Radboud University

Master's Thesis 2021-2022

Conscious Decision or Inherent Preference? The Predictive Relationship between Personality Traits of Dutch Listeners and their Evaluations of Moroccan Flavoured Dutch Speakers

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Date and place of submission: 24 August 2022, Nijmegen

Words: 13.866 (including in-text references and tables)

Words: ~12.800 (excluding in-text references and tables)

ABSTRACT

Evaluations of speakers with a foreign or non-standard accent have been studied numerous times. However, the origin of these evaluations is underexplored, while only limited research has been done into what intrinsically motivates a person to evaluate a non-standard speaker differently from a standard speaker. Therefore, in this verbal-guise experiment (n = 79) consisting of two conditions, Standard Dutch and Moroccan flavoured Dutch (a generally downgraded non-standard accent), the difference in understandability (perceived intelligibility, perceived comprehensibility) and attitudinal evaluations (status, competence, likeability, dynamism) and the predictive effects of personality dimensions (HEXACO) for these evaluations is tested. Dutch listeners were asked to evaluate either Standard Dutch or Moroccan flavoured Dutch speakers and self-report their personality through the HEXACO-60 scale. Main findings include significant differences between Standard-Dutch and Moroccan flavoured Dutch on perceived intelligibility, comprehensibility and likeability. HEXACO dimension Honesty-Humility predicted status and likability evaluations, while extraversion, emotional stability and openness were expected to be significant predictors, but proved not to be. The non-significant predictive results suggest the difference in understandability ratings is not an unconscious decision inherent to personality, but rather a conscious decision influenced by external factors. The for the most part unsignificant differences in attitudinal evaluations suggest Moroccan flavoured Dutch is not downgraded as much as expected from previous research, but the understandability differences not predicted by personality indicate that society should be made aware of the discrimination that is still shown as a consequence of factors other than accent. Future accentedness research should attempt to characterize the Moroccan flavoured Dutch accent more precisely regarding phonetic, phonological and interjecting characteristics and incorporate context to study interaction effects of accent and context. The predictive effects of personality should be studied with larger homogenous and heterogenous samples to examine the effect of the sample size and characteristics on the results and to increase understanding of the origin of speaker evaluations.

INTRODUCTION

Since the large-scale immigration of migrant workers from Mediterranean areas in the 1960s, the Netherlands has been a country with substantial communities of people from especially Moroccan and Turkish descent. Italian, Spanish, Greek, and Turkish and Moroccan fathers moved house from their home country to the Netherlands looking for work, as the Dutch were struggling to cope with the explosive growth of the national economy. Many migrant workers from Italy, Spain and Greece chose to move back to their home countries, as these economies began to develop too, while Moroccan and Turkish workers chose to move their families over to the Netherlands in larger numbers (Bonjour, 2008). In January 2022, a quarter of the population in the Netherlands has a migration background, with Turkish and Moroccan being the first and second most common backgrounds because of the migration starting in the 1960s (Central Bureau for Statistics, 2022a). Yet, after decades of the communities being here in the Netherlands, a negative sentiment towards these Muslim immigrants seems to be present.

As a cause of the current socio-political climate in the Netherlands, citizens with a Turkish and especially Moroccan background are on a large scale subject to stigmatization, stereotypes and discrimination, fuelled mainly by right-wing politics supported by the Dutch working class, but increasingly also the right-wing upper-class, lead by political parties like the PVV and FVD. Moroccan-Dutch people, especially the younger generations, are stereotyped as being more rude, in contact with criminal activities, not integrated correctly or have their immigration even referred to as 'het Marokkanendrama' (= 'the Moroccan tragedy') (Bouabid, 2018).

As a result of the large number of inhabitants with a migration background in the Netherlands, there are many varieties and (unofficial) dialects of Dutch. Next to the second official language Frisian, dialects like Limburgian and Brabantian and recognizable accents native to cities like Amsterdam or The Hague, more new variations to the Dutch language have developed since the arrival of the migrant workers. As Nortier and Dorleijn reported in 2008, an 'ethnic' accent characterized by influences from Moroccan languages has developed in large parts of the Netherlands. Used mainly by the younger generation, it is different from the first generation of Moroccans who learned Dutch as a foreign language and is in research many times referred to as 'Moroccan flavoured Dutch' (MFD) (Grondelaers & Van Gent, 2019; Grondelaers, Van Gent & Van Hout, 2015; Nortier & Dorleijn, 2008). This research not only shows the development of a new accent, but also indicates how this Moroccan

flavoured Dutch accent differs from the Moroccan-Dutch accent that is common for first generation migrants. While the socio-political climate over the past decades has indicated a downgrading sentiment towards the Moroccan immigrants and the generations that followed, multiple studies set out to research whether speakers of the aforementioned Moroccan flavoured Dutch accent proved to be judged more negatively than speakers of other official Dutch dialects (Dekker, Duarte & Loerts, 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015). These indeed showed a negative sentiment towards speakers of this new Moroccan-Dutch accent as opposed to Standard Dutch and for example Frisian. Participants even reported they found the MFD-accent to sound ugly, aggressive and antisocial (Grondelaers et al., 2015). However, where these judgements come from has not yet been measured. One could wonder whether it is external factors like the looks of a speaker or the contexts in which is spoken are what determines how they judge a speaker of Moroccan flavoured Dutch. These factors have been studied slightly, while not for this accent, and results show that the looks of a speaker regarding perceived gender, age and ethnicity indeed influence the evaluations of their accents (Brown, 1992; Hay, Warren & Drager, 2006; Hu & Su, 2010; Kang & Rubin, 2009; Rubin, 1992; Strand, 1999). Yet, it has only rarely been studied whether internal motivations of a person, that is, pre-existing beliefs or their personal character which has naturally formed and is not influenced on one certain instance, have an effect on the evaluations of accents. DeWaele and McCloskey (2015), one of the few that studied the effect of personality on speaker evaluations, showed positive effects of extraversion and emotional stability on the evaluations of non-standard accented speakers, which suggests a relationship between said evaluations and certain characteristics of a person. Nonetheless, other research into this relationship has not yet extensively studied the effects of personality traits on understandability and attitudinal evaluations commonly used in accentedness research, meaning it would be valuable to study whether a similar relation is present as has been suggested in the few earlier studies on this subject.

The development of this novel accent is interesting and could well be part of the cause for the current negative sentiment towards the younger Moroccan-Dutch generation. With a gap in research towards the effect of personality on speaker evaluations and only limited research into the Moroccan flavoured Dutch accent and the attitudes it evokes, it seems valuable to study whether the personality of listeners relates to the speaker evaluations they hold towards Moroccan flavoured Dutch speakers compared to standard accented speakers. Moreover, accentedness research generally concerns languages like English, Spanish, German and Asian languages, whereas it seems beneficial to research other (fewer spoken)

languages too to study how universal the reactions to accents are. Finally, the incorporation of the measurement of personality makes the present study even more unique.

