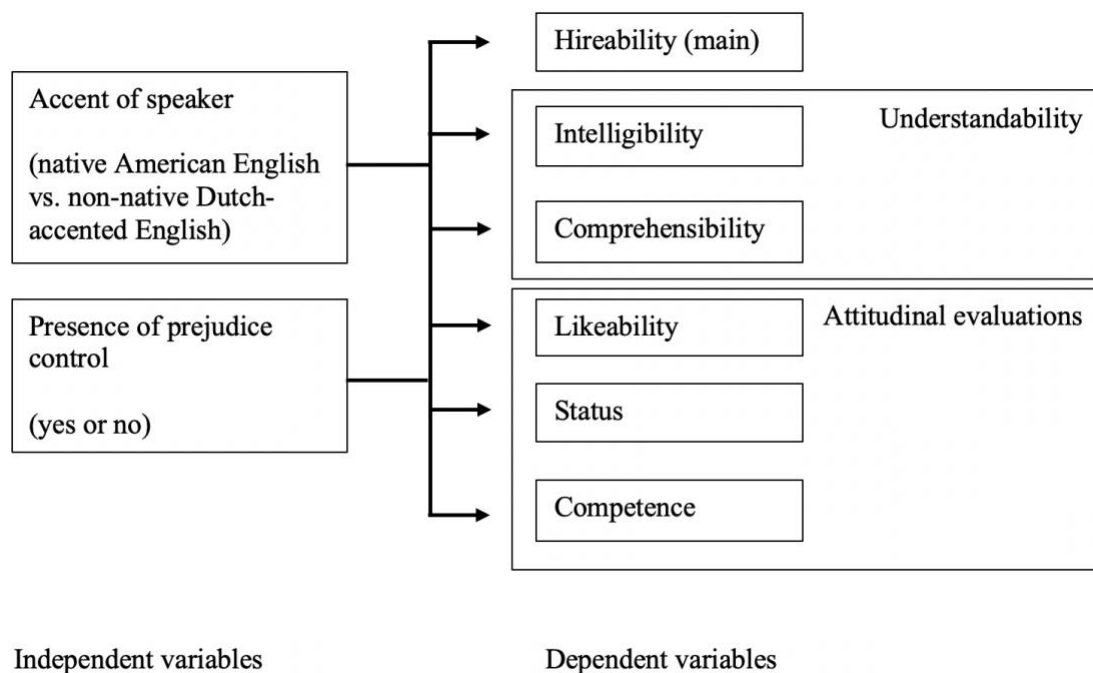
For this study, 142 participants (65.5% female ($n = 93$), 33.8% male ($n = 48$), 0.7% preferred not to say ($n = 1$)) who were either a working person (80.3%), HR-student (12%) or both (7.7%) and had Dutch as their only mother tongue were used. Bilinguals were not allowed to participate. Educational level ranged from High School to Master's degree and age ranged from 18 to 67 ($M = 29.73$, $SD = 13.09$). For the experience of working people and people who worked and were HR-students too, years worked ranged from 0 to 46 ($M = 11.34$, $SD = 12.57$). For the experience of HR-students, the year of study they were in ranged from 1 to 6 ($M = 3.29$, $SD = 1.61$).

Two-way ANOVAs with type of accent ($F(1, 138) < 1$) and presence of PCM ($F(1, 138) = 3.78$, $p = .054$) as independent variables showed no main or interaction effects ($F(1, 138) < 1$) on age. There were no main effects of type of accent ($F(1, 119) < 1$) and presence on PCM ($F(1, 119) = 2.22$, $p = .139$) on working experience and no interaction effect either ($F(1, 119) < 1$). No main effects of type of accent ($F(1, 24) < 1$) and presence PCM ($F(1, 24) = 3.42$, $p = .077$) were measured for HR student experience, year of study, as well as no interaction effect ($F(1, 24) < 1$). For self-assessed English proficiency, no main effects of type of accent ($F(1, 138) < 1$) and presence of PCM ($F(1, 138) < 1$) were found, as well as no interaction effect ($F(1, 138) < 1$). Chi-square measures showed no significant distributions of gender ($\chi^2(2) = 2.57$, $p = .276$) and highest educational level either ($\chi^2(4) = 1.92$, $p = .751$).

