Radboud Universiteit Nijmegen

Native Dutch listeners' attitudes towards and understanding of Moroccan-flavored Dutch-accented speakers and the predictive effects of listeners' personality traits.

Master thesis

Name: Mathis Barten
Student number: 1012363
Study program: Master International Business Communication (2022)
Assessor: Dr. W. Nejjari
Second assessor: Dr. B.J.H. Hilberink-Schulpen
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Abstract

Native listeners often more negatively evaluate nonstandard-accented speakers in terms of competence and status, however, not necessarily when it comes to dynamism and likeability. Traditional accentedness studies have mainly focused on nonstandard-accented speakers' speech characteristics as the cause of listeners' attitudinal evaluations and understanding. However, listeners' personality traits have also been shown to influence their evaluations of nonstandard-accented speech. Therefore, in a within-subjects experimental (verbal-guise) design, the present study examined how a Moroccan-flavored Dutch (MFD) vs. a standard Dutch (SD)-accented speaker was evaluated by native Dutch listeners in terms of attitudes (competence, status, likeability, dynamism) and understanding (perceived comprehensibility, intelligibility). In addition, this study measured the predictive effects of listeners' personality traits on their attitudes towards and understanding of the MFD-accented speaker. Findings showed that the MFD-accented speaker was similarly evaluated as the SD-accented speaker on all attitudinal constructs. Meaning that native Dutch listeners do not necessarily downgrade MFD-accented speakers in terms of attitudes. However, Dutch listeners did perceive the MFD-accented speaker to be significantly less comprehensible than the SD-accented speaker, even though their actual intelligibility did not seem to be affected. This indicates that if the goal of communication is to successfully convey information, the MFD accent seems like a viable option. Furthermore, listeners with high scores on emotionality (anxious, sentimental, fearful) were more likely to assign harsher perceived comprehensibility scores to the MFD-accented speaker, highlighting the importance of the role of listeners' personality (traits) in the speech evaluation process. However, in view of the limitations, more research might be needed to confirm the present study's findings.

Introduction

The Moroccan-Dutch community has a rather strong presence in the Netherlands (Statista, 2022) and is likely to be negatively stigmatized (Bouabid, 2016). Many of these youngsters of Moroccan descent consciously speak with a Moroccan-flavored Dutch (MFD) accent to signal their identity (Nortier & Dorleijn, 2008). Even people without a Moroccan background sometimes appropriate Moroccan speech features as Arabic accents in Dutch are often seen as being 'cool' (Grondelaers & Van Gent, 2019). Since accents can be salient cues for ethnicity, they may form a basis for stigmatization (Gluszek & Dovidio, 2010). Hence, the negative stigma towards the Moroccan-Dutch community (Bouabid, 2016) may be reflected in Dutch listeners' evaluations of MFD-accented speakers.

Accentedness research commonly measures listeners' responses to non-standard accented speech in terms of attitudes (e.g. likeability, competence, dynamism) and understanding (e.g. perceived comprehensibility). Regarding attitudes, native listeners generally evaluate nonstandard-accented speakers more negatively on constructs related to competence and status compared to standard-accented speakers. However, mixed findings have been observed regarding constructs that aim to measure social attractiveness (e.g. likeability, dynamism) (Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al., 2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022). In terms of understanding, it seems like nonstandard-accented speech does not necessarily interfere with native listeners' actual intelligibility of nonstandard-accented speakers (Derwing & Munro, 1997; Hendriks et al., 2021; Munro & Derwing, 1995a). However, studies have found mixed results regarding native listeners' perceived comprehensibility of nonstandard-accented speakers (Hendriks et al., 2021; Hendriks & Van Meurs, 2022).

Traditional accent evaluation studies have mainly focused on nonstandard-accented speakers' speech characteristics as the cause of listeners' evaluations (Lindemann & Subtirelu, 2013; Subtirelu & Lindemann, 2016). However, ultimately, speech evaluation relies on human perception that may be subject to several social and perceptual biases (Lindemann & Subtirelu, 2013). Personality essentially affects how individuals perceive and interact with their environment (Cervone & Pervin, 2015). Therefore, it can be expected that listener personality also affects (Dutch) listeners' evaluations of nonstandard (MFD)-accented speakers. Yet, much more research is needed to fully grasp the influence of listener personality in the speech evaluation process (Gaffney & Côté, 2020; Yoon, 2021).

For those that speak with a nonstandard accent, it is important to assess how their

accent affects listeners' evaluations in terms of attitudes and understanding and to what extent these evaluations are caused by accentedness or a factor such as listeners' personality. As previously explained, MFD-accented speakers are a nonstandard-accented speaker group in the Netherlands that is likely to be negatively evaluated due to the negative associations that their accentedness may trigger. Yet, relatively little research has focused on Dutch listeners' evaluations of MFD-accented speakers. Therefore, the present study will aim to assess how MFD-accented speakers are evaluated by native Dutch listeners, in terms of attitudes and understanding, and to what extent these evaluations may be predicted by native Dutch listeners' personality traits.

Accent

According to Lippi-Green (1994), accent can be defined as the manner in which one pronounces words, mainly in terms of intonation and phonology, that can be linked to particular social groups and/or geographic locations. Standard accents are generally seen as the linguistic norm in society (Lippi-Green, 1997), are associated with high socioeconomic status within a particular country (Giles & Billings, 2004) and are often spoken by the majority of the population (Fuertes et al., 2010). On the other hand, nonstandard accents are foreign (e.g. German-accented Dutch), regional (e.g. Southern-Dutch) or ethnic accents (e.g. Moroccan-Dutch), often spoken by minority groups that may have low socioeconomic status in a particular country (Fuertes et al., 2012). Initially, these nonstandard accents originate from the (un)conscious application of the phonology of one language (e.g. Moroccan) when speaking a different one (e.g. Dutch), resulting in a nonstandard-like accent (e.g. Moroccan-Dutch) (Hinskens, 2015). However, many second and later-generation descendants of particular foreign backgrounds may consciously speak with a nonstandard accent variety to emphasize their identity (Hinskens, 2015).

Speaking with a nonstandard accent can have considerable consequences for the speaker since accents can be salient cues for ethnicity and may form a basis for social categorization (Gluszek & Dovidio, 2010). Those with similar characteristics may be perceived as the in-group or 'us' and those who possess dissimilar characteristics may be perceived as the out-group or 'them' (Tajfel, 1978), possibly resulting in intergroup biases (Leaper, 2011). For example, a standard Dutch (SD)-accented speaker might tend to favor other SD-accented speakers (in-group) over nonstandard Dutch-accented speakers (out-group).

Speaking with a nonstandard accent can also form a basis for stigmatization (Gluszek

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& Dovidio, 2010). This means that a listener may discredit a nonstandard-accented speaker based on his nonstandard accent which is linked to (negative) stereotypes and/or associations.

A nonstandard-accented speaker group in the Netherlands that is likely to be victim of stigmatization is speakers with a Moroccan-flavored Dutch (MFD) accent. Around 422,000 out of 17.5 million inhabitants in the Netherlands have a Moroccan background (Statista, 2022). Many of these youngsters of Moroccan descent consciously speak with an MFD accent to signal their identity (Nortier & Dorleijn, 2008). According to Bouabid (2016), there seems to be a negative stigma on the Moroccan-Dutch based on the behavior of a small group of Moroccan-Dutch male youth that is commonly involved in grave social problems, such as crime (Bovenkerk, 2014) and nuisance. Implicit association tests among primary school children revealed that Dutch children already preferred an SD accent over a Moroccan-Dutch accent (Dekker et al., 2021). However, as Grondelaers and Van Gent (2019) suggest, there seems to be a growing societal appreciation for ethnic Arabic accents in Dutch. For instance, partly due to their omnipresence in Dutch rap music, Arabic accents in Dutch are often seen as being 'cool' (Grondelaers & Van Gent, 2019). As a result, even people without a Moroccan background sometimes appropriate Moroccan speech features (Grondelaers & Van Gent, 2019). Overall, it is important for those who (un)consciously speak with an MFD accent to know how native Dutch listeners evaluate them.

The Moroccan-flavored Dutch accent
The MFD accent is based on the phonological features of first-generation Moroccans' accent when they speak Dutch as a second language (i.e., based on a Moroccan-Dutch accent). However, it is slightly different since its speakers commonly are of second or later-generation Moroccan descent and have learned Dutch as a first language, which is why their accent is called Moroccan-flavored Dutch and not Moroccan-Dutch (Nortier & Dorleijn, 2008). Some characteristics of the phonological features of the Moroccan-Dutch accent are the following (see Nortier & Dorleijn, 2008 for a complete review):

- Gemination of the Dutch uvular /X/. The pronunciation of this letter sounds harder and sharper than in SD-accented speech.
- Gemination of the /z/. This letter is pronounced with more voice than in SD-accented speech.
- Difficulty to pronounce long tense vowels, for example: /proble:m/ > /problɛʊm/.
- Vowels are often pronounced inconsistently.

In contrary, speakers of second or later-generation Moroccan descent (MFD-accented speakers) often exaggerate some of the phonological features of the Moroccan-Dutch accent, especially in the pronunciation of consonants. For instance, they would make the syllable-initial /z/ even more voiced and the /x/ even sharper. However, their pronunciation of vowels is consistent and indistinguishable from SD-accented speech. It should be mentioned that MFD accents can be highly variable based on the degree to which the speaker's accent is colored by local provenance, Moroccan-Arabic, Berber and/or second language Dutch.

As previously mentioned, speaking with a nonstandard accent in any language can have considerable consequences for the speaker since accents can be salient cues for ethnicity and may form a basis for stigmatization (Gluszek & Dovidio, 2010). Since the Moroccan-Dutch are likely to be negatively stigmatized (Bouabid, 2016), it is assumable that this negative stigma may be transferred to Dutch listeners' evaluations of MFD-accented speakers.

Attitude

Previous research has demonstrated that having a nonstandard accent can affect native listeners' attitudinal evaluations of the speaker (Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al., 2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022). Attitude can be defined as the package of beliefs and feelings that one has, both positive and negative, relative to another person. Constructs that are commonly used in accentedness research to measure listeners' attitudinal evaluations of the speaker are status (trustworthiness, influence, self-confidence), likeability (credibility, friendliness, tactfulness, humor), competence (intelligence, competence, reliability) and dynamism (modern, hip, trendy) (Grondelaers et al., 2019; Hendriks & Van Meurs, 2022). These attitudinal constructs seem important to measure based on the logical assumption that the average person wants to be found likable, competent, dynamic and status-worthy. Moreover, being negatively evaluated on one of these constructs due to one's accentedness could have detrimental consequences for the speaker. For instance, when a particular accent causes a teacher to be negatively evaluated in terms of his or her competence, students might be inclined to take the teacher less seriously, potentially affecting the teacher's ability to transfer knowledge.