Theoretical framework

Moroccan flavoured Dutch

Research into the specific ethnic accent referred to as Moroccan flavoured Dutch is rare, while few researched the development, characteristics and who in society use it (Nortier & Dorleijn, 2008; Van Meel, Hinskens & Van Hout, 2013) and, more recently, the perceptions of the accent by native Dutch speakers (Dekker et al., 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015). The relatively recent discovery and ambiguity of the Moroccan flavoured Dutch accent might be the reason that research into the perception of this accent is not frequent, as it first needed to be identified and characterized. The development of this accent seems to have begun, or was at least identified in research as such, in the early 2000s. As Nortier and Dorleijn (2008) report, before this time there was no indication in research of the existence of an MFD-accent. According to the researchers, there are a few noticeable aspects of this novel accent that make it stand out from the original Moroccan-Dutch accent. For example, Nortier and Dorleijn (2008) state that the second-generation speakers (that is, Moroccan flavoured Dutch speakers) often seem to exaggerate specific aspects of the original Moroccan-Dutch accent. Pronunciation of consonants is 'sharper' and even more exaggerated and there is overgeneralization of some features of speech. In addition, observations showed that the MFD-accent is characterized by the frequent insertion of interjections from Arabic and Berber languages (for example, *tfoe* = 'I spit on it', *wahed* = 'a' as in 'a job'). One could state that the insertion of these specific interjections from the Moroccan flavoured Dutch speakers' native languages is a conscious choice, as Nortier and Dorleijn (2008) do, while the insertions typical for the MFD-accent are usually functional elements rather than content words from an embedded language, since the opposite is commonly the case. This would mean there is an intent behind the way Moroccan flavoured Dutch speakers are talking and that the linguistic changes in the Moroccan-Dutch accent are not caused by universal, unconscious processes per se, but may come from the need to differentiate oneself from others through conscious manipulation of the language, which might become routinized through the course of time (Thomason, 2007). As it seems to partially be a consciously manipulated accent however, this does mean that it is hard to define uniform Moroccan flavoured Dutch characteristics. Nortier and Dorleijn (2008) already identified urban

variations in the Netherlands (differences in MFD-accents between cities like Amsterdam and Rotterdam), but the conscious manipulation argument might mean that the accent even differs between individuals. Yet, the abovementioned most pronounced characteristics listed by Nortier and Dorleijn (2008) do make for a steady foundation of the definition and identification of the Moroccan flavoured Dutch accent.

The limited accent perception research that can be found (i.e., Dekker, Duarte & Loerts, 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015), showed negative evaluations of a Moroccan flavoured Dutch accent when compared to Standard Dutch and a variation of the Dutch language, Frisian, with adults and children reporting implicit and explicit preference for Standard Dutch and Frisian over MFD regarding variables like status and attractiveness (Dekker et al., 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015). These few studies offer a first insight into the evaluation of this specific accent, however still in a general context as Dekker et al. (2021), Grondelaers and Van Gent (2019) and Grondelaers et al. (2015) mainly aim to study the prestige and integrity the Moroccan flavoured Dutch accent in general evokes compared to a Standard Dutch accent.

Understandability and attitudinal evaluations

Traditional accentedness research usually focuses on understandability of accents as well as attitudinal evaluations. Because a foreign accent differs from local speech patterns, it is likely to be more difficult to understand than a native accent (e.g., Munro & Derwing, 1999; Munro, Derwing & Morton, 2006). This is emphasized by the fact that in classrooms with foreign accented individuals, teachers are recommended to focus on the intelligibleness of their speech, rather than on perfect phonology or grammatical accuracy (Munro et al., 2006), while the intelligibility of their speech seems to have more impact on how understandable they are. The attitudes towards speakers have repeatedly shown to be affected by the accent they spoke too, in addition to the understandability (Nejjari, Gerritsen, Van der Haagen & Korzilius, 2012). For instance, Cargile and Giles (1997) already showed that speakers with a native or standard accent were evaluated more likeable than speakers with a non-standard accent, while the Fuertes et al. (2012) meta-analysis re-enforces that speakers' accents have powerful effects on how others perceive them regarding attitudes like status, solidarity and dynamism. These previous studies show that understandability and attitudinal evaluations of speakers are commonly measured in accentedness research because the nativeness or standardness of an accent most definitely influences the way speakers of that accent are understood and evaluated, while more generally, mutual comprehension between people is

usually facilitated when individuals speak a similar accent/language variety. Understandability, therefore, is commonly divided into intelligibility (recognition of utterance) and comprehensibility (meaning of utterance) distinguished by Smith and Nelson (1985). Attitudinal evaluations are usually measured with the variables status, likeability/affect, competence and dynamism of the speaker (Bayard, Weatherall, Gallois & Pittam, 2001; Fuertes et al., 2012; Nejjari, Gerritsen, Van Hout & Planken, 2020). Studying attitudinal evaluations in addition to understandability provides one with more insight into the effect of (non-standard) language resulting in a more complete understanding of this influence. Using this technique would offer the opportunity to distinguish the views listeners have of speakers with a standard versus non-standard accent regarding understandability and attitudes, those accents in the present study being Standard Dutch and Moroccan flavoured Dutch.

As previous research into Moroccan flavoured Dutch showed negative judgement of the accent as opposed to Standard Dutch regarding status and attractiveness, it seems valuable to study whether the same holds for other attitudinal evaluations, like likeability/affect and dynamism, as this has proven to be the case in other languages too, for example English (Fuertes et al., 2012).

Origin of speaker evaluations

Using the abovementioned variables to study the understandability and attitudinal evaluations of accentedness has been standard practice for some time now and the fact that non-standard or non-native accents are judged more negatively on these variables is confirmed repeatedly (Fuertes et al., 2012). Despite that, these studies rarely explore if the attitudes of listeners are related to internal motivations like pre-existing beliefs or character of the listener. A certain number of studies has researched whether judgements of listeners were influenced when visualisations of the speakers were shown or described in addition to an English audio recording of the speaker (Hu & Su, 2010; Kang & Rubin, 2009; Rubin, 1992). Results showed that perceived ethnicity of the speaker influenced the attitude of listeners, these being generally more positive when the speaker was visualized as Caucasian or as a US citizen as opposed to an Asian person. Other studies show that listener's perceptions of a speaker's ability to speak a different language, so with a non-standard accent, changed based on perceived country of origin, gender or age (Brown, 1992; Strand, 1999; Hay et al., 2006). These studies suggest that the evaluations of speakers could be influenced by the beliefs a listener holds about the speaker, yet the actual beliefs of persons and the corresponding

personality traits or characteristics were not explicitly measured. While it seems valuable to measure the perceptions a listener holds as motivators for the judgements, it seems valuable even more so to measure whether these judgements are grounded in a listener's character and not only influenced by external sources. More information on the internal motivations of listeners would increase the understanding of the process of creating a judgement of a speaker and would also suggest possibilities that these judgements are partially unconscious.

It is clear that in accentedness research a limited number of studies have explored whether people's beliefs influence their perception of non-native speech. However, there is an even more limited number of studies that investigate whether these attitudes and evaluations are not only formed by beliefs, but whether they could also be grounded in the listeners' personalities. Assumptions that someone who has a more open or extraverted personality would be more accepting of non-standard accents or that a rather non-agreeable person would be harsher on individuals speaking a language variety different to their own seem not that farfetched.

Personality as predictor of speaker evaluations

If one is to study effects of personality on speaker evaluations in accentedness research, measures from psychology need to be integrated. In the psychological field, research into personality traits is plentiful and has resulted in the creation of well-known main trait dimensions like the Big Five's Agreeableness, Conscientiousness, Neuroticism/Emotional Stability, Extraversion and Intellect/Openness (Digman, 1990) or the six major dimensions of personality structure Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience (HEXACO) identified by Lee and Ashton (2004, 2006). The development of these dimensions has led to the ability of researchers to accurately determine specific personality traits through self-reported scores on numerous questions related to each different dimension. Despite that, this ability has only been applied in accentedness research on limited occasions (e.g., DeWaele & McCloskey, 2015; Gaffney & Côté, 2020; Yoon, 2021). It seems like a major opportunity to study this in higher volumes in addition to the research that incorporates pre-existing explicit beliefs of listeners, as this would help to gain further knowledge on and understanding of the process of responses to accent varieties. Specifically, it would suggest explanations as to if reactions of listeners to accents are inherent to their personalities or whether they are mostly influenced by external additional information like perceived country of origin, age or gender as shown in aforementioned research.