Design

The study made use of a 2x2 factorial between-subjects design (see Figure 1). The two independent variables, type of accent and presence of prejudice control measure, both consisted of two levels, non-native Dutch-accented English versus native American English and no prejudice control measure present versus prejudice control measure present respectively. Each respondent was exposed to and evaluated one of the four conditions.

Figure 1. Analytical model of the present research.



Procedure

The questionnaire was created in Qualtrics and remained online. The mean response time was 16.52 minutes ($SD = 41.10$). The questionnaire was done in English, firstly to follow Roessel et al.'s (2019) suggestion and secondly because studies show that scale responses are more intense in a foreign language (De Langhe, Puntoni, Fernandes & Van Osselaer, 2011). Distribution of the questionnaire was done through the social media channels LinkedIn, Facebook, Instagram and WhatsApp. The questionnaire was conducted on individual basis. Respondents were able to access the questionnaire via a link where they, after agreeing with the consent form, could answer the questions anywhere they want after they were randomly assigned to one of the four conditions. They were told that the researchers were interested in the evaluations of specific job pitches, and, to justify the job pitch they would be hearing in

the audio recording, a cover story was added in which the position the speaker was (fictionally) applying for was explained, following Roessel et al. (2019). The position speakers in the recording were applying for was Retail Manager, which was taken from Nejjari et al. (2020).

For two of the four conditions, respondents would have to read the prejudice control text. After reading and answering abovementioned texts, respondents could listen to the audio recording. Before they listen to the audio recording, however, respondents were asked to make sure the sound on the device they were using is turned on and to preferably wear headphones, after which were able to listen to the audio recording once, to account for ecological validity. After listening, respondents had to answer the understandability, attitudinal evaluation and hirability questions, after which they could proceed to filling in their age, gender, mother tongue, highest level of education, whether they were a working person, HR-student or both, which was followed by questions about their experience as either a working person or HR-student, and lastly, the self-assessed English proficiency questions.

The recording of both speakers lasted for about one minute. Reason for this was to give the participants enough time to get an impression of the accent they were hearing. After listening to the recording, respondents had to fill in the intelligibility, comprehensibility, likeability, status, competence and hirability questions in that order. After filling in all the questions, respondents were thanked for their participation. The questionnaire took approximately 10 minutes to complete.

Statistical treatment

For the manipulation checks, independent samples t-tests were carried out to attest whether there was a difference, that should not have been present, in voice characteristics between the two speakers and whether there was a difference in nativeness, which should have been present, between the two speakers. A chi-square test was used to determine whether respondents were able to correctly identify the origin of the accent they heard. After recoding the answers of respondents to either correct or incorrect, crosstabulations with type of accent were created.

For the dependent variables, two-way ANOVAs were carried out for the American-accented versus Dutch-accented groups and the present PCM versus no PCM groups to determine the main and interaction effect of type of accent and presence of PCM.

RESULTS

Manipulation check

To determine how authentic the two speakers sounded, a manipulation check for perceived nativeness, voice characteristics and origin of the speaker was conducted. For perceived nativeness, an independent samples t-tests showed a significant difference between the native and non-native accent ($t(136.25) = 20.57, p < .001$). The native AE accent ($M = 5.54, SD = 0.90$) was judged to sound significantly more native English than the non-native DE accent ($M = 2.71, SD = 0.74$).

To attest whether there were differences in voice characteristics between the two speakers (confidence, naturalness, pleasantness), a second independent samples t-test was conducted, which showed a significant difference between the accents ($t(140) = 1.43, p < .001$). The native AE speaker ($M = 5.27, SD = 0.92$) was judged more positively on all items than the non-native DE speaker ($M = 3.52, SD = 1.07$). This means the two speakers significantly differed where they should have been equal, which should be taken into account in the limitations.

To find whether there were differences between the conditions regarding the ability to correctly identify the origin of the speakers they heard, chi-square tests were carried out. The identification was judged correct if participants in the native AE accented condition identified the speaker to come from the United States of America, and if participants in the non-native DE accented condition identified the speaker to come from the Netherlands.

The first chi-square test showed a significant relation between the type of accent participants were exposed to and their ability to correctly identify the origin of the speaker ($\chi^2(1) = 27.65, p < .001$) (see Table 1). Participants who listened to the non-native DE accent (97.1%, 2.9%) identified the origin of the speaker significantly more times correctly and less times incorrectly than participants who listened to the native American English accent (61.1%, 38.9%).