Research generally shows that native listeners more negatively evaluate nonstandard-accented speakers, compared to standard-accented speakers, on constructs related to competence and status (Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al.,

2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022). However, regarding constructs that aim to measure one's social attractiveness, such as solidarity, likeability, dynamism and integrity, mixed findings have been observed (Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al., 2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022). For instance, in Grondelaers and Van Gent (2019), MFD-accented speech was, compared to SD-accented speech, more negatively evaluated on superiority (competence, intelligence) and more positively on dynamism (hip, modern, trendy), even when the speakers were perceived to be unaccented (Grondelaers & Van Gent, 2019). However, a meta-analysis (Fuertes et al., 2012) observed that speakers with nonstandard accents in English are generally more negatively evaluated in terms of status, dynamism and solidarity by both native and non-native listeners.

Based on the evaluation of previous studies' findings, it is likely that Dutch listeners will more negatively evaluate MFD-accented speakers, compared to SD-accented speakers, on status and competence, however, not necessarily on dynamism and likeability. Due to the seemingly growing societal appreciation for ethnic Arabic accents in Dutch that are often seen as being 'cool', Dutch listeners might even more positively evaluate MFD-accented speakers on dynamism (modern, hip, trendy), as was observed in Grondelaers and Van Gent (2019).

Understanding

Arguably, the ultimate goal of communication is to successfully convey information. Therefore, it is also important to assess the extent to which a nonstandard-accented speaker has been understood by the listener. Intelligibility and perceived comprehensibility are commonly used in accentedness research as constructs to measure listeners' understanding of the speaker (Derwing & Munro 1997; Hendriks et al., 2016; Hendriks & Van Meurs, 2022; Munro & Derwing, 1995a; Nejjari et al., 2012; Nejjari et al., 2020). Perceived comprehensibility is mainly concerned with one's subjective or perceptual comprehension of accented speech (Munro & Derwing, 1995a). Intelligibility tries to assess listeners' actual understanding of individual sound patterns that form sentence-level elements like words (Nejjari et al., 2020).

Previous studies have found mixed results regarding native listeners' perceived comprehensibility of nonstandard-accented speakers (Derwing & Munro, 1997; Hendriks et al., 2021; Hendriks & Van Meurs, 2022). Some studies show that native listeners perceive nonstandard-accented speakers to be less comprehensible than standard-accented speakers

(Derwing & Munro, 1997; Hendriks & Van Meurs, 2022) while other studies did not observe this (Hendriks et al., 2021). Regarding intelligibility, it seems like nonstandard accents do not necessarily interfere with native listeners' intelligibility of the nonstandard-accented speaker (Derwing & Munro, 1997; Hendriks et al., 2021; Munro & Derwing, 1995a). Generally, native listeners' perceived comprehensibility scores seem to be harsher than their actual intelligibility of nonstandard-accented speakers (Derwing & Munro, 1997; Munro & Derwing, 1995a). The lower perceived comprehensibility ratings may be caused due to native listeners' awareness of additional processing effort when evaluating nonstandard-accented speech, even when full understanding does ultimately occur (Munro & Derwing, 1995b). To summarize, the findings of previous research seem to indicate that nonstandard accents do not necessarily form a barrier to effective communication.

Based on the evaluation of previous studies and the fact that Dutch listeners are likely to downgrade MFD-accented speech (Grondelaers et al., 2015; Grondelaers & Van Gent, 2019), Dutch listeners' perceived comprehensibility (perceptual and more subjective measure of understanding) can be expected to be relatively lower than their actual intelligibility (functional and more objective measure of understanding) of MFD-accented speakers. Moreover, Dutch listeners' intelligibility of MFD-accented speakers is likely to be equal to their intelligibility of SD-accented speakers. Consequently, together, these findings may show that the MFD accent is not as incomprehensible as Dutch listeners might perceive it to be and, if the ultimate goal of communication is to successfully convey information, may be a viable alternative to the SD accent.

Listener personality

Although speakers and listeners share the responsibility for successful communication (Lindemann & Subtirelu, 2013), traditionally, studies investigating the effects of nonstandard accents on listeners' evaluations of the speaker have mainly focused on nonstandard-accented speakers' speech quality as the cause for listeners' evaluations (Lindemann & Subtirelu, 2013; Subtirelu & Lindemann, 2016). Typically, nonstandard-accented speakers' pronunciation is compared to standard-accented speaker norms, even in situations where the alleged goal of a communicative act seems to be intelligible for your interlocutor instead of having an 'accurate' or standard-like pronunciation (Lindemann & Subtirelu, 2013). In doing so, solutions to improve listeners' evaluations of the nonstandard-accented speaker have mainly been placed on the shoulders of the speaker, for instance, through language or pronunciation training (Lindemann & Subtirelu, 2013; Subtirelu & Lindemann, 2016).

However, ultimately, speech evaluation relies on human perception that may be subject to several social and perceptual biases (Lindemann & Subtirelu, 2013). For instance, studies have shown that listeners' personality (Dewaele & McCloskey, 2015; Gaffney & Côté, 2020; Seravalle, 2010; Yoon, 2021) can act as a confounding factor, affecting listeners' speech evaluations. It is essential to assess the importance of the role of the listener in the speech evaluation process since this may clarify how listeners' evaluations of the speaker may be altered and who should bear this burden, the speaker, the listener, or both.

Listeners' personality is an underexplored listener factor that may affect their evaluations of nonstandard-accented speakers (Gaffney & Côté, 2020; Yoon, 2021). Personality essentially affects how one perceives and interacts with his environment (Cervone & Pervin, 2015). Therefore, it can be expected that personality also influences (Dutch) listeners' attitudes towards and understanding of nonstandard (MFD)-accented speakers. Yet, the influence of listener personality (Gaffney & Côté, 2020; Yoon, 2021), and listeners factors in general (Lindemann & Subtirelu, 2013), in the speech evaluation process is largely underexplored and, therefore, needs more extensive research.

The Big-Five factor model by Goldberg (1993) is one of the most widely used measures that conceptualizes personality (DeYoung et al., 2007). Its dimensions were recovered by early lexical investigations among small data sets in the English language. However, recent lexical investigations among larger data sets in many languages have recovered six personality dimensions, called the HEXACO personality factors (Ashton & Lee, 2007). The dimensions of the HEXACO personality inventory measure the extent to which one is sincere, fair, modest (**H**onesty-Humility); fearful, anxious and sentimental (**E**motionality); sociable, lively and expressive (E**x**traversion); patient, forgiving and flexible (**A**greeableness versus Anger); organized, perfectionistic and diligent (**C**onscientiousness); unconventional, appreciative and creative (**O**penness to experience) (Ashton & Lee, 2007).

Previous research has found relationships between certain personality dimensions and listeners' judgment of speakers' (linguistic) abilities (Dewaele & McCloskey, 2015; Gaffney & Côté, 2020; Seravalle, 2010; Yoon, 2021). Most of these studies have used (dimensions of) the Big-Five model by Goldberg (1993) to assess listeners' personality traits (Dewaele & McCloskey, 2015; Gaffney & Côté, 2020; Yoon, 2021). For instance, Yoon (2021) found that native and non-native English teachers with higher scores on extraversion evaluated nonstandard-accented speakers to be more fluent. Similarly, Gaffney and Côté (2020) found that native Canadian listeners with higher scores on extraversion were more lenient in their foreign accentedness ratings whereas those with higher scores on conscientiousness appeared

to be harsher in their foreign accentedness ratings of nonstandard-accented speakers. In Dewaele and McCloskey (2015), multilinguals that were emotionally stable, extraverted and tolerant of ambiguity had more positive attitudes towards others' nonstandard accents. Finally, Seravalle (2010) found that English students with lower levels of tolerance of ambiguity were more critical regarding their judgments in terms of speakers' accentedness, status, competence, pleasantness and comprehensibility.

Based on the evaluation of previous studies, it may be expected that extraversion, emotionality and conscientiousness appear as significant predictors for Dutch listeners' evaluations of MFD-accented speakers. More specifically, Dutch listeners with low scores on extraversion and high scores on emotionality and conscientiousness are more likely to positively evaluate MFD-accented speakers in terms of attitudes and understanding.

Current study

There are several reasons why accentedness research can benefit from an investigation into Dutch listeners' evaluations of MFD-accented speakers in combination with the predictive effects of listeners' personality traits on these evaluations. Firstly, as previously mentioned, many youngsters of Moroccan descent in the Netherlands speak with an MFD accent to signal their identity (Nortier & Dorleijn, 2008). Even people without a Moroccan background sometimes appropriate Moroccan speech features as Arabic accents in Dutch are often seen as being 'cool' (Grondelaers & Van Gent, 2019). Since accents can be salient cues of ethnicity and may form a basis for stigmatization and social categorization (Gluszek & Dovidio, 2010), it is important for those who (un)consciously speak with an MFD accent to know how native Dutch listeners evaluate them. Especially since the Moroccan-Dutch are likely to be negatively stigmatized (Bouabid, 2016). Yet, the focus of accentedness research seems to have mainly been placed on the evaluations of nonstandard English accent varieties and little on those of nonstandard (ethnic) accent varieties in other languages, such as Dutch. Based on previous research (Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al., 2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022), it is likely that native Dutch listeners will more negatively evaluate MFD-accented speakers, compared to SD-accented speakers, on attitudinal constructs such as status and competence, however, not necessarily on dynamism and likeability. Since ethnic Arabic accents in Dutch are often interpreted as 'cool', Dutch listeners might even more positively evaluate MFD-accented speakers on dynamism (modern, hip, trendy), as was observed in Grondelaers and Van Gent (2019). Regarding understanding, the findings of previous

research (Derwing & Munro, 1997; Munro & Derwing, 1995a, 1995b) and the fact that Dutch listeners are likely to downgrade MFD-accented speech (Grondelaers et al., 2015; Grondelaers & Van Gent, 2019) seem to predict that Dutch listeners' perceived comprehensibility might be relatively lower than their actual intelligibility of MFD-accented speakers. Moreover, it can be expected that the MFD accent does not necessarily interfere with Dutch listeners' intelligibility of MFD-accented speakers.

Secondly, although listener factors, such as listeners' personality (e.g. Gaffney & Côté, 2020), have shown to influence listeners' judgments of nonstandard-accented speakers, research has mainly focused on nonstandard-accented speakers' speech quality as the cause for listeners' evaluations (Lindemann & Subtirelu, 2013; Subtirelu & Lindemann, 2016). Personality essentially affects how individuals perceive and interact with their environment (Cervone & Pervin, 2015). Therefore, it can be expected that listeners' personality also affects (Dutch) listeners' evaluations of nonstandard (MFD)-accented speakers. Yet, much more research is still needed to fully grasp the influence of listeners' personality in the speech evaluation process (Gaffney & Côté, 2020; Yoon, 2021). In addition, studies that have focused on the relationship between listeners' personality and listeners' evaluations of nonstandard-accented speakers (Dewaele & McCloskey, 2015; Gaffney & Côté, 2020; Yoon, 2021) have mainly used the, compared to the six-dimensional HEXACO model (Ashton & Lee, 2007), traditional Big-five model by Goldberg (1993) to assess listeners' personality. The dimensions of the Big-five model were recovered by early lexical investigations among small data sets in the English language. However, more recent lexical investigations among larger data sets in many languages recovered six personality factors (HEXACO) (Ashton & Lee, 2007). Hence, the HEXACO personality inventory may be a more valid measure to assess listeners' personality traits.