Previous research related to personality has already shown that personality traits are linked to a person's cultural intelligence, that is, the ability to deal effectively with people from other cultural backgrounds, as Li, Mobley and Kelly (2016) suggested that high openness and agreeableness are positively related to cultural intelligence. In addition, Şahin, Gurbuz and Köksal (2014) showed that individuals with high measures of extraversion and openness improved their cultural intelligence over time when assigned international exercises. These results suggest relations between personality traits of people and their ability to deal with individuals from cultural varieties. Being that cultural varieties are inseparable from linguistic varieties; these results suggest possible relations between personality traits and the ability of people to deal effectively with language varieties. Yet, regarding the link between personality traits and actual accent judgements, DeWaele and McCloskey (2015) were the first to report significant results. Following results by Seravalle (2010) who showed links between tolerance of ambiguity, an individual's level of acceptance of novel, foreign and unfamiliar situations, and evaluations of comprehensibility, accentedness, pleasantness, status and competence, DeWaele and McCloskey (2015) found that individuals who speak multiple languages and who are extraverted and emotionally stable judged speakers' foreign accents less negatively than others. Moreover, Gaffney and Côté (2020) and Yoon (2021) in much smaller studies showed that higher conscientiousness and extraversion in listeners predicted more positive ratings for speakers speaking their foreign language and higher neuroticism (low emotional stability) correlated with more negative ratings. Clear is, though, that these first studies researching the effect of personality on accent judgements all make use of the Big Five personality traits, which lacks the dimension Honesty-Humility, which is incorporated in the HEXACO personality scale, while also not implementing the understandability and attitudinal evaluation variables. The aforementioned studies make use of a fluency rating scale (Yoon, 2021) and a Tolerance for Ambiguity scale (DeWaele & McCloskey, 2015; Gaffney & Côté, 2020), measuring how 'tolerant' or 'annoyed' listeners are towards foreign-accented speech. However, Gaffney and Côté (2020) suggested already that a measure of comprehensibility in addition to accentedness would allow better understanding of the full extent of personality's role in listeners' judgements. In extension of this suggestion, introducing another personality scale, like HEXACO, and variables that measure attitudes or 'tolerance' of accents more comprehensively, like understandability and attitudinal evaluations, to this type of research would provide missing broader insights into the effect of personality on speaker evaluations.

Moroccan flavoured Dutch and Personality

If one is to incorporate personality traits in accentedness research, that is, assessing whether the perception of accentedness is grounded in, or for that matter, predicted by the personality traits an individual possesses, it seems as though the clearest results would be generated if one was to use an accent that is generally understood to initiate strong reactions. Moroccan flavoured Dutch, for that reason, seems to be a fitting accent. As explained earlier, the Moroccan community in the Netherlands has been and still is subject to much discrimination from certain groups of people and frequently seen as not integrated correctly, which is an idea one could subscribe the creation of an own accent variation to too. Furthermore, it was already suggested multiple times that Moroccan flavoured Dutch is considered to be less attractive, prestigious and rated lower on status than Standard Dutch (Dekker et al., 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015). It is even apparent that 'Dutch with a Moroccan accent', as stated by Grondelaers et al. (2015), is associated with foreignness, aggressiveness, anti-socialness, and unintelligibleness by highly educated Dutch native listeners. The MFD-accent even being frequently described as ugly and unclear makes the seemingly negative sentiment towards this specific accent variation as evident as could be. Yet, one could state that if speakers of a specific accent are generally understood to arouse negative prejudice, it might not be fit to measure personality traits of individuals. However, while it has not yet been done, one could not say whether this is the case or not. There might be a possibility that it is not the accent of the speaker that provokes possible negative attitudes, but some other factor, like appearance, which reinforces the value of research into this accent. According to Grondelaers et al. (2015) and Jørgensen and Quist (2001), students are taught to critically reflect on power and dominance as well as media stereotyping of immigrants and show in Jørgensen and Quist's (2001) case particularly harsh evaluations of the quality of the non-standard speaker's accent. However, they seemed to accept more non-standard speakers of Danish as native speakers than other age groups. This suggests that students are more critical of the speech but have less tendency to identify speakers as non-native. The fact that students are more critical when evaluating non-standard speakers seems valuable for the present experiment, as this would mean the results would be more reliable and possibly larger differences between the Moroccan flavoured Dutch and Standard Dutch accent would be found. Nonetheless, it is than probably the case that Moroccan flavoured Dutch speakers would be identified as native more often than when a group of non-students would be used. This would mean that only the results of respondents

that actually identify the non-nativeness of the accent correctly should be used, to make sure the assumptions they have regard the intended accent.

Regarding the context of the stimuli in previous research, there were not many clear directions in the few studies related to this subject. Grondelaers and Van Gent (2019) and Grondelaers et al. (2015) analysed the responses of Dutch listeners to spontaneous speech by young Moroccan Dutchmen sourced from a certain online databank.[1] Judging from their description, the content of the stimuli was random and meant to represent a spontaneous ordinary sample of conversation, with no real connection to for example an educational or professional context. Dekker et al. (2021), who examined the reaction of Dutch children to Moroccan-accented Dutch do not seem to report anything about the content of the stimuli used in their study, so it is not clear whether the speakers were talking about a specific subject or were in a specific context like an educational or work environment or were talking general conversational topics. Jørgensen and Quist (2001), whose study was similar to the few that researched Moroccan-Dutch accentedness mentioned above, report they used audio of young students, the specific excerpts being cut from interviews and being as neutral in content as possible. Additionally, the accentedness research into this accent variety is still rather incomplete, with results about attractiveness, status and implicit associations (Dekker et al., 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015), but no real results for competence, likeability/affect and understandability evaluations. The absence in results for certain evaluations and few replications of earlier research into this accent variety shows that more studies that explore the Moroccan flavoured Dutch accent variety are needed to create a more complete understanding of its perception among listeners.

As the Moroccan community in the Netherlands is known to be discriminated and negatively portrayed by politics and the media (Bouabid, 2018), and according to Grondelaers et al. (2015) evokes strong reactions, it seems to be a fitting accent to use in accentedness research that incorporates the assessment of personality traits of listeners to determine whether the judgements of an accent variety are predicted by certain traits. As the psychological factor personality has rarely been incorporated in previous research, this would help gain further knowledge on the process of response to accent varieties.

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[1] www.rootsofethnolects.nl

Purpose

Following the research gaps, the purpose of the present study was to determine the predicting effect of personality traits of Dutch native listeners on their attitudinal and understandability evaluations of non-standard Dutch, in the form of Moroccan flavoured Dutch, versus Standard Dutch. Personality traits were measured through the much-used HEXACO-60, a short form personality inventory by Ashton and Lee (2009). This self-reporting measure is recommended to be used in contexts where administration time is limited and was proven to measure accurately the six dimensions of the HEXACO and correlate correctly with the Big Five factors by Digman (1990) (Lee & Ashton, 2004, 2006).

According to Grondelaers et al. (2015) and Jørgensen and Quist (2001), students are taught to critically reflect on power and dominance as well as media stereotyping of immigrants and show more critical evaluations of the quality of speech of non-standard speakers. It seemed beneficial to collect data from a homogenous group, while this would mean there was less chance of confounding variables. As a result of the timeframe of this study, there was no possibility to pre-select participants and test personality before comparing groups, so it was attempted to collect data from principally Dutch student listeners, to assure truthful and critically thought-out responses with as little confounding variables, like for example age, as possible. The context of the stimuli in the present study was not specified to an educational or professional environment and was meant to represent spontaneous samples of conversation, as there is still only limited research on general everyday use of this specific accent variety. Therefore, to investigate the response Moroccan flavoured Dutch generates in such specific contexts as educational or work environments seems to be too early.