Table 1. *Counts for the correct and incorrectly identified origin of speaker with the type of accent as dependent variable.*

			Type of accent		
Origin			Native	Non-native	Total
			American	Dutch	
Origin	Correct	Count	English	English	
		Count	44b	68a	112
	Incorrect	% within type of accent	61.1%	97.1%	78.9%
		Count	28b	2a	30
		% within type of accent	38.9%	2.9%	21.1%
		Count	72	70	142
Total		% within type of accent	100.0%	100.0%	100.0%

Understandability of the speaker

Intelligibility

A two-way ANOVA with the type of accent ($F(1, 138) = 4.87, p = .029$) and presence of PCM ($F(1, 138) = 1.55, p = .215$) as independent variables showed a significant main effect of type of accent on intelligibility. There was no significant main effect of presence of PCM on intelligibility. The native AE accent ($M = 4.60, SD = 1.29$) was shown to be significantly more intelligible than the non-native DE accent ($M = 4.15, SD = 1.38$). There was no interaction effect between the independent variables ($F(1, 138) = 1.70, p = .194$).

Table 2 shows the means and standard deviations for the intelligibility of the native and non-native accent with and without a PCM.

Comprehensibility

A two-way ANOVA with the type of accent ($F(1, 138) = 44.14, p < .001$) and presence of PCM ($F(1, 138) = 2.70, p = .103$) as independent variables showed a significant main effect of type of accent on comprehensibility. There was no significant main effect of presence of PCM on intelligibility. The native AE accent ($M = 5.48, SD = 0.88$) was shown to be

significantly more comprehensible than the non-native DE accent ($M = 4.39$, $SD = 1.12$). There was no interaction effect between the independent variables ($F(1, 138) < 1$).

Table 2 shows the means and standard deviations for the comprehensibility of the native and non-native accent with and without a PCM.

Table 2. Means, standard deviations and number of participants for the two-way analyses of variance for intelligibility and comprehensibility with the type of accent and presence of prejudice control measure as independent variables.

	Prejudice control measure			No prejudice control measure			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

Attitudinal evaluations

Perceived likeability

A two-way ANOVA with type of accent ($F(1, 138) = 13.49$, $p < .001$) and presence of prejudice measure ($F(1, 138) = 1.06$, $p = .306$) as independent variables showed a significant main effect of type of accent on likeability of the speaker. There was no main effect of presence of PCM on the likeability of the speaker. The interaction effect between the two

independent variables was not significant ($F(1, 138) < 1$). The AE accent ($M = 4.84$, $SD = 0.91$) was judged significantly more likeable than the DE accent ($M = 4.33$, $SD = 0.77$).

Table 3 shows the means and standard deviations for the perceived likeability of the native and non-native accent with and without a PCM.

Perceived status

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

Table 3 shows the means and standard deviations for the perceived status of the native and non-native accent with and without a PCM.

Perceived competence

A two-way ANOVA with type of accent ($F(1, 138) = 107.89$, $p < .001$) and presence of prejudice measure ($F(1, 119) < 1$) as independent variables showed a significant main effect of type of accent on competence of the speaker. There was no main effect of presence of PCM on the competence of the speaker. The interaction effect between the two independent variables was not significant ($F(1, 138) < 1$). The AE accent ($M = 5.76$, $SD = 0.69$) was judged to have significantly more status than the DE accent ($M = 4.21$, $SD = 1.04$).

Table 3 shows the means and standard deviations for the perceived competence of the native and non-native accent with and without a PCM.

Table 3. Means, standard deviations and number of participants 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 measure			No prejudice control measure			Total		
	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n
<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

Perceived hirability

A two-way ANOVA with type of accent ($F(1, 138) = 29.60, p < .001$) and presence of prejudice measure ($F(1, 138) < 1$) as independent variables showed a significant main effect of type of accent on hirability of the speaker. There was no main effect of presence of PCM on the hirability of the speaker. The interaction effect between the two independent variables was not significant ($F(1, 138) < 1$). The AE accent ($M = 4.14, SD = 0.42$) was judged significantly more hireable than the DE accent ($M = 3.78, SD = 0.34$).

Table 4 shows the means and standard deviations for the perceived hirability of the native and non-native accent with and without a PCM.

Table 4. Means, standard deviations and number of participants for the two-way analyses of variance for hirability with the type of accent and presence of prejudice control measure as independent variables.