Consequently, the present study will aim to measure how MFD-accented speakers are evaluated by native Dutch listeners, in terms of attitudes and understanding, and to what extent these evaluations can be predicted by native Dutch listeners' personality traits (as measured by the HEXACO model). The findings may show whether the negative stigma on the Moroccan-Dutch community is reflected in Dutch listeners' evaluations of MFD-accented speakers and whether the MFD accent forms a barrier to effective communication. In addition, the results might further clarify the link between listeners' personality (traits) and listeners' attitudes towards and understanding of nonstandard-accented speakers and, concurrently, the importance of the role of the listener in the speech evaluation process. Combined, these findings may indicate how Dutch listeners' evaluations of MFD-accented

speakers could be altered and who should bear this responsibility, the listener, the speaker, or both. In doing so, particular programs aimed at reducing bias against MFD-accented speakers may be conceived.

Based on a review of the literature, the following research questions have been formulated:

RQ1: To what extent do native Dutch listeners evaluate MFD vs. SD-accented speakers differently in terms of attitudes (status, competence, likeability, dynamism) and understanding (perceived comprehensibility, intelligibility)?

RQ2: To what extent can native Dutch listeners' personality traits predict their evaluations of MFD-accented speakers in terms of attitudes (status, competence, likeability, dynamism) and understanding (perceived comprehensibility, intelligibility)?

Method

Materials

The present study contained one independent variable (accent) and six predictor variables in the form of personality traits. To measure listeners' personality traits (*honesty-humility*, *emotionality*, *extraversion*, *agreeableness*, *conscientiousness* and *openness to experience*), Ashton and Lee (2007)'s HEXACO personality inventory was administered. Since the administration time for this personality test can be rather long, a short version of the HEXACO personality inventory, the HEXACO-60, was used (Ashton & Lee, 2009). The Dutch version of this model was obtained after contacting one of the designers of the model, dr. Michael Ashton.

The independent variable accent consisted of two levels, namely, MFD and SD. This independent variable was operationalized through a pre-test which saw the selection of two speech samples. In these speech samples, the speaker talked about his brother's job as a lawyer. The only difference between the speech samples was that one was voiced by a speaker with an MFD accent whereas the other was voiced by a speaker with an SD accent. A verbal-guise technique was used to voice the SD accent (control speaker). Both speakers were recruited in the area of Arnhem, Gelderland and had similar ages (MFD-accented speaker: 24, SD-accented speaker: 25). In addition, an SD-accented filler speaker speech sample about a random topic was used as a standard benchmark accent with which the participants could compare the MFD accent. Moreover, this filler speaker speech sample also aimed to familiarize the participants with the main task in the experiment. Therefore, participants were exposed to the filler speaker speech sample before listening to the MFD and (control) SD-accented speech sample (see the flow of the questionnaire in Appendix C). The choice to only use male speakers of similar ages was made in order to exclude the potential confounding of gender and age of the speaker.

Pre-test

A pre-test was conducted to examine the possibilities of a matched-guise technique and/or verbal-guise technique. The matched-guise technique entails asking participants to evaluate speakers based on recorded speech samples voiced by the same speaker using different accents. The verbal-guise technique implicates asking participants to evaluate speakers based on recorded speech samples voiced by different speakers that speak with different accents (Nejjari et al., 2019). An advantage that the matched-guise technique has over the verbal-guise technique is that the same voice is used in both accent varieties which assures that the

participants respond to the accents that are under study instead of the individual speakers (Nejjari et al., 2019).

During the pre-test, 18 speech samples (approximately 20 seconds each) divided into 4 topics have been evaluated by a random panel of 22 native Dutch listeners. The speech samples were voiced by 2 MFD-accented speakers, 3 SD-accented speakers and one matched-guise speaker. The panel assessed the speech samples on speech rate (slow-fast), voice characteristics (dynamism, naturalness, pleasantness, loudness, speaks with confidence), the age of the speaker and the degree to which the speaker spoke with a (non)standard-Dutch accent. Moreover, this panel also had to identify the origin of the speakers' accents (adapted from Hendriks et al., 2021).

All speech samples were voiced by male speakers between the age of 18 to 25. The speech samples represented random topics, such as speakers' jobs, families and hobbies. With regards to the MFD-accented speech samples, two were taken from recordings of natural conversations between pairs of MFD-accented speakers obtained through professor dr. F. Hinskens. One of these speakers spoke about his job at a fair (Speaker 1) and the other spoke about his brother's job as a lawyer (Speaker 2). A matched-guise speaker (Speaker 3a/b) tried to replicate the latter fragment with both, an SD and an MFD accent. In addition, this matched-guise speaker also wrote a short text about his current job as a youth worker and tried to pronounce this text with both accents. Finally, 3 verbal-guise speakers (Speakers 4, 5 and 6) tried to replicate all MFD-accented speech fragments with an SD accent. These SD-accented speakers also recorded some speech fragments about random subjects such as their jobs, families and hobbies. The latter were aimed to function as filler condition speech samples.

Before conducting the pre-test, the speech fragments were first equalized in terms of speakers' speaking rate and speaking volume. In addition, any background noise was removed. These adaptations were performed by means of the software programs Adobe audition and Adobe premiere pro.

The results of the pre-test showed that the matched-guise speaker samples (Lawyer 3a, 3b and Youth 3a, 3b) were all identified as having an MFD accent 86 to 91% of the time. As a result, the matched-guise technique could not be applied and focus was shifted towards using a verbal-guise technique. The MFD-accented speaker that spoke about his job at a fair (Fair 1) was identified as having a Surinamese-Dutch accent by 41% of the participants. Hence, this speech fragment and the accompanying verbal-guise speech fragments (Fair 2, 3 and 4) were eliminated for the main experiment. The speaker in the final MFD-accented

speech sample (Lawyer 2) and the one in the failed matched-guise speaker samples (Lawyer 3a/b and Youth 3a/b) were identified as having an MFD accent by 86 to 91% of the participants. The accompanying (verbal-guise) standard-Dutch accented speech samples were correctly identified by around 72 to 91% of the participants (Lawyer 4, Lawyer, 5, Lawyer 6, Youth 4, Youth 5, Youth 6). See Table 1 for the findings of the pre-test.

Table 1. Percentages for the identification of the speakers' accents in the pre-test ($N = 22$).

	Standard-Dutch	Moroccan-Dutch	Drents	Surinamese-Dutch	Haags	Other
Fair 1	0%	50%	0%	41%	0%	9%
Fair 4	82%	5%	0%	0%	0%	14%
Fair 5	82%	5%	0%	0%	9%	5%
Fair 6	91%	5%	0%	0%	5%	0%
Lawyer 2	0%	86%	0%	0%	0%	14%
Lawyer 3a*	0%	91%	0%	5%	0%	5%
Lawyer 3b	5%	91%	0%	0%	0%	5%
Lawyer 4*	73%	5%	5%	5%	9%	5%
Lawyer 5	91%	5%	0%	0%	5%	0%
Lawyer 6	73%	5%	5%	0%	14%	5%
Youth 3a	0%	91%	0%	5%	0%	5%
Youth 3b	9%	86%	0%	5%	0%	0%
Youth 4	73%	5%	9%	5%	5%	5%
Youth 5	77%	0%	5%	0%	9%	9%
Youth 6	73%	5%	0%	5%	14%	5%
Filler speaker 4	86%	0%	0%	0%	9%	5%
Filler speaker 5*	95%	0%	0%	0%	0%	5%
Filler speaker 6	95%	0%	0%	0%	5%	0%

Selected speakers for the main experiment*

Besides the panel, two researchers (dr. K. Mourigh and dr. F. Hinskens) that are experts in research regarding Dutch ethnolects were also asked to identify the accent (SD vs. MFD) of the speakers in the speech samples and to evaluate the understandability of the speakers. Dr. K. Mourigh (personal communication, May 30, 2022) identified the speakers' accents comparable as to how the panel of 22 participants evaluated them, although he would have liked to make more gradations. On the other hand, dr. F. Hinskens (personal communication, May 16, 2022) indicated that it was not possible to indicate which accents were representative of an MFD accent as the variety of this accent is highly variable based on the degree to which it is colored by local provenance, Arabic or Berber and second language Dutch.

Since the matched-guise manipulation had been unsuccessful, it was important to find speakers with similar voice characteristics to make sure that listeners' evaluations in the main experiment would, mainly, be based on the different accents instead of the different voices. Therefore, participants' evaluations of the speakers were all compared to each other in pairs by means of paired samples t-tests in SPSS. Paired samples t-tests are conducted when there are two experimental conditions in which the participants both have participated (Field, 2013). The analyses revealed that only one MFD-accented speaker (Lawyer 3a) and one verbal-guise SD-accented speaker (Lawyer 4), discussing their brother's job as a lawyer, were comparably and not significantly different evaluated in terms of voice characteristics and speech rate (see Appendix A). In addition, both speakers were born and raised in the city of Arnhem (Gelderland, Netherlands) limiting the potential confounding effect of differences in regional accentedness. To summarize, since the speakers had accents that were relatively often correctly identified (MFD/SD) and had voices that were comparable in terms of voice characteristics, speech rate and age, they were selected to function as the experimental (MFD-accented) and control (SD-accented) condition in the main experiment.

Regarding the filler condition speech samples (Filler speaker 4, 5 and 6), all SD-accented speakers' accents were correctly identified 95 to 100% of the time. Hence, for the selection of the filler condition speech sample, a speech sample of a different SD-accented speaker (Filler speaker 5) than the one that was selected to function as the control speaker for the main experiment (Speaker 4) was chosen.

Subjects

In total, 180 native Dutch listeners participated in the experiment. There were no restrictions with regards to participants' ethnicity, gender, age or educational background, except that

they needed to be at least 18 years old. Participants were asked to identify the type of accent of the speaker. Results showed that 88% correctly identified the filler speaker's accent (standard-Dutch), 97% correctly identified the experimental speaker's accent (MFD) and 66% correctly identified the control speaker's accent (standard-Dutch). In order to prevent the interference of associations with other speaker groups than those under study, only the responses of the participants which correctly identified the experimental and control speakers' accents were included. Moreover, 7 additional participants were excluded because they provided irrelevant answers and/or used inappropriate language. As a result, the responses of 110 participants were included in the main analyses. Of these participants, 55 were exposed to the filler-experimental-control speaker condition and the other 55 were exposed to the filler-control-experimental speaker condition.