Based on previous research, some tentative expectations could be formed for the results of the present study. As no studies have been done regarding the actual understandability of the Moroccan flavoured Dutch accent, it is hard to state what to expect based on research. However, Grondelaers et al. (2015) did ask its respondents, highly educated Dutch listeners, to describe their thoughts on the accent. This resulted in associations with aggressiveness, anti-socialness and ugliness, which implies a negative sentiment, but also foreignness, unintelligibleness and unclarity, which implies substandard understandability. Together with the fact that Moroccan flavoured Dutch is an accent that developed relatively recently in comparison to local accents or even the original Moroccan-Dutch accent, it could be expected that the perceived intelligibility and comprehensibility by Dutch listeners might be lower than for Standard Dutch. Regarding attitudinal evaluations

used in this study, limited results are available for Moroccan flavoured Dutch. Research mainly shows implicit and explicit preference for Standard Dutch over Moroccan flavoured Dutch and significant lower evaluations for the status and attractiveness of Moroccan flavoured Dutch speakers (Dekker et al., 2021; Grondelaers & Van Gent, 2019; Grondelaers et al., 2015). Based on these results, in addition to the apparent societal stance towards Moroccans in the Netherlands and Grondelaers et al.'s (2015) reported negative associations, it could be expected that for especially status and likeability Moroccan flavoured Dutch speakers are evaluated less positively than Standard Dutch speakers. However, this cannot be stated with relative certainty as rather limited results are available.

As studies that incorporated personality traits in cultural competence and accentedness research oftentimes showed significant effects for extraversion and/or openness (DeWaele & McCloskey, 2015; Gaffney & Côté, 2020; Li et al, 2016; Şahin et al., 2014; Yoon, 2021), it could be expected that high extraversion and openness are possible predictors of positive speaker evaluations, while low emotional stability could be a predictor of more negative speaker evaluations. Yet, because the Honesty-Humility dimension was never incorporated in research, it is unclear whether this could or could not be a predictor too. While only fluency ratings and tolerance to ambiguity were measured in addition to the major personality traits in the relevant studies researching personality effects on accent judgements, it is not possible to predict with relative certainty which variables of understandability and attitudinal evaluations could be influenced by extraversion and openness. Studies have shown fluency ratings and comprehensibility to correlate (e.g., O'Brien, 2014; Suzuki & Kormos, 2020), which could mean understandability would be positively predicted by higher extraversion and openness. Seravalle (2010) did suggest a link between comprehensibility, status, competence and the tolerance of ambiguity and an individual's level of acceptance of novel, foreign and unfamiliar situations, which could mean that openness or extraversion, which seem related to these dimensions, could predict ratings in comprehensibility, status and competence. Though, these are only very cautious expectations not underlaid with much evidence and based more on seeming similarity between the studied variables in Seravalle's (2010) study and the HEXACO personality dimensions.

Results of this exploratory study could add to the limited accentedness research incorporating the Moroccan flavoured Dutch accent variety and research into non-standard accents in general, as well as the limited research into the possibility of reactions to non-standard accents being grounded in listeners' personality. Understanding where speaker evaluations originate from would help the education of people about discrimination, whether

it is partly unconscious or not and what listeners and speakers of a non-standard accent could do to improve interaction between standard and non-standard accented speakers. Lastly, this study could give an insight into whether and why Moroccan-accented speakers are downgraded by native Dutch speakers if significant results are to be found or whether the actual differences in evaluation are not as large as thought. The research questions the present study answered were the following:

> *RQ 1*: To what extent are Moroccan flavoured Dutch speakers evaluated differently on understandability (perceived intelligibility, perceived comprehensibility) and attitudinal evaluations (status, competence, likeability, dynamism) than Standard Dutch speakers by Dutch listeners?

> *RQ 2*: To what extent are the understandability (perceived intelligibility, perceived comprehensibility) and attitudinal evaluations (status, competence, likeability, dynamism) of Moroccan flavoured Dutch and Standard Dutch speakers predicted by personality traits of Dutch listeners?

METHOD

Materials

The independent/predictor variables in the proposed study were the type of accent of the speaker and the personality traits of the listener. Type of accent consisted of two levels, Moroccan flavoured Dutch and Standard Dutch. This variable was operationalised via the verbal-guise technique, where audio recordings of different speakers with similar voice characteristics were used for the two levels of accentedness. To replicate previous research, especially Grondelaers and Van Gent (2019) and Grondelaers et al. (2015), audio recordings were sourced from the same database that was used in their studies.[2] These audio recordings consisted of hour-long conversations between Moroccan-Dutch individuals. Two recordings of conversations were selected for the creation of the needed Moroccan flavoured Dutch stimuli based on the audio being of the highest quality. From these recordings, snippets of speech that sounded typical for the Moroccan flavoured Dutch-accent, as defined by Nortier and Dorleijn (2008), were taken. In addition to the authenticity of the accent, voice similarity was also considered. This meant that, based on the researcher's opinions, a total of eleven

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[2] www.rootsofethnolects.nl

pieces of Moroccan flavoured Dutch audio from two individuals that sounded authentic, alike and did not revolve around any specific topics were cut from the original conversations. The length of the audio recordings ranged from a few seconds up to 35 seconds. Longer pieces of audio were not viable as there would have been too much background noises or interruption from the conversational partner. Following the initial selection of the Moroccan flavoured Dutch audio, Standard Dutch variants were created. Two male individuals with, according to the researcher's opinion, similar voice characteristics as the Moroccan flavoured Dutch speakers, but who have a Standard Dutch accent according to the researcher, were selected. Together with the researcher, these Standard Dutch speakers attempted to record versions of the Moroccan flavoured Dutch audio that were similar to the originals in sound quality, speech rate, intonation, tone and text, but differed in accent. However, because the Moroccan-Dutch speakers also used interjections from Arabic in their speech (for example, '*kifesh*', meaning 'why' or 'how so' and '*sahbi*', meaning 'friend' or 'buddy' (Ensie, 2022a; Ensie, 2022b)), it meant these words had to be replaced by Standard Dutch comparables, to make the 'translations' of the Moroccan flavoured Dutch audio as accurate as possible. In addition, the Standard Dutch speakers were told to try and make their recordings sound as natural as possible, which meant there are some minor discrepancies between the Moroccan flavoured Dutch audios and their Standard Dutch counterparts regarding pauses between sentences or stumbling in speech. Eventually, it was most important that all recordings sounded as natural as possible and that the pairs of different accented recordings sounded as similar as possible.

To determine which pairs of recordings sounded most authentic, alike and pleasurable, a pre-test was done. Following the initial selection and recording of stimuli, all excerpts were presented to a group of 23 Dutch university students, the target group of the eventual experiment, as well as to linguistic experts. The technique of using the university students for this pre-test was taken from Grondelaers et al. (2015). The experts that were approached were among the researchers of Grondelaers et al. (2015) that did the initial research into the MFD-accent and Dr. Khalid Mourigh, Moroccan-Dutch expert. They were asked to determine the authenticity of specifically the MFD-excerpts. The student respondents were presented with eighteen audio recordings in total and asked to identify the accent they heard in each recording as either Moroccan-Dutch, Standard Dutch, Frisian, Limburgian or another accent, to ensure authenticity of the eventually used recordings. Frisian, Limburgian and other were added as options to not steer the reactions of respondents too much and to add regional accents to the options. Next to the origin of the accent, they

were asked to rate the strength of the accent on a 7-point Likert scale ranging from 'very mild' to 'very broad', a technique from Grondelaers et al. (2015). To determine whether voice characteristics were similar, respondents in the pre-test were asked to rate the speakers on naturalness ('the speaker sounds natural'), dynamism ('the speaker sounds monotonous'), pleasantness ('the speaker has a pleasant voice') and confidence ('the speaker speaks with self-confidence') via 7-point Likert scales, anchored by 'completely disagree' and 'completely agree'. These statements were taken from Hendriks, Van Meurs and Reimer (2018). The pre-test questions were asked in the mother tongue of the participants to avoid possible mistakes or unclarity of the questions. From the pre-test with student respondents and opinions of Prof. Dr. Frans Hinskens and Dr. Khalid Mourigh, four pairs of recordings (2x Moroccan Speaker 1, 2x Moroccan Speaker 2, 2x Dutch Speaker 1, 2x Dutch Speaker 2) were judged to be most similar in voice characteristics and naturalness and almost unanimously identified correctly as either Moroccan-Dutch or Standard Dutch. The scripts of the selected audio recordings can be found in the Appendix.