	Prejudice control measure			No prejudice control measure			Total		
	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n	<i>M</i>	<i>SD</i>	n
<i>Hirability</i>									
American English	4.12	0.35	31	4.15	0.47	41	4.14	0.42	72
Dutch English	3.80	0.37	40	3.77	0.29	30	3.78	0.34	70
Total	3.94	0.40	71	3.99	0.45	71	3.96	0.42	142

CONCLUSION/DISCUSSION

To recapitulate, the purpose of the present study was to determine to what extent a native AE accent was judged differently from a non-native DE accent by Dutch monolingual listeners on hirability, understandability and attitudinal evaluations in a job application situation. In addition, it was attested to what extent a written PCM would have an effect on these evaluations. It can be concluded that, based on the results of the present study, a native AE accent is judged more positively than a non-native DE accent on hirability, understandability and attitudinal evaluations, confirming the first hypothesis. However, it appears that a written

PCM does not cause listeners to be more lenient towards the non-native job applicants, which means the second hypothesis is infirmed.

Regarding understandability, the semantic differential statements used to attest the intelligibility of the native AE accented speaker and non-native DE accented speaker showed that the type of accent had a main effect on the intelligibility of the speaker. These results are in line with previous research that showed that native English is more intelligible than non-native English, regardless of the linguistic background of the listeners (Deprez-Sims & Morris (2010), Hendriks et al. (2016), Hendriks et al. (2018), Nejari et al. (2012), Nejari et al. (2020), Nickerson (2005), Roessel et al. (2019)). For comprehensibility, type of accent had a significant effect on the ability to comprehend what was said by the speaker. Non-native DE accented speakers were judged less comprehensible than native AE speakers, which is in line with previous research, regardless of the linguistic background of the listeners (Deprez-Sims & Morris (2010), Fuertes et al. (2012), Hendriks et al. (2016), Hendriks et al. (2018), Nejari et al. (2012), Nejari et al. (2020), Nickerson (2005), Roessel et al. (2019)).

However, there was no significant effect found for the PCM on intelligibility or comprehensibility. Hansen et al. (2014) and Roessel et al. (2019) did not report any results on the effect of a PCM on the intelligibility of a speaker. It is therefore hard to say why the PCM had no effect on intelligibility. However, it can be assumed based on common sense that a notion to not let pre-existing bias influence evaluations would not influence the ability of listeners to recall a specific piece of text. Roessel et al. (2019) also reported no effect of the presence of a PCM on comprehensibility, which means the result from the present study is in line with previous research, which it was meant to replicate too. As there were no main effects of the presence of a PCM, there were no interaction effects between type of accent and presence of PCM on intelligibility and comprehensibility either. So, it could be concluded that the type of accent (native vs. non-native) seems to have a significant effect on the understandability of a speaker, even if the listener has the same linguistic background as the non-native speaker. Yet, the presence of a written PCM seems to not make a difference in the ability to understand what a speaker with either accent is saying.

For the attitudinal evaluations, likeability, status and competence, the results were all similar. There was a significant main effect of type of accent on attitudes listeners had towards the speakers. Native AE accented speakers were judged to be more likeable, have more status and be more competent than the non-native DE accented speakers, which is in line with previous research (Deprez-Sims & Morris (2010), Fuertes et al. (2012), Hendriks et

al. (2016), Hendriks et al. (2018), Nejjari et al. (2012), Nejjari et al. (2020), Nickerson (2005), Roessel et al. (2019)). However, there was no significant effect of the presence of a PCM on the attitudinal evaluations. This does not concur with the results of Roessel et al. (2019), who showed that instructions that were meant to reduce the effect of an accent, which the present prejudice control text was based on, reduced the degree to which respondents judged the non-native speaker negatively for at least affect (likeability) and competence. Additionally, Hansen et al.'s (2014) results indicate a significant reduction in negative judgements towards non-native speakers for the item competence, when using a PCM where participants were exposed to their own experiences speaking a non-native language. As there was no main effect of the PCM, no interaction effect between type of accent and presence of PCM on the attitudinal evaluations was found either. So, it could be concluded that, in line with past research, the type of accent (native vs. non-native) seems to have a significant effect on the attitudinal evaluations by listeners, regardless of their linguistic background. Yet, the presence of a PCM, unlike in previous research, seems to not have an effect on attitudinal evaluations in the present study.