The participants had a mean age of 26.83 ($SD = 7.72$), range: 18-56. Moreover, 57 participants were female (52%), 52 (47%) were male and 1 participant indicated being non-binary (1%). Regarding educational background, participants reported following, or having finished, a university program (48%), a program at the university of applied sciences (43%), a vocational study (4%), a propaedeutic degree (3%), high school (2%) and a PHD (1%). Furthermore, regarding participants' self-assessed ethnic accent, only 2% indicated speaking with an ethnic Dutch accent themselves. The background variables: age ($t (106.76) = 0.11$, $p = .722$), gender ($\chi^2 (2) = 1.09$, $p = .579$), educational level ($\chi^{2.} (7) = 7.94$, $p = .338$) and self-assessed ethnic accent ($\chi^2 (1) = 3.08$, $p = .079$) were all equally and evenly distributed across the conditions (filler-experimental control and filler-control-experimental condition).

Design

The present study used a within-subjects experimental design with accent and listeners' personality (traits) as within subjects factors. Regarding accent, the MFD accent functioned as the experimental condition and the SD accent (verbal-guise) functioned as the control condition. In addition, another SD-accented speaker functioned as a filler condition aimed at offering participants a standard benchmark accent with which they could compare the MFD accent. Moreover, this filler speaker speech sample also aimed to familiarize the participants with the main task in the experiment. To minimize the influence of order effects, participants were randomly and equally attributed to either the filler-experimental-control condition or to the filler-control-experimental condition.

Instruments

In an online questionnaire distributed via Qualtrics, the following variables were measured: perceived comprehensibility, identification of the speaker's accent, intelligibility, likeability, dynamism, status, competence, voice characteristics, speech rate and listeners' personality traits. Before discussing the present study's instruments, it should be mentioned that Cronbach's alpha scores of .65, .66 and .69 were also considered acceptable because as Cho and Kim (2015) have shown, a reliability threshold of .7 is arbitrary and not supported by empirical evidence that clearly shows the extent to which 0.65, 0.66 and 0.67 indicate significantly less reliability than .70.

Listeners' *perceived comprehensibility* of the speaker was measured with four 7-point Likert scales anchored by 'completely disagree – completely agree' (based on Hendriks & Van Meurs, 2022). The following statements were used: 'I have to listen very carefully to be able to understand the speaker' (r); 'The speaker speaks clearly'; 'The speaker is difficult to comprehend' (r); 'I have problems understanding what the speaker is talking about' (r). The reliability of perceived comprehensibility, comprising four items, was good (α = .84).

Identification of the speaker's accent was measured by asking participants the following question: 'Which accent do you think this speaker has?' followed by a list with some of the main accent varieties in the Netherlands, including SD and MFD.

Listeners' *intelligibility* of the speaker was measured by asking the participants to orthographically transcribe a fragment of the speech sample which lasted around 2 seconds (adapted from Nejjari et al., 2012). Listeners were allowed to listen no more than two times to the short speech fragments. For each of the first 9 words of the speech fragment, participants could receive a point if they had correctly transcribed the word. Two raters independently assigned intelligibility scores of 1 to 9 for each participant. Typos and deviations in terms of spelling were not counted wrong. In addition, the closely related nouns 'zal' en 'zou' were both counted as correct. Afterwards, in case of a disagreement, the raters were instructed to jointly re-evaluate the intelligibility score to reach consensus. This method was chosen because initially, the raters disagreed with only 5 out of 220 intelligibility scores. Hence, it seemed unnecessary to use an inter-rater reliability test.

The attitudinal evaluations of the speaker were measured using twelve 7-point Likert scales. All scales were introduced by the statement 'The speaker sounds…' and were anchored by 'completely disagree – completely agree'. *Likeability* was measured by the items: irritating (r), unfriendly (r), humoristic and sympathetic. The reliability of likeability, comprising four items, was acceptable (α = .71). *Dynamism* was measured by the items: hip,

modern, lively and trendy. The reliability of dynamism, comprising four items, was good (α = .86). *Status* was measured by the items: influential, self-confident and trustworthy. The reliability of status, comprising three items, was acceptable (α = .66). *Competence* was measured by the items: intelligent, hardworking and competent. The reliability of competence, comprising three items, was acceptable (α = .79) (adapted from Grondelaers et al., 2019; Hendriks & Van Meurs, 2022).

To measure whether the speakers were similarly evaluated on their voice characteristics and speech rate(s) as during the pre-test, speakers' voice characteristics and speech rates were again measured. Speakers' voice characteristics were measured with seven 7-point Likert scales: 'This speaker has a loud voice'; 'This speaker sounds energetic'; 'This speaker sounds natural'; 'This speaker sounds monotonous'; 'This speaker has a pleasant voice'; 'This speaker speaks with confidence'; 'This speaker as a normal speech rate'. All statements were anchored by 'totally agree – totally disagree' (adapted from Hendriks et al., 2021). Additionally, based on two 7-point Likert scales, participants were also asked to indicate the degree to which the speaker had (1) an SD accent and (2) an ethnic Dutch accent (ethnolect). Both Likert scales were anchored by 'completely disagree – completely agree' (adapted from Hendriks & Van Meurs, 2022).

The Dutch version of the HEXACO-60 trait model was used to determine participants' personality traits (Ashton & Lee, 2009). The HEXACO-60 personality test consists of 60 items equally divided over the following six dimensions: *honesty-humility*, *emotionality*, *extraversion*, *agreeableness*, *conscientiousness* and *openness to experience*. All dimensions comprised 10 items. The reliability of honesty-humility (α = .69) and openness to experience (α = .65) was acceptable. The reliability of emotionality (α = .83), extraversion (α = .84), agreeableness (α = .80) and conscientiousness (α = .85) was good.

Finally, participants were asked to indicate whether they spoke with an ethnic accent in Dutch in a simple yes/no question (adapted from Hendriks & Van Meurs, 2022).

Procedure

The experiment was conducted on an individual basis utilizing an online questionnaire via Qualtrics which was administered in Dutch (see Appendix C for questionnaire). Participants were recruited by means of snowball and convenience sampling methods with the help of Whatsapp, Facebook and e-mail. In addition, the questionnaire was also published on SurveySwap and SurveyCircle. These platforms enable one to collect participants by filling out questionnaires and/or surveys of others. In the message that was sent to potential

participants, they were told that a couple of minutes of their time could help a student to graduate. No (financial) rewards were given to the participants.

In the introduction, participants were told that participation involved listening to three Dutch speech samples which they had to evaluate on the basis of several questions/statements. Moreover, they were also told that they had to conduct a short personality test. Furthermore, participants were informed about voluntary participation, the conditions to participate, data protection and anonymization. Thereafter, they were asked to give consent.

After the participants had given their consent, they were asked to indicate their mother tongue, gender, age and educational background. Subsequently, the main part of the experiment began. This part consisted of three parts, a filler speaker assessment, a control speaker assessment and an experimental speaker assessment. The order of the control and the experimental speaker assessments was randomized equally across the participants. Before listening to the filler speaker, participants were told to seek out a quiet environment and to turn up the volume of their devices in order for the upcoming speech fragment to be audible. Subsequently, they listened to an SD-accented filler speaker (11 seconds) which talked about a general topic. Participants were instructed to listen no more than once to the speech fragment. After listening, the participants were asked to fill out questions that aimed to measure their perceived comprehensibility of the speaker, identification of the speaker's accent and their attitudes towards the speaker. When finished with the filler speaker evaluation, participants were asked to listen to a speech fragment (20 seconds) voiced by either an MFD or an SD-accented speaker. After listening, participants were asked to fill out questions that aimed to measure their perceived comprehensibility of the speaker, identification of the speaker's accent and their attitudes towards the speaker. Subsequently, they were instructed to listen to a short fragment (2 seconds) of the same speech sample and to literally transcribe what the speaker had said. Participants were told to listen no more than 2 times to this short fragment. Finally, participants had to listen a final time to the full speech sample in order to evaluate the speaker based on his voice characteristics and speech rate. Participants that first evaluated the MFD-accented speaker then had to do the same for the SD-accented speaker and vice versa.

After the speaker evaluations, participants had to fill out 60 questions aimed at assessing their personality (as measured by the HEXACO-60 personality inventory). In the end, participants were told that the experiment was about the evaluations of ethnic Dutch accents. Thereafter, participants were asked to indicate whether they spoke with an ethnic

accent in Dutch in a simple yes/no question and they were thanked for their participation in the experiment. The mean length of the questionnaire was 25,63 minutes ($SD = 96,64$ minutes). It should be mentioned that the answers of participants were only deleted if they had not completed the questionnaire within 48 hours. As a result, outliers may have significantly affected the mean length of the questionnaire.

Statistical treatment

To compare the means of listeners' evaluations of MFD vs. SD-accented speakers in terms of attitudes (competence, status, likeability, dynamism) and understanding (perceived comprehensibility, intelligibility) (RQ1), several paired samples t-tests were performed. These tests were chosen because the participants participated in both conditions (filler-experimental-control and filler-control-experimental condition), the independent variable accent was nominal and had two levels and the dependent variables had an interval or ratio measurement level. To assess the predictive effects of listeners' personality traits on their evaluations of MFD-accented speakers (RQ2), multiple regression analyses were conducted. These statistical tests were used because the predictor variables (Honesty-Humility, Emotionality, Extraversion, Conscientiousness, Agreeableness and Openness to experience) had an interval measurement level and the outcome variables had an interval or ratio measurement level. All analyses were performed using the 27th version of SPSS. In Figure 1, the analytical model of this study can be found.

Figure 1. Analytical model
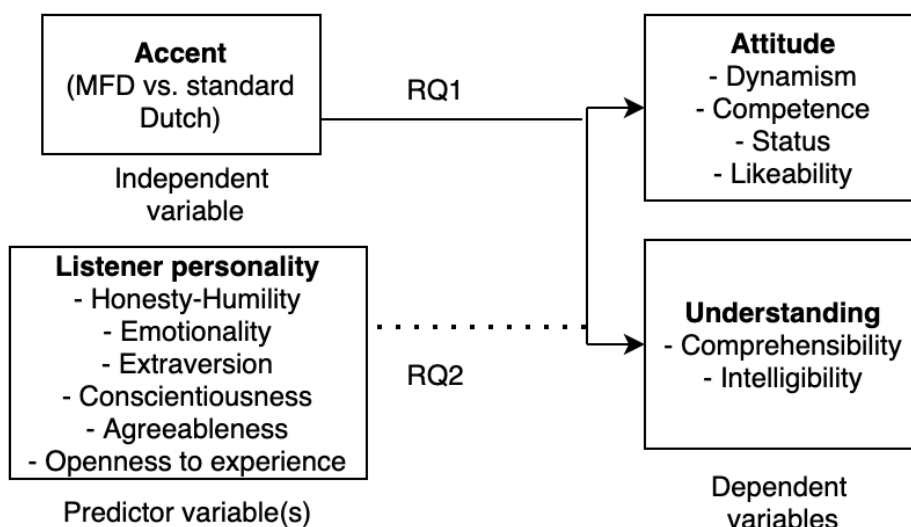
Results

Manipulation checks

Before performing the main analyses, several paired samples t-tests were conducted in order to see if the experimental (MFD-accented) and control (SD-accented) speaker were similarly evaluated with regards to their voice characteristics and age. A paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker with regards to confidence (t (109) = 2.84, p = .005). Dutch listeners evaluated the SD-accented speaker to speak with less confidence (M = 4.68, SD = 1.29) compared to the MFD-accented speaker (M = 5.04, SD = 1.00). In addition, a second paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker with regards to monotony (t (109) = -2.41, p = .018). Dutch listeners evaluated the SD-accented speaker to have a more monotonous voice (M = 4.21, SD = 1.47) compared to the MFD-accented speaker (M = 3.81, SD = 1.44). Moreover, a third paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker with regards to loudness (t (109) = -2.02, p = .045). Dutch listeners evaluated the SD-accented speaker to have a louder voice (M = 4.68, SD = 1.23) compared to the MFD-accented speaker (M = 4.44, SD = 1.22). Furthermore, a fourth paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker with regards to age (t (109) = 5.24, p < .001). Dutch listeners evaluated the SD-accented speaker to be slightly younger (M = 23.12, SD = 1.91) compared to the MFD-accented speaker (M = 24.4, SD = 2.83). No significant differences were found between the SD-accented and the MFD-accented speaker regarding their speech rate (t (109) = 0.14, p = .887) and the degree to which their voice sounded natural (t (109) = -0.68, p = .501), pleasant (t (109) = -1.95, p = .054) and energetic (t (109) = 1.04, p = .302). The observed significant differences with regards to the speakers' voice characteristics have been taken into account when interpreting the findings and in the limitations of the study.