To make sure that participants in the experiment reacted in the most authentic way possible, a filler sample was be used. Said filler functioned as a way for participants to familiarize themselves with the type of audio and questions they were to be confronted with, as well as a way to determine whether all respondents were able to identify a Standard Dutch accent. The filler sample consisted of a speech recording of a Dutch verbal guise speaker with no real context or specific content, similar to the actual stimuli and recorded by one of the verbal guise speakers. The filler sample was selected from the recordings that were incorporated in the pre-test and were not chosen to be used as actual stimuli but were judged positively regarding pleasantness and authenticity. The script of the filler sample can be found in the Appendix. The use of a filler sample is a technique taken from Nejjari, Gerritsen, Van Hout, and Planken (2019).

The predictor variable in the proposed study, personality traits of the listener, was operationalised through the use of the aforementioned HEXACO-60 questionnaire, by Ashton and Lee (2009), recommended to be used in contexts where administration time is limited. This list of questions consists of ten items for each of the six personality scales from the HEXACO Personality Inventory – Revised (Ashton & Lee, 2008; Lee & Ashton, 2004, 2006). Respondents rated their personality via 5-point Likert scales, anchored by 'strongly disagree' and 'strongly agree' on statements belonging Honesty-Humility (sub-categories: sincerity, fairness, greed-avoidance, modesty), Emotionality (sub-categories: fearfulness, anxiety, dependence, sentimentality), Extraversion (sub-categories: social self-esteem, social

boldness, sociability, liveliness), Agreeableness (sub-categories: forgiveness, gentleness, flexibility, patience), Conscientiousness (sub-categories: organization, diligence, perfectionism, prudence), and Openness to Experience (sub-categories: aesthetic appreciation, inquisitiveness, creativity, unconventionality). Reliability of the Honesty-Humility dimension was moderate: $\alpha = .61$ (initially $\alpha = .50$, before omission of one item), of the Emotionality dimension was very good: $\alpha = .80$, of the Extraversion dimension was acceptable: $\alpha = .79$, of the Agreeableness dimension was acceptable: $\alpha = .75$ (initially $\alpha = .59$, before omission of one item), of the Conscientiousness dimension was acceptable: $\alpha = .77$ and of the Openness to Experience dimension was moderate: $\alpha = .64$ (initially $\alpha = .48$, before omission of one item).

Yet, as the creators of the HEXACO-PI-R state, the scales of the 60-item version of this questionnaire are not intended to have high levels of internal-consistency reliability (Lee & Ashton, 2009b), which might explain the initially relatively low scores on Cronbach's alpha for three of the six dimensions. However, after omission of three statements causing this, reliability of all scales is at least satisfactory.

Subjects

For the proposed study, the subjects that took part in the study were Dutch university (of applied sciences) students with Dutch as their first mother tongue, as well as Dutch middle-aged individuals. 107 individuals took part in the survey (55.6% female, 0.9% non-binary). Educational level ranged from MBO (3.7%), HBO (29.9%), WO Bachelor (36.4%) to WO Master (29.9%), with 85% still being a student or recently graduated. Subjects' ages ranged from 19 to 60 ($M = 26.62$, $SD = 9.90$). A chi-square test for the difference in distribution of gender and educational level between the two conditions of Type of Accent Moroccan-Dutch and Standard-Dutch (respectively 53 and 54 subjects) showed no significant relation between gender and condition ($\chi^2(2) = 1.08$, $p = .583$) and a marginally significant relation between educational level and condition ($\chi^2(3) = 8.22$, $p = .042$), while the Standard Dutch condition (7.4%) contained relatively more subjects with an MBO background than the Moroccan-Dutch condition (0.0%). An independent samples t-test showed no significant difference between the conditions regarding the variable age ($t(105) = .58$, $p = .288$; Moroccan-Dutch ($M = 26.06$, $SD = 1.28$), Standard Dutch ($M = 27.17$, $SD = 1.42$)).

Design

The present study made use of a between- and within-subjects design, in which participants were exposed to one of two levels of the independent variable Accent of Speaker, that is, either Moroccan flavoured Dutch or Standard Dutch and all participants answered the HEXACO-60 statements. A Standard Dutch filler sample was used, which was the same for both groups. A pre-test was used to determine the authenticity of the audio stimuli and to test the similarity in voice characteristics between speakers, using linguistic experts and students. The students that participated in the pre-test, which was explained previously, were not allowed to participate in the actual experiment.

Instrumentation

For the proposed study, the dependent variables/criterion variables were the understandability (intelligibility, comprehensibility) and attitudinal evaluations (status, likeability, competence, dynamism), measured by ways of a questionnaire in the subjects' mother tongue Dutch, to avoid possible mistakes or unclarity. The questionnaire used in the study can be found in the Appendix. As the present study focusses on the perception of the MFD-accent and how personality traits are related to these perceptions, perceived understandability was measured, instead of the actual understandability. Whether people do actually understand what is being said is not of relevance per se, as their own perception of their understanding might be influenced by personality traits or external factors and could therefore be different to the reality, which is where the interest of this study lies.

Similar to the pre-test, for each stimulus in the experiment, participants were asked asked to identify the accent they heard in each recording as either Moroccan-Dutch, Standard Dutch, Frisian, Limburgian or other accent, to ensure authenticity of the eventually used recordings. Frisian, Limburgian and other were added as options to not steer the reactions of respondents too much and to add regional accents to the options. Next to the origin of the accent, they were asked to rate the strength and voice characteristics of the accent on 7-point Likert scales ranging from 'very mild' to 'very broad' and 'completely disagree' and 'completely agree'. The reliability of the variable voice characteristics (naturalness, dynamism, pleasantness, confidence) was acceptable: $\alpha = .75$.

Perceived intelligibility of the speaker was measured with a technique taken from Hendriks et al. (2018) and Munro et al. (2006), which poses five 7-point semantic differentials to the subject. The scales were introduced by 'I think this speaker is...' and anchored by 'very easy to understand – very difficult to understand', 'hard to understand –

effortless to understand', 'uncomplicated to understand – complicated to understand', 'rather simple to understand – rather tough to understand' and 'demanding to understand – undemanding to understand'. The reliability of the variable perceived intelligibility was very good: α = .94.

Perceived comprehensibility of the speaker was measured through six 7-point Likert scales anchored by 'completely disagree' and 'completely agree', based on Hendriks, Van Meurs and Hogervorst (2016), Munro et al. (2006) and Nejjari et al. (2020). The statements that were used to determine comprehensibility were, 'I have to listen very carefully to the speaker', 'The speaker speaks clearly', 'The speaker is barely intelligible', 'The speaker is difficult to comprehend', 'I have problems understanding what the speaker is talking about' and 'I do not understand what the speaker means'. The reliability of the variable perceived comprehensibility was very good: α = .93.