For the last independent variable, hirability, which was meant to attest whether listeners would actually hire a speaker based on their job pitch, similar results were found as for the attitudinal evaluations. The type of accent had a significant effect on whether Dutch listeners would hire an applicant, with the native AE accented speaker judged significantly more hireable than the non-native DE accented speaker. Because of the relatively little use of this variable in past research, it is hard to compare the present results to previous research. However, as the variable was based on the hirability variable in Roessel et al. (2019), it can be compared to those specific outcomes. In Roessel et al. (2019), a significant effect of the type of accent was found on the hirability of a speaker, when strong arguments were used in the stimulus material. The present study found the same results, as it also made use of stimulus material with strong arguments for why one should be hired for the specific positions the speaker was applying for. Therefore, it can be stated that the results are in line with past research, and were also in the line of expectation, as attitudinal evaluations likeability and competence, which were used as mediators in Roessel et al. (2019), showed results rather concurring with previously found outcomes too. That said, once again, there was no significant effect of the PCM on the hirability of the speaker. Both the native and non-native speakers were not judged differently in the conditions where the listeners were specifically instructed to not let pre-existing bias influence their evaluations, as this study was meant to replicate a job application situation. These results are not in line with Hansen et

al. (2014) or Roessel et al. (2019), which showed listeners to be more lenient in their hirability judgements towards the speakers when confronted with the possibility of judging them based on prejudices. Again, there was no interaction effect between type of accent and presence of PCM on the hirability either. So, it could be concluded that, in line with past research, the type of accent (native vs. non-native) seems to have a significant effect on the hirability of speakers. Yet, the presence of a PCM, unlike in previous research, seems to not have an effect on hirability in the present study.

Clear is that the analyses regarding the influence of a non-native accent on the hirability, understandability and attitudinal evaluations did not cause any surprising results. Striking is however, that the written PCM did not cause respondents to be more lenient towards the speakers, specifically the non-native speakers, on the evaluations where this was expected, hirability and attitudes. A cause for this could be the fact that the PCM was written rather than conducted offline and face-to-face, which Hansen et al (2014) and Roessel et al. (2019) did do. This meant respondents could neglect the text they were presented with and therefore not be made aware of the biases they might have and the request to not base their evaluations on those biases. In addition, the written PCM used in the present research, did not explicitly mention that it was accent biases that respondents had to look out for because research had proven those to influence judgements negatively. Rather, people were instructed to not let any biases, including among others, accent biases, influence their evaluations. This was more implicit. However, Roessel et al. (2019) reports their PCM as rather explicitly instructing respondents about the research done into the negative accent bias and not to base their evaluations on feelings or stereotypes that might be evoked by the accent heard. The fact that the present research made use of a written, implicit PCM may explain why respondents were not affected by it. In the future, research could be done into the use of written PCMs which are explicit, like Roessel et al.'s (2019) face-to-face instructions and into whether and offline questionnaire where respondents cannot neglect the written text makes a difference regarding accent effect reduction. Additionally, research could be done into whether different languages, that is, non-Germanic, react differently to PCMs, as only Germanic languages have yet been attested (present research; Hansen et al., 2014; Roessel et al, 2019).

What could have also caused the rather insignificant results of the PCM were the differences in voice characteristics that were measured for the verbal guise speakers. In the pretest, the speakers that were chosen to be used in the experiment were judged similarly on voice characteristics by twenty participants and had similar speech rates. Yet, results from the

same questions in the experiment, indicate that, when using a larger sample, voice characteristics seem to differ after all. This means the verbal guise technique was not successful, which could have influenced the results of the present study. However, as the results for the differences in judgements between the native and non-native accent are in concurrence with previous research, the effect might have been marginal. Still, future research could make use of experts to judge the authenticity of accents in the pretests, like Hendriks et al. (2018) did, to ensure the viability of the verbal guise technique. Furthermore, the targeting of specifically HR-students in addition to working people did not make a significant difference in the results, compared to previous research, and might not be relevant enough for further investigation with regards to accent bias in the business context.

Based on the results of the present research, it could be concluded that the use of a written, implicit PCM seems to not make respondents with the same linguistic background more lenient in their judgements towards non-native English-speaking job applicants. The present research provides new insights in the accent effect reduction measures in the workplace, specifically in job application situations; the role of understandability and attitudinal evaluations as predictors of hirability evaluations; and the judgement of non-native listeners towards non-native speakers. Considering the negative attitudes towards non-native job applicants in the present study and the insignificant effect of a written PCM, it seems even more important that people on the work floor are made aware of their biases to diminish employment discrimination. As previous research into PCMs have shown, prejudices can be overcome and should not prevent non-native speakers of being accepted as well as native speakers in the working environment.