Participants were also asked about the ethnic background of the speaker to check if the manipulation of the accents (SD and MFD) had been successful. A paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker regarding the degree to which the speaker had an SD accent (t (109) = -23.06, p < .001). Dutch listeners evaluated the SD-accented speaker to have more of an SD accent (M = 5.45, SD = 1.41) compared to the MFD-accented speaker (M = 1.77, SD = 0.87). A second paired samples t-test a significant difference between the MFD-accented speaker vs. the SD-accented speaker regarding the degree to which the speaker had an ethnic accent in Dutch (t

(109) = 8.87, *p* < .001). Dutch listeners evaluated the SD-accented speaker to have less of an ethnic accent in Dutch (*M* = 2.86, *SD* = 1.79) compared to the MFD-accented speaker (*M* = 5.40, *SD* = 1.60).

RQ1: To what extent do native Dutch listeners differently evaluate MFD vs. SD-accented speakers in terms of attitudes and understanding?

In order to answer RQ1, multiple paired samples t-tests were performed. The results of these analyses can be found in Table 2. For all analyses, the level of significance was set at *p* < .05.

Understanding

With regards to Dutch listeners' understanding of the MFD vs. the SD-accented speaker, a paired samples t-test showed a significant difference between the MFD-accented speaker vs. the SD-accented speaker with regards to perceived comprehensibility (*t* (109) = 4.53, *p* < .001). Dutch listeners perceived the SD-accented speaker to be significantly more comprehensible (*M* = 4.92, *SD* = 1.38) compared to the MFD-accented speaker (*M* = 4.20, *SD* = 1.37). A paired samples t-test showed no significant difference between the SD-accented and the MFD-accented with regards to Dutch listeners' intelligibility of the speaker (*t* (109) = 1.09, *p* = .280).

Attitudes

Regarding Dutch listeners' attitudinal evaluations of the MFD vs. the SD-accented speakers, paired samples t-tests showed no significant differences for competence (*t* (109) = 1.29, *p* = .201), likeability (*t* (109) = 0.16, *p* = .872) status (*t* (109) = 0.15, *p* = .882) and dynamism (*t* (109) = 0.94, *p* = .351).

Table 2. Means, standard deviations, sample size and *p* for intelligibility (1 = low, 9 = high), perceived comprehensibility, competence, status, likeability and dynamism (1 = low, 7 = high).

	MFD-accented speaker			SD-accented speaker			
	M	*SD*	*N*	*M*	*SD*	*N*	*p*
Intelligibility	8.61	0.99	110	8.71	0.63	110	.280
Comprehensibility	4.18	1.37	110	4.92	1.38	110	< .001
Competence	3.73	1.08	110	3.90	1.15	110	.201
Status	3.99	0.85	110	4.00	1.11	110	.882
Likeability	4.29	1.10	110	4.27	0.99	110	.872
Dynamism	4.20	1.08	110	4.31	1.11	110	.351

RQ2: To what extent can native Dutch listeners' personality traits predict their evaluations of MFD-accented speakers in terms of attitudes and understanding?

To be able to answer RQ2, several multiple regression analyses were performed. For all analyses, the level of significance was set at $p < .05$. With regards to Dutch listeners' understanding of the MFD-accented speaker, a multiple regression analysis showed that Dutch listeners' perceived comprehensibility of the MFD-accented speaker can be explained for 10% by the 6 variables (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to experience) entered into the model ($F (6, 103) = 3.08$, $p = .008$). HEXACO-dimension Emotionality was shown to be a significant predictor of Dutch listeners' perceived comprehensibility of the MFD-accented speaker ($\beta = -.32$, $p = .002$). For each increase of 1 *SD* in Emotionality, Dutch listeners' perceived comprehensibility of the MFD-accented speaker goes down by -.32 *SD*, given that all other variables are kept constant. However, Honesty-Humility ($\beta = .05$, $p = .593$), Extraversion ($\beta = -.18$, $p = .062$), Agreeableness ($\beta = .03$, $p = .787$), Conscientiousness ($\beta = -.11$, $p = .257$) and Openness to experience ($\beta = .06$, $p = .534$) did not appear to be significant predictors. The results of this analysis can be found in Table 3.

Table 3. Regression for the dimensions of HEXACO as predictors for perceived
comprehensibility ($N = 110$)

Variable	B	$SE\ B$	β
Intercept	6.97	1.58	
Honesty-Humility	.13	.24	.05
Emotionality	-.62	.19	-.32**
Extraversion	-.37	.19	-.18
Agreeableness	.06	.21	.03
Conscientiousness	-.21	.18	-.11
Openness to experience	.14	.22	.06
R^2	.10		
F	3.08**		

*$P < .05$, **$P < .01$, *** $P < .001$

A second multiple regression analysis showed that Dutch listeners' intelligibility of the MFD-accented speaker could not be explained by the six variables (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to experience) entered into the model ($F\ (6,\ 103) = 1.23$, $p = .272$).

With regards to Dutch listeners' attitudes towards the MFD-accented speaker, a third multiple regression analysis showed that Dutch listeners' evaluations of the MFD-accented speaker in terms of likeability can be explained for 6% by the 6 variables (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to experience) entered into the model ($F\ (6,\ 103) = 2.24$, $p = .045$). However, all HEXACO dimensions Honesty-Humility ($\beta = .15$, $p = .160$, Emotionality ($\beta = -.09$, $p = .392$), Extraversion ($\beta = .05$, $p = .598$), Agreeableness ($\beta = .18$, $p = .070$), Conscientiousness ($\beta = -.12$, $p = .232$) and Openness to experience ($\beta = .08$, $p = .381$) did not appear to be significant predictors. The results of this analysis can be found in Table 4.

Table 4. Regression for the dimensions of HEXACO as predictors for likeability ($N = 110$)

Variable	B	$SE\ B$	β
Intercept	2.61	1.29	
Honesty-Humility	.28	.19	.15
Emotionality	-.13	.16	-.09
Extraversion	.08	.16	.05
Agreeableness	.32	.17	.18
Conscientiousness	-.18	.15	-.12
Openness to experience	.16	.18	.08
R^2	.06		
F	3.08*		

*$P < .05$, **$P < .01$, *** $P < .001$

Finally, multiple regression analyses showed that Dutch listeners' evaluations of the MFD-accented speaker in terms of competence ($F\ (6, 103) = 2.06$, $p = .064$), status ($F\ (6, 103) = 1.85$, $p = .096$) and dynamism ($F\ (6, 103) = .98$, $p = .440$) could not be explained by the 6 variables (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to experience) entered into the model.

Conclusion and discussion

The purpose of this study was to assess how MFD-accented speakers were evaluated by Dutch listeners in terms of attitudes and understanding. This was measured because the negative stigma towards the Moroccan-Dutch community (Bouabid, 2016) was likely to be reflected in Dutch listeners' evaluations of MFD-accented speakers. Moreover, many youngsters of Moroccan descent in the Netherlands consciously speak with an MFD accent to signal their identity (Nortier & Dorleijn, 2008). Even people without a Moroccan background sometimes appropriate Moroccan speech features as Arabic accents in Dutch are often seen as being 'cool' (Grondelaers & Van Gent, 2019). Yet, the focus of accentedness research seems to have mainly been placed on the evaluations of nonstandard English accent varieties and little on those of nonstandard (ethnic) accent varieties in other languages, such as Dutch. Regarding understanding, the results showed that Dutch listeners perceived the MFD-accented speaker to be less comprehensible than the SD-accented speaker. However, no significant differences were found with regards to intelligibility. In terms of attitudes, Dutch listeners evaluated the MFD-accented speaker similarly to the SD-accented on all constructs (likeability, status, dynamism, competence).

Moreover, the present study also aimed to assess to what extent Dutch listeners' evaluations of MFD-accented speakers could be predicted by listeners' personality (traits). This was measured because traditional accent evaluation studies have mainly focused on nonstandard-accented speakers' speech characteristics as the cause of listeners' evaluations (Lindemann & Subtirelu, 2013; Subtirelu & Lindemann, 2016). However, speech evaluation relies on human perception that may be subject to several social and perceptual biases (Lindemann & Subtirelu, 2013). Personality essentially affects how individuals perceive and interact with their environment (Cervone & Pervin, 2015). Therefore, it could be expected that listener personality also affected (Dutch) listeners' evaluations of (MFD-accented) nonstandard-accented speakers. Yet, much more research was needed to fully grasp the influence of listener personality in the speech evaluation process (Gaffney & Côté, 2020; Yoon, 2021). Moreover, it was crucial for nonstandard (MFD)-accented speakers to know to what extent (Dutch) listeners' evaluations were caused by their accentedness instead of a factor such as listeners' personality. This could indicate how listeners' evaluations of MFD-accented speakers may be altered and who should bear this responsibility, the speaker, the listener, or both. The results showed that Dutch listeners who scored higher on emotionality (fearful, anxious and sentimental) were more likely to assign harsher perceived comprehensibility scores to MFD-accented speakers.

RQ1: To what extent do native Dutch listeners differently evaluate MFD vs. SD-accented speakers in terms of attitudes and understanding?