The attitudinal evaluations in the present study were measured using a technique based on Bayard et al. (2001), Grondelaers et al. (2015), Hendriks et al. (2018), Nejjari et al. (2012) and Nejjari et al. (2020). For each evaluation, the items belonging to the evaluation were preceded by, 'In my opinion, the speaker sounds…', which was answered via 7-point Likert scales anchored by 'completely disagree' and 'completely agree'. The reliability of the variable status ('authorative', 'trustworthy', 'self-confident', 'influential' and 'has a powerful voice') was very good: α = .85. The reliability of the variable competence ('reliable', 'intelligent', 'competent', 'hardworking' and 'educated') was very good too: α = .93. The reliability of the variable likeability ('credible', 'sympathetic', 'warm', 'humoristic', 'tactful', 'polite', 'irritating' and 'unfriendly') was very good: α = .91. Lastly, the reliability of the variable dynamism ('enthusiastic', 'confident' and 'energetic') was acceptable: α = .79.

As the questionnaire was in the mother tongue of the respondents, Dutch, all items were translated to Dutch by the researcher, a native Dutch speaker, and checked by a second native Dutch speaker. The Dutch items can be found in the questionnaire in the Appendix.

Procedure

Subjects for the experiment were approached via various ways of interaction. Calls to action were shared on social media like LinkedIn, Facebook and Instagram, while people that were in the target group were also approached personally on WhatsApp and LinkedIn as well as in WhatsApp groups. Moreover, the researcher shared QR-codes linked to the questionnaire on the Radboud University and HAN University of Applied Sciences campus in Nijmegen,

requesting student to fill the survey out. Also, people that were approached via WhatsApp were asked to share the request to fill out the survey in their own network. During this, the questionnaire was also posted on survey exchange platforms SurveyCircle and SurveySwap, where filling in surveys from others results in respondents for one's own survey. As recruiting respondents proved to be a time-consuming task and with minimum results and a deadline approached, middle-aged individuals were added to the target group to make sure enough responses were collected before analysis had to start. This does mean not all respondents were students, which was the initial aim, however the vast majority was.

The researcher approached individuals that were within the population relevant for the study, Dutch students (later also middle-aged native speakers of Dutch), and asked them whether they would be interested in participating in a study that researches the listening skills of people, with the explanation of the experiment of course not revealing the true purpose. Recruited participants took part in the experiment individually, in their own time. The questionnaire was administered online and was created in Qualtrics. Respondents were asked to use headphones while participating.

Subjects were not lured into the experiment with a (financial) reward or other incentives of that kind, while those could have encouraged rushing or careless responses. For the same reason, it was in first instance the intent to only recruit subjects face-to-face and have them participate while being watched by the researcher. However, because that would have taken up way too much time and effort, the survey was distributed for subjects to fill out in their own time.

Subjects started the experiment by giving consent to participate and confirming their Dutch nationality. When finished, subjects had to evaluate four speech samples from two different individuals of either Moroccan flavoured Dutch speakers or Standard Dutch speakers on the understandability and attitudinal evaluations mentioned previously. Each speech sample was followed by the evaluative questions. To make sure that participants react in the most authentic way possible, a filler sample followed by the same questions was used, which preceded the actual speech samples. Said filler of a Standard Dutch speaker functioned as a way for participants to compare the actual speech samples to, so that they react in a way that is representative for a reaction in real life. The filler sample consisted of a speech recording of a Dutch verbal guise speaker with no real context or specific content. In addition, the filler sample was used by the researcher as a way of comparing the filler sample judgements to judgements of the stimuli to see whether the reactions are coherent and logical, to check whether participants did not respond carelessly. All participants, regardless of the

condition they were attributed to, evaluated the same filler sample. The use of a filler sample is a technique taken from Nejjari, Gerritsen, Van Hout, and Planken (2019). Following the speech samples, respondents had to fill in the 60 HEXACO personality questions, taken from (Lee & Ashton, 2009a). When all speech samples were evaluated and personality questions were answered, participants were asked to provide demographic information (age, gender, level of education) and to answer an open question regarding their thoughts on the purpose of this experiment. The latter to be able to determine whether one uncovered the actual purpose or not and therewith eliminate subjects that could have been biased.

As mentioned before, the Dutch translations of the items can all be found in the Appendix.

Statistical treatment

To analyse the data from the Qualtrics questionnaire in the present study, chi-square tests, t-tests, analyses of variance and regression analyses were used. To check whether the intended manipulations were obtained, chi-square tests to analyse the authenticity of the accents were used. To check for differences in accent strength and voice characteristics of the speakers, t-tests were employed. For the understandability and attitudinal evaluations and HEXACO-PI-R dimensions, items were made into composite variables after the polarity of all statements in the questionnaire was controlled for and reliability of the variables was determined through Cronbach's reliability index. One-way analyses of variance were used for the understandability and attitudinal evaluations and eventually multiple and simple regression analyses were used to study possible predictive effects of the dimensions of the HEXACO-PI-R for the understandability and attitudinal evaluations. Descriptive statistics of background variables age, gender, and education were analysed through chi-square tests and t-tests to determine whether there were confounding variables that might have an unwanted influence on the outcome of the analyses. The complete data analysis was done using IBM SPSS Statistics 26.

RESULTS

Manipulation checks

Manipulation checks regarding authenticity of the accent, perceived strength of the accent and perceived voice characteristics were conducted to study whether the accents were

identified correctly and the speakers were judged similarly in voice characteristics, to determine whether the verbal guise technique actually was implicated.

To determine whether there were undesired differences between stimuli within conditions in the experiment, respondents were asked to for each accent stimulus select which accent they thought they were listening to from the options Moroccan-Dutch, Standard Dutch, Limburgian, Frisian or other. In addition, subjects were asked to rate the accent strength and voice characteristics for each stimulus.

Crosstabulations showed that the filler sample, which every participant was exposed to, was identified correctly as Standard Dutch by 89 subjects (83.2%). For stimulus 1, both conditions were identified significantly more times correctly than incorrectly (Moroccan-Dutch, 88.7%; Standard Dutch, 72.2%) ($\chi^2(3) = 61.23$, $p < .001$). For stimulus 2, both conditions were identified significantly more times correctly than incorrectly (Moroccan-Dutch, 90.6%; Standard Dutch, 83.3%) ($\chi^2(3) = 73.20$, $p < .001$). For stimulus 3, both conditions were identified significantly more times correctly than incorrectly (Moroccan-Dutch, 96.2%; Standard Dutch, 77.8%) ($\chi^2(4) = 77.38$, $p < .001$). Lastly, for stimulus 4, both conditions were also identified significantly more times correctly than incorrectly (Moroccan-Dutch, 84.9%; Standard Dutch, 94.4%) ($\chi^2(3) = 84.25$, $p < .001$). This means all stimuli for all conditions were identified correctly significantly more than not and there were no striking differences between conditions.

To check whether there were differences in perceived accent strength between conditions, composite variables were computed over the four stimuli. An independent samples t-test for the accent strength of the conditions showed a significant effect of condition on perceived accent strength ($t(104.81) = 10.13$, $p < .001$), with the Moroccan-Dutch condition ($M = 5.27$, $SD = 1.08$) perceived as having a stronger accent than the Standard Dutch condition ($M = 3.18$, $SD = 1.06$). This means that after listening to the Standard Dutch filler sample, subjects found Moroccan-Dutch to be a stronger accent, which is to be desired if one would consider Standard Dutch as being neutral- or no accent-Dutch.

Regarding voice characteristics, an independent samples t-test was executed to check whether there were any unwanted differences between the conditions. For the four stimuli, no significant difference was found for the composite variable of perceived voice characteristics between the Moroccan-Dutch ($M = 4.27$, $SD = .57$) and Standard Dutch ($M = 4.24$, $SD = .60$) conditions ($t(105) = .26$, $p = .796$), which was to be desired as this means all speakers were perceived to have similar voice characteristics. Therefore, it can be stated verbal guise was attained in this experiment.