LITERATURE

- Bayard, D., Weatherall, A., Gallois, C., & Pittam, J. (2001). Pax Americana? Accent attitudinal evaluations in New Zealand, Australia and America. *Journal of Sociolinguistics*, 5(1), 22-49.
- Beinhoff, B. (2014). Perceiving intelligibility and accentedness in non-native speech: A look at proficiency levels. *Concordia Working Papers in Applied Linguistics*, 5, 58-72.
Retrieved from http://doe.concordia.ca/copad/documents/6_Beinhoff_Vol5.pdf
- Charles, M. (2007). Language matters in global communication: Article based on ORA lecture, October 2006. *Journal of Business Communication*, 44(3), 260-282.
- De Langhe, B., Puntoni, S., Fernandes, D., & Van Osselaer, S. M. (2011). The anchor contraction effect in international marketing research. *Journal of Marketing Research*, 48(2), 366-380.
- Deprez-Sims, A. S., & Morris, S. B. (2010). Accents in the workplace: Their effects during a job interview. *International Journal of Psychology*, 45, 417-426.
- Edwards, H. T. (1992). *Applied phonetics: the sounds of American English*. Singular Publishing Group.
- Fuertes, J. N., Gottdiener, W. H., Martin, H., Gilbert, T. C., & Giles, H. (2012). A meta-analysis of the effects of speakers' accents on interpersonal evaluations. *European Journal of Social Psychology*, 42(1), 120-133.
- Giles, H., & Billings, A. C. (2004). Assessing language attitudes: Speaker evaluation studies. *The handbook of applied linguistics*, 187, 209.
- Grondelaers, S., Van Hout, R., & Van Gent, P. (2019). Re-evaluating the prestige of regional accents in Netherlandic Standard Dutch: The role of accent strength and speaker gender. *Journal of Language and Social Psychology*, 38(2), 215-236.
- Hansen, K., Rakić, T., & Steffens, M. C. (2014). When actions speak louder than words: preventing discrimination of nonstandard speakers. *Journal of Language and Social Psychology*, 33(1), 68-77.
- Hendriks, B., Van Meurs, F., & Hogervorst, N. (2016). Effects of degree of accentedness in lecturers' Dutch-English pronunciation on Dutch students' attitudes and perceptions of comprehensibility. *Dutch Journal of Applied Linguistics*, 5(1), 1-17.
- Hendriks, B., Van Meurs, F., & Reimer, A. K. (2018). The evaluation of lecturers' nonnative-accented English: Dutch and German students' evaluations of different degrees of

- Dutch-accented and German-accented English of lecturers in higher education. *Journal of English for Academic Purposes*, 34, 28-45.
- Jesney, K. (2004). *The use of global foreign accent rating in studies of L2 acquisition*. Calgary, AB: University of Calgary Language Research Centre Reports.
- Munro, M. J., Derwing, T. M., & Morton, S. L. (2006). The mutual intelligibility of L2 speech. *Studies in second language acquisition*, 111-131.
- Nejjari, W., Gerritsen, M., Van der Haagen, M., & Korzilius, H. (2012). Responses to Dutch-accented English. *World Englishes*, 31(2), 248-267.
- Nejjari, W., Gerritsen, M., Van Hout, R., & Planken, B. (2020). Where does a ‘foreign’ accent matter? German, Spanish and Singaporean listeners’ reactions to Dutch-accented English, and standard British and American English accents. *PloS one*, 15(4), e0231089.
- Nickerson, C. (2005). English as a lingua franca in international business contexts. *English for Specific Purposes*, 24(4), 367-380.
- Roessel, J., Schoel, C., Zimmermann, R., & Stahlberg, D. (2019). Shedding new light on the evaluation of accented speakers: Basic mechanisms behind nonnative listeners’ evaluations of nonnative accented job candidates. *Journal of Language and Social Psychology*, 38(1), 3-32.
- Roessel, J., Schoel, C., & Stahlberg, D. (2020). Modern notions of accent-ism: Findings, conceptualizations, and implications for interventions and research on nonnative accents. *Journal of Language and Social Psychology*, 39(1), 87–111.
- Smith, L. E., & Nelson, C. L. (1985). International intelligibility of English: Directions and resources. *World Englishes*, 4(3), 333-342.
- Van Meurs, F., Hendriks, B. C., & Planken, B. C. (2013). Studying the effects of non-nativeness in a business communication context.