Understanding

Regarding understanding, the finding that Dutch listeners perceived the MFD-accented speaker to be less comprehensible than the SD-accented speaker is in line with previous studies which show that native listeners perceive nonstandard-accented speakers to be less comprehensible than standard-accented speakers (Derwing & Munro, 1997; Hendriks & Van Meurs, 2022). However, it contradicts the study by Hendriks et al. (2021) where this finding was not observed. With regards to intelligibility, the finding that Dutch listeners assessed the MFD-accented speaker to be as intelligible as the SD-accented speaker is in line with previous research which shows that nonstandard accents do not necessarily interfere with native listeners' intelligibility of the nonstandard-accented speaker (Derwing & Munro, 1997; Hendriks et al., 2021; Munro & Derwing, 1995a). Combined, the findings of this study seem to concur with the general observation that native listeners' perceived comprehensibility scores seem to be harsher than their actual intelligibility of nonstandard-accented speakers (Derwing & Munro, 1997; Munro & Derwing, 1995a). More specifically, they show that speaking with an MFD accent does not have to form a barrier to effective communication, although Dutch listeners might perceive this to be the case.

A possible explanation for the findings could be that Dutch listeners' downgraded MFD-accented speech based on the negative associations that it may trigger or because it does not sound like a standard variant of Dutch. Alternatively, an explanation could be that listeners were aware of (potential) additional processing effort when evaluating the MFD-accented speaker (Munro & Derwing, 1995b). Yet, the latter is not very likely since the MFD accent might have sounded familiar to the Dutch listeners which could have aided their comprehensibility of the MFD-accented speaker. An explanation for the deviating finding compared to Hendriks et al. (2021) may be the fact that the present study looked at a different nonstandard accent which triggers different associations and, subsequently, affects listeners' speech evaluations differently.

Attitudes

Regarding attitudes, the finding that the MFD-accented speaker was similarly evaluated as the SD-accented speaker in terms of status and competence does not concur with the general trend in accentedness research which mainly shows that nonstandard-accented speakers are more negatively evaluated on such constructs compared to standard-accented speakers

(Fuertes et al., 2012; Grondelaers et al., 2010; Grondelaers et al., 2015; Grondelaers & Van Gent, 2019; Heijmer & Vonk, 2002; Hendriks & Van Meurs, 2022). Moreover, it seems to contradict the findings by Grondelaers and Van Gent (2019) which showed that MFD-accented speech was, compared to SD-accented speech, more negatively evaluated on superiority (competence, intelligence). All in all, this suggests that speaking with an MFD accent does not necessarily have to affect Dutch listeners' perceptions of the speaker in terms of his competence (intelligent, hardworking, competent) and status (influential, self-confident, trustworthy).

There are multiple possible explanations for this finding. Firstly, listeners perceived the MFD-accented speaker to speak with more confidence, to sound less monotonous and to have a softer voice than the SD-accented speaker. This may have inflated Dutch listeners' evaluations in terms of status and competence of the MFD-accented speaker and/or deflated their evaluations in terms of status and competence of the SD-accented speaker. Especially since confidence also was one of the three items used to measure status. Secondly, the filler speaker may have influenced listeners' evaluations of the SD-accented speaker. To clarify, the filler speaker spoke with a sentence structure that may be considered to be 'normal' whereas the (control) SD-accented speaker spoke with a sentence structure that may be considered as 'slang' (see Appendix B for the texts of the speakers). As a result, listeners might have evaluated the (control) SD-accented speaker more negatively on status (influential, trustworthy, confident) and competence (competent, educated, hard-working). Thirdly, it may be the case that the status of the MFD accent and/or the associations with the Moroccan-Dutch community in the Netherlands have changed over the years. What gives further room to this thought is the fact that several majors of big cities (e.g. Ahmed Marcouch, Ahmed Aboutaleb) and (former) political figures (e.g. Khadija Arib; Malik Azmani) in the Netherlands have a Moroccan background. As a result, Dutch listeners' associations with the Moroccan-Dutch community, as triggered by speakers with an MFD accent, may not be significantly inferior in terms of status and competence compared to those evoked by an SD-accented speaker.

Regarding likeability, the finding that Dutch listeners evaluated the MFD-accented speaker similarly on likeability as the SD-accented speaker is in line with studies that show that nonstandard (regional)-accented speakers are not more negatively evaluated on constructs related to social attractiveness (solidarity, integrity) (Hendriks & Van Meurs, 2022). However, it contradicts the findings of studies that show that nonstandard (regional)-accented speakers are more positively evaluated in this regard (Grondelaers et al., 2010;

Heijmer & Vonk, 2002) and studies that show that non-standard (English)-accented speakers are more negatively evaluated in this regard (Fuertes et al., 2012).

A conceivable explanation for the deviating finding compared to studies that show that nonstandard-accented speakers are more positively (Grondelaers et al., 2010; Heijmer & Vonk, 2002), or more negatively evaluated (Fuertes et al., 2012) in this regard is the fact that the present study looked at a different nonstandard accent which may trigger different associations among listeners.

In terms of dynamism, the results showed that Dutch listeners did not perceive the MFD-accented speaker to be more dynamic than the SD-accented speaker. This finding contradicts the study by Grondelaers and Van Gent (2019) where MFD-accented speech was, compared to SD-accented speech, more positively evaluated on dynamism (hip, modern, trendy). Moreover, it also contradicts studies that show that non-standard (English)-accented speakers are more negatively evaluated in this regard (Fuertes et al., 2012). In addition, it is in contrast with the study by Hendriks and Van Meurs (2022) where the speaker with a standard accent was evaluated more positively on dynamism compared to the speaker with a nonstandard (regional) accent. All in all, this seems to suggest that speaking with an MFD accent does not necessarily have to affect Dutch listeners' perceptions of the speaker in terms of dynamism (modern, hip, trendy, lively).

A possible explanation for the deviating finding compared to Grondelaers and Van Gent (2019)'s finding might again be that Dutch listeners in the present study compared the (control) SD-accented speaker's sentence structure (slang) to the filler speaker's sentence structure (normal sentence structure). This might have caused the listeners to more positively evaluate the (control) SD-accented speaker in terms of dynamism (modern, hip, trendy, lively).

RQ2: To what extent can native Dutch listeners' personality traits predict their evaluations of MFD-accented speakers in terms of attitudes and understanding?
With regards to the predictive effects of listeners' personality traits, it was expected that Dutch listeners with low scores on extraversion and high scores on emotionality and conscientiousness would be more likely to negatively evaluate MFD-accented speakers in terms of attitudes and understanding. The findings of the present study showed that only for perceived comprehensibility, Dutch listeners with higher scores on emotionality were more likely to negatively evaluate the MFD-accented speaker. This partially concurs with the findings by Dewaele and McCloskey (2015) where multilinguals that were emotionally

stable, extraverted and tolerant of ambiguity had more positive attitudes towards others'
nonstandard accents. However, the absence of extraversion and conscientiousness as
significant predictors does not seem in line with what may be expected based on previous
research (Dewaele & McCloskey, 2015; Gaffney & Côté, 2020; Seravalle, 2010; Yoon,
2021). Overall, the findings of this study show that listeners' personality traits can form a
perceptual bias in the speech evaluation process. More specifically, Dutch listeners that score
relatively high on emotionality are more likely to perceive MFD-accented speakers to be less
comprehensible. As a result, attempts to alter Dutch listeners' comprehensibility evaluations
of MFD-accented speakers should, at least partly, be placed on the shoulders of the listener.

A possible explanation for the deviating results compared to previous studies that
examined the relationship between listeners' personality and their evaluations of
nonstandard-accented speakers might be the fact that most used (dimensions of) the Big-Five
model by Goldberg (1993) to assess listeners' personality traits (Dewaele & McCloskey,
2015; Gaffney & Côté, 2020; Yoon, 2021). However, the present study used the HEXACO-
60 personality inventory which is based on more recent lexical investigations among larger
data sets in many languages (Ashton & Lee, 2007). In addition, the present study looked at
the predictive effects of listeners' personality traits on variables related to attitudes and
understanding whereas previous studies looked at the relationship between listeners'
personality traits and their attitudes towards (Dewaele & McCloskey, 2015), fluency (Yoon,
2021) and foreign accentednes ratings (Gaffney & Coté, 2020) of nonstandard-accented
speakers. A potential explanation for why emotionality did not appear to be a significant
predictor for the other measured variables (likeability, status, competence, dynamism,
intelligibility) might be the fact that the MFD-accented speaker was not more negatively
evaluated in this regard compared to the SD-accented speaker.

Limitations and future research
The present study has several limitations. Firstly, a limitation of the present study lies in the
fact that only one speaker was used for the MFD accent. This speaker was born and raised in
the city of Arnhem (Gelderland, Netherlands) and spoke Berber-Moroccan as a second
language. As was mentioned by dr. F. Hinskens (personal communication, May 16, 2022)
and by Nortier and Dorleijn (2008), the MFD accent can be highly variable based on the
degree to which the speaker's accent is colored by local provenance (Amsterdam, Utrecht,
Rotterdam etc.), Moroccan-Arabic, Berber and/or second language Dutch. As a result, Dutch
listeners' evaluations of MFD-accented speakers can be very different based on the MFD-

accented sample that the participants are exposed to. Therefore, future research should consider employing several MFD-accented speakers to see if this yields the same results.

Moreover, a limitation of this study is that participants perceived the MFD-accented speaker to sound less monotonous, to speak with more confidence and to have a softer voice than the SD-accented speaker, even though the pre-test showed that the speakers did not significantly differ regarding their voice characteristics. However, the sample of the pre-test only consisted of 22 participants, which might have been too little to detect any significant differences. A consequence of this failed manipulation is that it cannot be excluded that participants evaluated the MFD and SD-accented speakers based on their differing voice characteristics instead of their differing accents. However, it does seem unlikely that the difference in voice characteristics has had a large impact since Dutch listeners did not evaluate the MFD and the SD-accented speaker differently in terms of attitudes. Yet, the potential confounding effect of the individual speakers' voices does seem like another reason to use multiple speakers for the accent conditions. To clarify, if similar patterns are observed in Dutch listeners' evaluations of multiple MFD vs. SD-accented speakers, then it can be stated with more confidence that the results were caused by the speakers' different accents instead of the voices of the individual speakers.

Another limitation is that the filler speaker speech sample was not selected/constructed in a way that guaranteed reliable results. However, as the present study used natural speech, this was a difficult task to accomplish. As stated earlier, the SD-accented filler speaker speech sample was used as a standard benchmark accent with which the participants could compare the MFD accent. However, the filler speaker spoke with a sentence structure that may be considered to be 'normal' whereas the experimental and the control speaker spoke with a sentence structure that may be considered to be 'slang' (see Appendix B for the texts of the speakers). As a result, this might have had a confounding effect on Dutch listeners' evaluations of the control and the experimental speaker. Therefore, future research should aim to select/construct a filler speaker speech sample that does guarantee reliable results.

Moreover, a limitation is that only one communicative context has been assessed. Since the communicative context in which accented speech occurs may affect listeners' evaluations of the accented speaker, future research should aim to assess Dutch listeners' evaluations of MFD vs. SD-accented speakers in different and more formal contexts such as job interviews, sales conversations and teaching situations.