From the results of the manipulation checks for the filler sample it became clear that, out of 107 initial subjects, 89 (43 Moroccan-Dutch condition, 46 Standard-Dutch condition) identified the accent of the filler sample correctly. Further analysis showed, 79 subjects identified all stimuli, including the filler sample, correctly (38 Moroccan-Dutch condition, 41 Standard-Dutch condition). For this reason, further analyses of the experiment were executed on only the data of the subjects that identified all stimuli correctly, as this assures that the associations the listeners have concern the intended accent.

Understandability & attitudinal evaluations

To answer the first research question of this study, 'To what extent are Moroccan flavoured Dutch speakers evaluated differently on understandability and attitudinal evaluations than Standard Dutch speakers by Dutch listeners?', multiple analyses of variance were executed to determine the effect of the Type of Accent on the understandability and attitudinal evaluations of the listeners.

Perceived intelligibility & comprehensibility

A one-way analysis of variance with Type of Accent as independent variable showed a significant effect of Type of Accent on perceived intelligibility ($F(1, 77) = 43.11$, $p < .001$). The Moroccan-Dutch accent ($M = 4.10$, $SD = .81$) was judged significantly less intelligible than the Standard Dutch accent ($M = 5.59$, $SD = 1.16$). A one-way analysis of variance with Type of Accent as independent variable showed a significant effect of Type of Accent on perceived comprehensibility too ($F(1, 77) = 27.65$, $p < .001$). The Moroccan-Dutch accent ($M = 4.20$, $SD = .90$) was perceived significantly less comprehensible than the Standard Dutch accent ($M = 5.28$, $SD = .92$). Table 1 shows the means, standard deviations and number of participants the one-way analyses of variance for perceived intelligibility and perceived comprehensibility.

Table 1.   *Means, standard deviations and number of participants for the one-way analyses of variance for perceived intelligibility and comprehensibility with the type of accent as independent variable.*

		M	*SD*	n
Intelligibility	Moroccan-Dutch	4.10	.81	38
	Standard Dutch	5.59	1.16	41
	Total	4.87	1.25	79
Comprehensibility	Moroccan-Dutch	4.20	.90	38
	Standard Dutch	5.28	.92	41
	Total	4.76	1.05	79

Status, competence, likeability & dynamism

A one-way analysis of variance with Type of Accent as independent variable showed no significant effect of Type of Accent on perceived status ($F(1, 77) < 1$), meaning that Moroccan-Dutch ($M = 3.78$, $SD = .65$) was not evaluated more negative regarding status than Standard Dutch ($M = 3.80$, $SD = .72$). Regarding perceived competence, a one-way analysis of variance with Type of Accent as independent variable did not show a significant effect of Type of Accent ($F(1, 77) = 3.75$, $p = .056$), with speakers of Moroccan-Dutch ($M = 3.37$, $SD = .76$) not evaluated less competent than Standard Dutch speakers ($M = 3.70$, $SD = .78$). For perceived likeability, a one-way analysis of variance with Type of Accent as independent variable did show a significant effect of Type of Accent ($F(1, 77) = 4.25$, $p = .043$), as Moroccan-Dutch ($M = 3.73$, $SD = .70$) was judged less likeable than Standard Dutch ($M = 4.03$, $SD = .57$). Lastly, a one-way analysis of variance with Type of Accent as independent variable showed no significant effect of Type of Accent on perceived dynamism $F(1, 77) = 1.50$, $p = .224$), meaning that the Moroccan-Dutch ($M = 3.86$, $SD = .72$) speakers were not evaluated less dynamic than the Standard Dutch speakers ($M = 3.67$, $SD = .64$).

This means only perceived likeability differed significantly between the conditions, while the other attitudinal evaluations did differ but not significantly according to the analyses. Table 2 shows the means, standard deviations and number of participants for the one-way analyses of variance of perceived status, competence, likeability and dynamism.

Table 2.   *Means, standard deviations and number of participants for the one-way analyses of variance for the attitudinal evaluations with Type of Accent as independent variable. Variables succeeded by an '*' are significant.*

		M	SD	n
Status	Moroccan-Dutch	3.78	.65	38
	Standard Dutch	3.80	.72	41
	Total	3.79	.68	79
Competence	Moroccan-Dutch	3.37	.76	38
	Standard Dutch	3.70	.78	41
	Total	3.54	.78	79
Likeability*	Moroccan-Dutch	3.73	.70	38
	Standard Dutch	4.03	.57	41
	Total	3.89	.65	79
Dynamism	Moroccan-Dutch	3.86	.72	38
	Standard Dutch	3.67	.64	41
	Total	3.76	.68	79

* $p = .043$

Predicting effect of personality

To answer the second research question of this study, 'To what extent are the understandability and attitudinal evaluations of Moroccan flavoured Dutch and Standard Dutch speakers predicted by personality traits of Dutch listeners?', regression analyses were executed for each dependent variable to study whether there was a predicting effect of the self-reported personality traits of a listener and if so, which dimensions of the HEXACO-PI-R had (the strongest) predicting effects.

Understandability

A multiple regression analysis showed that the personality dimensions entered as possible predictor variables explained 0% of the variance in intelligibility ($F(6, 72) = 1.01$, $p = .428$). A second multiple regression analysis showed that the personality dimensions entered as

possible predictor variables only explained 5% of the variance in comprehensibility (F(6, 72) = 1.71, p = .143), meaning for both understandability variables no personality dimensions were significant predictors. The β- and p-coefficients of the significant and non-significant dimensions as predictors for understandability can be found in Table 3.

Table 3.　*Regression analyses for all HEXACO-PI-R dimensions as predictors of independent variables belonging to perceived understandability (intelligibility, comprehensibility) (n = 79).*

| | Understandability | | | | | | | |
| | Intelligibility | | | | Comprehensibility | | | |
Variable	*B*	*SE B*	β	*p*	*B*	*SE B*	β	*p*
Intercept	3.12	1.74			3.71	1.43		
Honesty-Humility	.38	.27	.19	.156	.41	.22	.24	.061
Emotionality	.08	.23	.05	.717	-.02	.19	-.01	.910
Extraversion	.24	.23	.12	.305	-.16	.19	-.10	.405
Agreeableness	.08	.25	.04	.757	-.05	.20	-.03	.817
Conscientiousness	-.43	.27	-.20	.109	-.15	.22	-.08	.503
Openness to Experience	.23	.22	.12	.311	.32	.18	.20	.082
R^2	.00				.05			
F	1.01			.428	1.71			.131

Attitudinal evaluations

A multiple regression analysis for perceived status showed that the personality dimensions entered as possible predictor variables only explained 6% of the variance (F(6, 72) = 1.82, p = .107). However, Honesty-Humility (β = .27, p = .038) was found to be a significant predictor of perceived status of the speaker (see Table 4). A simple regression analysis showed that Honesty-Humility explained 8% of the variance (β = .30, p = .008) (F(1, 77) = 7.41, p = .008), meaning perceived status of the speaker increases with .08 *SD* for each increase of 1 *SD* of Honesty-Humility, given that all the other variables are kept constant.

A second multiple regression analysis for perceived competence showed that the personality dimensions entered as possible predictor variables only explained 4% of the variance (F(6, 72) = 1.59, p = .164).

A third multiple regression analysis for perceived likeability showed that the personality dimensions entered as possible predictor variables explained 10% of the variance

(F(6, 72) = 2.38, p = .038). Honesty-Humility (β = .26, p = .040) was shown to be a significant predictor of perceived likeability of the speaker. A simple regression analysis showed that Honesty-Humility explained 8% of the variance (β = .31, p = .006) (F(1, 77) = 8.14, p = .006), meaning that perceived likeability increases with .08 *SD* for each increase of 1 *SD* of Honesty-Humility, given that all the other variables are kept constant.