APPENDIX A.

JOB APPLICATION QUESTIONNAIRE

Start of Block: Intro/Consent

Dear participant,

Thank you for your willingness to participate in this study carried out at the Radboud University about the evaluation of English-spoken job pitches.

The procedure of this research study involves filling out an online questionnaire. 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 internationalisation, the process was conducted in English. Therefore, it is important that the volume on your computer or telephone is working. Preferably listen to the recordings using headphones. You can only listen to the recording once. After you have listened to the recording, you will be asked a number of questions. It is important that you read the texts and questions you are provided with carefully. Filling out this questionnaire will take approximately 10 to 15 minutes.

Your participation in this study is voluntary and you may withdraw at any time. All your answers will remain confidential, are processed anonymously and will only be used for this study. Clicking on the 'I agree' button below indicates that:

- You have read the above information;
- You voluntarily agree to participate;
- You are a native Dutch speaker;
- You are not bilingual;
- You are at least 18 years of age.

If you do not wish to participate in this study, please click 'I do not agree and want to exit this survey'. You will be automatically redirected to the end of this questionnaire.

Should you want more information on this study, please contact nienke.arends@student.ru.nl.

Thank you again for your participation.

- ☐ **I agree (1)**
- ☐ **I do not agree and want to exit this survey (2)**

Skip To: End of Survey If Dear participant, Thank you for your willingness to participate in this study carried out at t... != I agree

Reducing Accent Discrimination in the Workplace

I confirm that my native language is Dutch and that I am not bilingual. If your native language is not Dutch or if you are bilingual, you are not eligible for this study and will be directed to the end of the survey.

- ☐ Yes (1)
- ☐ No, my native language is not Dutch (2)
- ☐ No, I am bilingual (3)

Skip To: End of Survey If I confirm that my native language is Dutch and that I am not bilingual. If your native language i... != Yes

End of Block: Intro/Consent

Start of Block: Prejudice control

Attention: The following organisation values a diverse workforce and working environment. All qualified applicants will receive consideration for employment without regard to age, gender identity or expression, ethnicity and accent. Please keep this in mind when listening to the following audio recordings and try not to base your evaluations on feelings or stereotypes that might be evoked during the audio recording.

You can now go through to the recording. Make sure to listen to the recording in full. We advise you to wear headphones and have your volume up, as you will only be able to listen to the recording once.

End of Block: Prejudice control

Start of Block: No prejudice control

You can now go through to the recording. Make sure to listen to the recording in full. We advise you to wear headphones and have your volume up, as you will only be able to listen to the recording once.

End of Block: No prejudice control

Start of Block: Audio recording American (American3)

Listen to the following audio recording **once**.

Reducing Accent Discrimination in the Workplace

After listening, proceed to the next page.

American English audio

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 overanalyse 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.'*

End of Block: Audio recording American (American3)

Start of Block: Audio Recording Dutch (Dutch3)

Listen to the following audio recording once.

After listening, proceed to the next page.

Dutch English audio

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 overanalyse 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.'*

End of Block: Audio Recording Dutch (Dutch3)

Start of Block: Understanding the message - 1. Intelligibility, 2. Comprehensibility

Answer the questions by marking the bullet that best reflects your personal opinion. It is important that you fill in all the questions. Please remember that we are interested in your opinions, which means your answer can never be wrong.

Please finish the following statement:

'I think, what this speaker is saying is...'

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Very easy to recall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very difficult to recall
Hard to recall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Effortless to recall
Uncomplicated to recall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Complicated to recall
Rather simple to recall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rather tough to recall
Demanding to recall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Undemanding to recall

Reducing Accent Discrimination in the Workplace

Please rate the following statements

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
I have to listen very carefully to the speaker (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The speaker speaks clearly (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The speaker is barely understandable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The speaker is difficult to comprehend (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have problems understanding what the speaker is talking about (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not understand what the speaker means (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Understanding the message - 1. Intelligibility, 2. Comprehensibility

Start of Block: Attitudinal Evaluations - 1. Likeability, 2. Status, 3. Competence