Besides, a limitation might have been the length of the questionnaire ($M = 25{,}63$ minutes, $SD = 96{,}64$ minutes). Due to its length, the quality of participants' responses might have been affected. It should be mentioned that the answers of participants were only deleted if they had not completed the questionnaire within 48 hours. As a result, outliers may have significantly affected the mean length of the questionnaire. Still, future research might benefit from a research design that is less demanding to the participants.

Finally, the study was limited by the fact that most participants were relatively young (average age of 26.6 years), highly educated (95%) and did not speak with an ethnic Dutch accent themselves (98%). Hence, in order to improve the generalizability, future studies should aim to use a sample that is more representative of the population.

Implications and contributions of the study

The findings of the present study have several practical and theoretical implications. Firstly, the negative stigma towards the Moroccan-Dutch community in the Netherlands does not seem to be reflected in Dutch listeners' attitudinal evaluations of MFD-accented speakers. Hence, MFD-accented speakers do not have to be afraid that their accentedness automatically causes them to be perceived differently in terms of competence, status, dynamism and likeability compared to SD-accented speakers. Moreover, they also do not have to be concerned that their accentedness might form a barrier to effective communication as the present study showed that MFD-accented speech can be as intelligible as SD-accented speech to Dutch listeners. As a result, there seems to be no reason for MFD-accented speakers to avoid speaking with an MFD accent. Yet, since Dutch listeners did perceive the MFD-accented speaker to be less comprehensible than the SD-accented speaker, they might be inclined to downgrade MFD-accented speech. Therefore, in order to reduce potential bias, particular programs aimed at informing Dutch listeners about the results of this study may be conceived. These bias reduction programs could particularly aim to address listeners that are more emotional and inform them of the fact that their personality trait may form a perceptual bias when evaluating the comprehensibility of (nonstandard) MFD-accented speakers. Overall, the findings regarding listeners' understanding of MFD-accented speakers and the predictive effects of listeners' personality traits on these evaluations indicate that the responsibility to alter Dutch listeners' evaluations of MFD-accented speakers should be placed on the shoulders of the listener and not on those of the speaker.

The present study contributes to the literature on the effects of nonstandard-accentedness in multiple ways. Firstly, it is the first to assess Dutch listeners' evaluations of

MFD-accented speakers in terms of constructs that aim to measure listeners' understanding. Secondly, it shows the importance of the role of the listener in the speech evaluation process as listeners' personality (traits) may form a perceptual bias when evaluating nonstandard-accented speech. More specifically, this study shows that Dutch listeners with higher scores on emotionality (fearful, anxious and sentimental) are more likely to negatively evaluate an MFD-accented speaker on perceived comprehensibility. Consequently, future speech evaluation studies should be aware of this potential influence and may consider incorporating listeners' personality traits more often into their research designs. Besides, another contribution of this study is that it might be the first speech evaluation study to measure listeners' personality traits by means of the HEXACO-60 personality inventory. In doing so, it shows the predictive value of the HEXACO-60 personality inventory in the speech evaluation process. However, in view of the limitations, more research might be needed to confirm the present study's findings.

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Results of the pre-test (selected speakers for main experiment only)

Several paired samples t-test were performed to see if the experimental (MFD-accented) and the verbal-guise control speaker (SD-accented) were similarly evaluated with regards to their voice characteristics and speech rate. These paired samples t-tests did not show a significant difference between the SD-accented and the MFD-accented speaker regarding their speech rate ($t(21) = 0$, $p = 1$) and the degree to which their voice sounded natural ($t(21) = 1.25$, $p = .226$), monotonous ($t(21) = 1.79$, $p = .087$), pleasant ($t(21) = -1.31$, $p = .206$), loud ($t(21) = 1.22$, $p = .236$), energetic ($t(21) = 0.50$, $p = .623$) and confident ($t(21) = 1.74$ $p = .097$).

Advocaat	MFD		SD	
	M	*SD*	*M*	*SD*
Deze spreker heeft een natuurlijke stem	5.27	1.01	4.82	1.47
Deze spreker klinkt monotoon	3.23	1.35	3.91	1.44
Deze spreker heeft een aangename stem	4.27	1.39	4.68	1.10
Deze spreker heeft een luide stem	4.95	0.88	4.59	1.44
Deze spreker klinkt energiek	4.23	1.24	4.00	1.45
Deze spreker spreekt met zelfvertrouwen	5.36	0.64	4.82	1.11
De spreker heeft een standaard Nederlands accent	1.86	0.92	5.50	1.23
De spreker heeft een etnisch Nederlands accent (etnolect)	5.00	2.07	3.09	1.90
Met welk soort accent denkt u dat de spreker spreekt?				
Standaard-Nederlands	0.00%		Standaard-Nederlands	72.73%
Marokkaans-Nederlands	90.91%		Marokkaans-Nederlands	4.55%
Drents	0.00%		Drents	4.55%
Surinaams-Nederlands	4.55%		Surinaams-Nederlands	4.55%
Haags	0.00%		Haags	9.09%
Anders, namelijk:	4.55%		Anders, namelijk:	4.55%
Leeftijd	25.95	3.62	24.14	3.77
Spreektempo	4.36	0.71	4.36	0.88

Filler speaker

Qua sporten doe ik veel skiën. Ik heb altijd veel gevoetbald. Vind het lekker om te fitnessen, te hardlopen en verder eigenlijk in het weekend met vrienden afspreken en uiteten gaan. Een beetje dat soort dingen. En jij?

MFD and SD-accented speaker

Toen moest die stagelopen is een keigroot advocatenbureau weetje, maar hij ging daar hard werken. Alles heeft die uh, je weet toch stagerapport zeg maar, heeft die alles zeer goed gekregen. Er stond zo uh, de heer Onsouri is zeer geschikt voor advocatuur, we willen hem graag een baan aanbieden. En ja als je, als je zeg maar afgestudeerd bent, veel mensen kunnen geen baan vinden. Dus hij zat nog te twijfelen, zal ik gaan werken meteen of zal ik nog een jaartje rusten of wat weetje. Toen dacht die zo, fack it, moest die scriptie maken nog.

Appendix C: Questionnaire

Flow of questionnaire

Introduction   **Demographics**   **Filler speaker evaluation**

Randomizer: - Evenly Present Elements

Standard: MFD-accented speaker evaluation   **Standard: SD-accented speaker evaluation**

HEXACO-60   **Self-assesed ethnic accent**

Questionnaire

Introduction

Radboud University

Beste deelnemer,

Hierbij nodig ik u uit om deel te nemen aan mijn onderzoek voor de master International Business Communication aan de Radboud Universiteit.

Meedoen aan het onderzoek houdt in dat u een online vragenlijst gaat invullen. Allereerst vraag ik u om enkele demografische gegevens in te vullen. Daarna zult u drie Nederlandstalige spraakfragmenten te horen krijgen die u moet beoordelen op basis van een aantal vragen/stellingen. Tenslotte zal ik u vragen om een korte persoonlijkheidstest uit te voeren.

Er zal discreet en volgens de privacy-richtlijnen van de Radboud Universiteit met uw data omgegaan worden. Deelname is volledig anoniem en vrijwillig. Dit betekent dat u op elk moment uw deelname kunt beëindigen. Data die tot dan toe is verzameld zal dan worden vernietigd.

Mocht u nog vragen hebben, aarzel dan niet om contact op te nemen met Mathis Barten (mathis.barten@ru.nl).

Door mee te doen aan dit onderzoek, bevestigt u:

- 18+ te zijn
- Nederlands als moedertaal te hebben
- Akkoord te gaan met de voorwaarden
- Alle informatie gelezen te hebben

Ik ga akkoord met de voorwaarden en doe mee met het onderzoek

Ik doe niet mee met het onderzoek

→

Demographics

Radboud University

Is Nederlands uw moedertaal?

Ja

Nee

→

Radboud University

Wat is uw geslacht?

Man

Vrouw

Non-binair

Zeg ik liever niet

Anders, namelijk:

Wat is uw leeftijd?

→

Wat is uw hoogst afgeronde of huidige opleiding?

Basisschool

Middelbare school

MBO

HBO/Universitaire propedeuse

HBO bachelor

HBO master

Universitaite bachelor

Universitaire master

Doctoraat (PHD)

→

Filler speaker evaluation

Radboud University

Nu begint het tweede deel van het onderzoek. In dit deel zult u spraakfragmenten te horen krijgen die u moet beoordelen op basis van verschillende vragen en stellingen. Zorg er dus voor dat het geluid van uw apparaat **aan** staat en dat u zich in een **stille** omgeving bevindt.

Luister maximaal **1 keer** aandachtig naar het volgende spraakfragment en ga daarna door naar de vragen.

▶ 0:00 / 0:11 ——— 🔊 ⋮
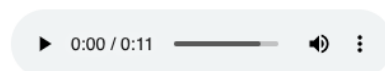
Geef aan in hoeverre je het eens bent met de volgende stellingen

Perceived Comprehensibility

	Zeer mee oneens	Mee oneens	Beetje mee oneens	Neutraal	Beetje mee eens	Mee eens	Zeer mee eens
Ik moet heel goed luisteren om de spreker te kunnen begrijpen	○	○	○	○	○	○	○
De spreker spreekt duidelijk	○	○	○	○	○	○	○
De spreker is moeilijk te begrijpen	○	○	○	○	○	○	○
Ik heb moeite om te begrijpen waar de spreker het over heeft	○	○	○	○	○	○	○

Met welk soort **accent** denkt u dat de spreker spreekt?

Identification of accent

Standaard-Nederlands

Marokkaans-Nederlands

Drents

Surinaams-Nederlands

Haags

Anders, namelijk:

Attitudes

Geef aan in hoeverre je het eens bent met de volgende stellingen

	Zeer Mee oneens	Mee oneens	Beetje mee oneens	Neutraal	Beetje mee eens	Mee eens	Zeer mee eens
Deze spreker klinkt onvriendelijk	O	O	O	O	O	O	O
Deze spreker klinkt sympathiek	O	O	O	O	O	O	O
Deze spreker klinkt irritant	O	O	O	O	O	O	O
Deze spreker klinkt humoristisch	O	O	O	O	O	O	O
Deze spreker klinkt modern	O	O	O	O	O	O	O
Deze spreker klinkt hip	O	O	O	O	O	O	O
Deze spreker klinkt trendy	O	O	O	O	O	O	O
Deze spreker klinkt levendig	O	O	O	O	O	O	O
Deze spreker klinkt invloedrijk	O	O	O	O	O	O	O
Deze spreker klinkt betrouwbaar	O	O	O	O	O	O	O
Deze spreker klinkt zelfverzekerd	O	O	O	O	O	O	O
Deze spreker klinkt intelligent	O	O	O	O	O	O	O
Deze spreker klinkt hardwerkend	O	O	O	O	O	O	O
Deze spreker klinkt competent	O	O	O	O	O	O	O

→

SD and MFD-accented speaker evaluation (randomized order across participants)

Radboud University

Luister maximaal **1 keer** aandachtig naar het volgende spraakfragment en ga daarna door naar de vragen.