Please rate the following statements

Reducing Accent Discrimination in the Workplace

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
In my opinion, this speaker sounds credible (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds sympathetic (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds warm (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds humoristic (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds tactful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds polite (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds irritating (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds unfriendly (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate the following statements

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
In my opinion, this speaker sounds authoritative (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds trustworthy (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds self-confident (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds influential (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds like they have a powerful voice (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reducing Accent Discrimination in the Workplace

Please rate the following statements

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
In my opinion, this speaker sounds reliable (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds intelligent (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds competent (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds hardworking (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion, this speaker sounds educated (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Attitudinal Evaluations - 1. Likeability, 2. Status, 3. Competence

Start of Block: Hireability

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Please rate the following statements

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
I would recommend employing this job applicant (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a very positive impression of the job applicant (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a very negative impression of the job applicant (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The job applicant is professionally qualified (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The job applicant is not professionally qualified (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Hireability

Start of Block: Origin/Voice characteristics questions

Please rate the following statements

Reducing Accent Discrimination in the Workplace

	Completely disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (6)	Completely agree (7)
This speaker sounds like a native speaker of English (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This speaker has a strong foreign accent in English (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This speaker sounds like a native speaker of American English (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This speaker sounds confident (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This speaker sounds natural (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This speaker sounds pleasant (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please indicate which country you think the speaker is from

▼ Afghanistan (1) ... Zimbabwe (1357)

End of Block: Origin/Voice characteristics questions

Start of Block: Background variables



Please indicate your age

Please indicate your gender

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

Please indicate your native language

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Please select your highest level of education

- ☐ High school (1)
 - ☐ MBO (2)
 - ☐ HBO Bachelor (3)
 - ☐ WO Bachelor (4)
 - ☐ WO Master (5)
-

Please select the category most fitting to your current situation

- ☐ Human Resource student (1)
- ☐ Working a job (2)
- ☐ Human Resource Student and Working a job (3)
- ☐ Currently not employed but I have previously applied for job(s) (4)

Skip To: Q14 If Please select the category most fitting to your current situation = Working a job

Skip To: Q14 If Please select the category most fitting to your current situation = Currently not employed but I have previously applied for job(s)

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Please select what year of your Human Resource study you are in

- ☐ First year Bachelor (1)
 - ☐ Second year Bachelor (2)
 - ☐ Third year Bachelor (3)
 - ☐ Fourth year Bachelor (4)
 - ☐ More than fourth year Bachelor (5)
 - ☐ First year Master (6)
 - ☐ Second year Master (7)
 - ☐ More than second year Master (8)
-

Please select whether you have done/are doing (an) internship(s)

- ☐ Yes (1)
 - ☐ No (2)
-

Display This Question:

If Please select whether you have done/are doing (an) internship(s) = Yes

Please indicate **how many months** you have done or have been doing an internship for

Display This Question:

If Please select the category most fitting to your current situation != Human Resource student



Please indicate **how many years** you have been working

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Display This Question:

If Please select the category most fitting to your current situation != Human Resource student

Please indicate your current position (e.g. store manager, secretary, data analyst, et cetera)

Please indicate how proficient you are in **reading** English

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

Please indicate how proficient you are in **writing** English

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

Please indicate how proficient you are in **speaking** English

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

Please indicate how proficient you are in **listening** to English

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

End of Block: Background variables

APPENDIX B.

ETHICS REVIEW CHECKLIST

(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 → 4. Standard experimental research into linguistic judgement of language fragments → continue with questionnaire
- ☐ No → assessment necessary, end of checklist

Participants

5. Is the participant population a healthy one?

- ☒ Yes → continue with questionnaire

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- ☐ 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

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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

APPENDIX C. STATEMENT OF OWN WORK

Student name: *Teun Fransen*
Student number: *s1021776*

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

DECLARATION:

- a. I hereby declare that I am familiar with the faculty manual (<https://www.ru.nl/facultyofarts/stip/rules-guidelines/rules/fraud-plagiarism/>) and with Article 16 "Fraud and plagiarism" in the Education and Examination Regulations for the Bachelor's programme of Communication and Information Studies.
- b. I also declare that I have only submitted text written in my own words
- c. I certify that this thesis is my own work and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communication.

Signature:

A handwritten signature in black ink, appearing to be 'Teun Fransen', written over a horizontal line.

Place and date: *17 May 2021*