▶ 0:00 / 0:27 ──── ◀》 ⋮
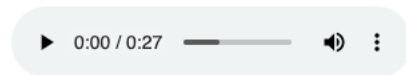
Perceived Comprehensibility

Geef aan in hoeverre je het eens bent met de volgende stellingen

	Zeer mee oneens	Mee oneens	Beetje mee oneens	Neutraal	Beetje mee eens	Mee eens	Zeer mee eens
Ik moet heel goed luisteren om de spreker te kunnen begrijpen	○	○	○	○	○	○	○
De spreker spreekt duidelijk	○	○	○	○	○	○	○
De spreker is moeilijk te begrijpen	○	○	○	○	○	○	○
Ik heb moeite om te begrijpen waar de spreker het over heeft	○	○	○	○	○	○	○

Identification of accent

Met welk soort **accent** denkt u dat de spreker spreekt?

Standaard-Nederlands

Marokkaans-Nederlands

Drents

Surinaams-Nederlands

Haags

Anders, namelijk:

[ ]

Attitudes

Geef aan in hoeverre je het eens bent met de volgende stellingen

	Zeer Mee oneens	Mee oneens	Beetje mee oneens	Neutraal	Beetje mee eens	Mee eens	Zeer mee eens
Deze spreker klinkt onvriendelijk	O	O	O	O	O	O	O
Deze spreker klinkt sympathiek	O	O	O	O	O	O	O
Deze spreker klinkt irritant	O	O	O	O	O	O	O
Deze spreker klinkt humoristisch	O	O	O	O	O	O	O
Deze spreker klinkt modern	O	O	O	O	O	O	O
Deze spreker klinkt hip	O	O	O	O	O	O	O
Deze spreker klinkt trendy	O	O	O	O	O	O	O
Deze spreker klinkt levendig	O	O	O	O	O	O	O
Deze spreker klinkt invloedrijk	O	O	O	O	O	O	O
Deze spreker klinkt betrouwbaar	O	O	O	O	O	O	O
Deze spreker klinkt zelfverzekerd	O	O	O	O	O	O	O
Deze spreker klinkt intelligent	O	O	O	O	O	O	O
Deze spreker klinkt hardwerkend	O	O	O	O	O	O	O
Deze spreker klinkt competent	O	O	O	O	O	O	O

Intelligibility

Luister aandachtig naar **een deel** van hetzelfde spraakfragment. U zult hierna moeten **opschrijven** wat de spreker zegt. Let op: u mag maximaal **twee keer** naar het fragment luisteren.

▶ 0:00 / 0:02 ——————— 🔊 ⋮

Schrijf hier op wat de spreker zegt:

Luister nog **1 keer** aandachtig naar het spraakfragment en ga daarna door naar de vragen.

▶ 0:00 / 0:27 ━━━ 🔊 ⋮

Voice characteristics

Hoe zou u de spreker beoordelen?

	Helemaal niet mee eens	Niet mee eens	Beetje mee oneens	Neutraal	Beetje mee eens	Mee eens	Helemaal mee eens
Deze spreker heeft een natuurlijke stem	O	O	O	O	O	O	O
Deze spreker klinkt monotoon	O	O	O	O	O	O	O
Deze spreker heeft een aangename stem	O	O	O	O	O	O	O
Deze spreker heeft een luide stem	O	O	O	O	O	O	O
Deze spreker klinkt energiek	O	O	O	O	O	O	O
Deze spreker spreekt met zelfvertrouwen	O	O	O	O	O	O	O
De spreker heeft een normaal spreektempo	O	O	O	O	O	O	O
De spreker heeft een standaard Nederlands accent	O	O	O	O	O	O	O
De spreker heeft een etnisch Nederlands accent (etnolect)	O	O	O	O	O	O	O

Speech rate (aligned with "De spreker heeft een normaal spreektempo")

(Ethnic) Dutch accentedness (aligned with "De spreker heeft een standaard Nederlands accent")

Age of the speaker

Hou oud denkt u dat de spreker is?

[   ]

→

Hexaco-60 personality test

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De volgende vragen zijn erop gericht om uw persoonlijkheid vast te stellen

Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Ik zou me vervelen bij een bezoek aan een kunstgalerie.	O	O	O	O	O
Ik maak vooraf plannen en regel alvast zaken om te vermijden dat ik op het laatste moment nog dingen moet doen.	O	O	O	O	O
Ik houd zelden een wrok tegen iemand, zelfs niet als ik erg slecht behandeld ben.	O	O	O	O	O
Alles bij elkaar heb ik wel een tevreden gevoel over mijzelf.	O	O	O	O	O
Ik zou bang worden als ik in slecht weer zou moeten reizen.	O	O	O	O	O
Ik zou niet vleien om op het werk opslag of promotie te krijgen, zelfs al zou het succes hebben.	O	O	O	O	O
Ik kom graag meer te weten over de geschiedenis en politiek van andere landen.	O	O	O	O	O
Ik span me vaak tot het uiterste in als ik een doel tracht te bereiken.	O	O	O	O	O
Mensen vertellen me soms dat ik te kritisch op anderen ben.	O	O	O	O	O
Ik geef zelden mijn mening in groepsbijeenkomsten.	O	O	O	O	O

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Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Ik maak me soms zorgen over onbenulligheden.	O	O	O	O	O
Als ik niet gepakt zou worden, dan zou ik er geen probleem mee hebben om een miljoen Euro te stelen.	O	O	O	O	O
Ik zou graag iets kunstzinnigs doen, zoals een boek schrijven, een lied componeren of een schilderij maken.	O	O	O	O	O
Als ik aan iets werk, besteed ik weinig aandacht aan kleine details.	O	O	O	O	O
Mensen vertellen me soms dat ik te koppig ben.	O	O	O	O	O
Ik heb liever een baan waarin men veel met andere mensen omgaat dan één waarin men alleen dient te werken.	O	O	O	O	O
Na een pijnlijke ervaring heb ik iemand nodig om me te troosten.	O	O	O	O	O
Veel geld bezitten vind ik onbelangrijk.	O	O	O	O	O
Ik vind het tijdverlies om aandacht te besteden aan radicale ideeën.	O	O	O	O	O
Ik neem beslissingen op basis van 'hier-en-nu' gevoelens in plaats van zorgvuldig beraad.	O	O	O	O	O

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Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Mensen vinden me een heethoofd.	O	O	O	O	O
De meeste dagen voel ik me blij en optimistisch.	O	O	O	O	O
Ik voel tranen opkomen als ik anderen zie huilen.	O	O	O	O	O
Ik vind dat ik meer recht op respect heb dan de gemiddelde persoon.	O	O	O	O	O
Als ik de gelegenheid had, zou ik graag een klassiek concert bijwonen.	O	O	O	O	O
Ik haal me soms problemen op de hals omdat ik slordig ben.	O	O	O	O	O
Mijn houding ten aanzien van mensen die mij slecht behandeld hebben is "vergeven en vergeten".	O	O	O	O	O
Ik heb het gevoel dat ik een impopulair persoon ben.	O	O	O	O	O
Als het gaat om fysiek gevaar, ben ik een angsthaas.	O	O	O	O	O
Als ik iets van iemand wil, lach ik om diens slechtste grappen.	O	O	O	O	O

→

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Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Ik heb nooit met veel plezier in een encyclopedie gekeken.	O	O	O	O	O
Ik verricht zo min mogelijk werk, maar net genoeg om rond te komen.	O	O	O	O	O
Ik heb de neiging andere mensen mild te beoordelen.	O	O	O	O	O
Als ik anderen ontmoet, ben ik meestal diegene die het contact op gang brengt.	O	O	O	O	O
Ik maak me veel minder zorgen dan de meeste mensen.	O	O	O	O	O
Ik zou nooit ingaan op een poging tot omkoping, zelfs niet als het om een erg hoog bedrag ging.	O	O	O	O	O
Mensen vertellen me vaak dat ik een levendige verbeelding heb.	O	O	O	O	O
Ik probeer altijd zo nauwkeurig mogelijk te werken, zelfs al kost het me extra tijd.	O	O	O	O	O
Ik ben gewoonlijk vrij flexibel in mijn opvattingen als mensen het met mij oneens zijn.	O	O	O	O	O
Het eerste dat ik altijd doe als ik ergens nieuw ben, is vrienden maken.	O	O	O	O	O

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Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Moeilijke situaties kan ik aan zonder emotionele steun van anderen nodig te hebben.	O	O	O	O	O
Ik zou veel plezier beleven aan het bezit van dure luxe goederen.	O	O	O	O	O
Ik houd wel van mensen met onconventionele ideeën.	O	O	O	O	O
Ik maak veel fouten omdat ik niet nadenk voordat ik iets doe.	O	O	O	O	O
De meeste mensen hebben de neiging sneller boos te worden dan ik.	O	O	O	O	O
De meeste mensen zijn levenslustiger en dynamischer dan ik over het algemeen ben.	O	O	O	O	O
Ik raak erg geëmotioneerd als iemand die me na staat voor een lange tijd weg gaat.	O	O	O	O	O
Ik wil dat mensen weten hoe belangrijk ik ben.	O	O	O	O	O
Ik beschouw mezelf niet als een artistiek of creatief type.	O	O	O	O	O
Mensen noemen me vaak een perfectionist.	O	O	O	O	O

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Geef aan in hoeverre u het eens bent met de volgende stellingen

	Helemaal mee oneens	Mee oneens	Neutraal	Mee eens	Helemaal mee eens
Zelfs als mensen veel fouten maken, zeg ik zelden iets negatiefs.	O	O	O	O	O
Soms heb ik het gevoel dat ik een waardeloos persoon ben.	O	O	O	O	O
Zelfs in crisissituaties blijf ik rustig.	O	O	O	O	O
Ik zou niet net doen alsof ik iemand mag om te zorgen dat die persoon mij een dienst bewijst.	O	O	O	O	O
Ik vind het saai om over filosofie te discussiëren.	O	O	O	O	O
Ik doe liever dingen spontaan dan vast te houden aan een plan.	O	O	O	O	O
Als mensen mij vertellen dat ik het mis heb, is mijn eerste reactie dit aan te vechten.	O	O	O	O	O
Als ik met andere mensen samen ben, ben ik vaak de woordvoerder van de groep.	O	O	O	O	O
Ik raak niet snel geëmotioneerd, zelfs niet in situaties waarin anderen erg sentimenteel worden.	O	O	O	O	O
Ik zou in de verleiding komen om vals geld te gebruiken als ik er zeker van was dat ik er mee weg zou komen.	O	O	O	O	O

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Self-assessed ethnic accent

Dit onderzoek ging over de beoordelingen van (etnische) accenten in het Nederlands. Spreekt u zelf met een etnisch Nederlands accent?

Ja, namelijk:

Nee

→

Bedankt voor je deelname. Je antwoorden zijn geregistreerd.