  A final multiple regression analysis for perceived dynamism showed that the personality dimensions entered as possible predictor variables only explained 1% of the variance (F(6, 72) = 1.10, p = .372), meaning that Honesty-Humility was a significant predictor for perceived status and likeability, while no significant predictors were identified for perceived competence and dynamism. The β- and p-coefficients of the significant and non-significant dimensions as predictors of attitudinal evaluations can be found in Table 4.

Table 4. *Regression analyses for all HEXACO-PI-R dimensions as predictors of independent variables belonging to attitudinal evaluations (status, competence, likeability and dynamism) (n = 79). Coefficients succeeded by an '*' are significant.*

	Attitudinal evaluations															
	Status				*Competence*				*Likeability*				*Dynamism*			
Variable	*B*	*SE B*	β	*p*	*B*	*SE B*	β	*p*	*B*	*SE B*	β	*p*	*B*	*SE B*	β	*p*
Intercept	2.96	.92			2.19	1.06			2.43	.86			3.69	.94		
Honesty-Humility	.30	.14	.26	.038*	.26	.16	.20	.112	.27	.13	.26	.040*	.07	.14	.07	.603
Emotionality	.18	.12	.18	.137	.15	.14	.13	.283	.11	.11	.11	.351	-.07	.12	-.07	.565
Extraversion	-.03	.12	-.03	.799	-.03	.14	-.03	.832	.00	.12	.00	.977	-.21	.13	-.20	.094
Agreeableness	.07	.13	.07	.594	.06	.15	.05	.705	.13	.12	.13	.286	.09	.13	.09	.488
Conscientiousness	-.20	.14	-.17	.165	-.18	.16	-.13	.267	-.19	.13	-.17	.148	.11	.14	.09	.456
Openness to Experience	-.04	.12	-.03	.767	.20	.14	.17	.152	.16	.11	.16	.151	.04	.12	.03	.765
R^2	.06				.04				.10				.01			
F	1.82			.107	1.59			.150	2.38			.038*	1.10			.372
Intercept	2.69	.41							2.80	.39						
Honesty-Humility	.33	.12	.30	.008*					.33	.11	.31	.006*				
R^2	.08								.08							

CONCLUSION & DISCUSSION

Understandability & attitudinal evaluations

The first research question (RQ1) set out to investigate whether and to what extent speakers of Moroccan flavoured Dutch were evaluated differently on understandability (perceived intelligibility, perceived comprehensibility) and attitudinal evaluations (status, competence, likeability, dynamism) than speakers of Standard Dutch by native Dutch listeners.

Results of the first analyses showed significant effects of type of accent on understandability of the speakers. Respondents reported they perceived the Moroccan flavoured Dutch accent to be significantly less intelligible and comprehensible than the Standard Dutch accent (see Table 1). Whether actual intelligibility and comprehensibility was lower than Standard Dutch was not the focus of this study, because this study set out to study the perceptions of listeners. Reason for studying the perceived understandability of listeners has to do with the origin of perceptions versus actual understanding. The latter does not have to do with the personality or ideologies of an individual, as it is influenced by the degree to which a person has the cognitive ability or intelligence to decipher what something means, which is not part of the personality dimensions in the Big Five or HEXACO. The understandability of something might be perceived by a person as low, while a measurement of the actual understandability could be intermediate or high, meaning the perception of the understandability would be different from the actuality. Perceived understanding is influenced by the context of a situation, that is, the thoughts someone is having at that moment, which might be derogatory as they could have certain preconceptions that are evoked because of the stimulus they are exposed to. This means one is not really measuring understanding per se, but actually what one thinks is their understanding as a cause of the preconceptions they hold. This was relevant for the present research as the intent was to study whether the perceptions listeners hold of speakers were related in some way to their personality.

The results for the perceived understandability evaluations were in line with the tentative expectations that were formed from the limited research into understandability of Moroccan flavoured Dutch. Grondelaers et al. (2015) reported that explicit associations its respondents had with the Moroccan flavoured Dutch revolved partially around unintelligibleness, unclarity and foreignness, which, in addition to the fact the accent in relatively new, implied understandability issues. Moreover, Dekker et al. (2021) reported implicit and explicit preference for Standard Dutch over Moroccan flavoured Dutch.

Aforementioned results concern opinions of highly educated Dutch individuals as well as Dutch children, implying less positive attitudes towards the Moroccan flavoured Dutch accent are present from an early age and stay present after higher education. The results of the present study provide convincing evidence that the Moroccan flavoured Dutch accent is perceived less intelligible and comprehensible than the Standard Dutch accent among a sample of mostly highly educated (recently graduated) students, which is no different from previous implied results and expectations formulated in the Introduction. In addition, these results imply that perceived intelligibility and perceived comprehensibility appear to be subjects of a similar process or are related to one another, the one possibly being a prerequisite of the other, while previous research (e.g., Nejjari et al, 2019) found that actual intelligibility was not necessarily a prerequisite of comprehensibility as relatively low intelligibility correlated with relatively high comprehensibility. Further research could be conducted into the differences or similarities between perceived and actual intelligibility and comprehensibility, to better understand the relation between these concepts.

Results for the attitudinal evaluations showed a significant effect of type of accent on likeability of the speaker. The Moroccan flavoured Dutch speakers were judged less likeable than the Standard Dutch speakers. For the other attitudinal evaluations, status, competence and dynamism, no significant effect was found (see Table 2). These results are partially in line with previous results and expectations and partially contrary. The insignificant effect of the type of accent on perceived status was most unexpected, as both Grondelaers & Van Gent (2019) and Grondelaers et al. (2015) produced significant results for the variable status. Dynamism and competence were not studied in previous research, however the negative explicit associations from Grondelaers et al. (2015) implied possible negative evaluations for Moroccan flavoured Dutch speakers on these variables too. This was not the case. Regarding likeability, the significantly more negative evaluations of the Moroccan flavoured Dutch speakers were in line with the expectations mostly based on the negative associations from Grondelaers et al. (2015) (i.e., 'aggressiveness') and the explicit preference for Standard Dutch from Dekker et al. (2021). The results of the present study in comparison with previous results imply lower perceived likeability for speakers of Moroccan flavoured Dutch in comparison with speakers of Standard Dutch. Yet, the present insignificant results regarding status, competence and dynamism imply ambiguity on whether the accent actually is regarded as having less status and being less attractive than Standard Dutch, or not.

Explanations for the attitudinal evaluations results might have to do with changing opinions in recent years, as Grondelaers et al. (2015) reported on already. They state Dutch

migrant communities have noticeably increased education levels which has led and leads to better participation in the labour market and a higher socio-economic status and that this increase was expected to sustain. This suggestion is supported by statistics from the Central Bureau of Statistics (2022b), which show that in the second quarter of 2021 18.6% of Dutch inhabitants with a non-western background are educated on university of applied sciences level or higher, whereas this was only 12.2% 10 years earlier. It could be the case than, that in recent years the negative attitude towards speakers of Moroccan flavoured Dutch has declined as a cause of increased socio-economic status and increased positive social contact with indigenous Dutch people, as second-generation immigrants are less inclined to move to neighbourhoods with high concentrations of migrants (Bolt & Van Kempen, 2010). Moreover, an important argument raised by Grondelaers et al. (2015) which seems to be of even more relevance in 2022 is the prestige and acceptance that Moroccan immigrants have gained in pop culture. Major figures in arts, sports and politics are of Moroccan descent (e.g., singer Bilal Wahib, actor Achmed Akkabi, comedian Soundos El Ahmadi, rapper Boef, politicians Jesse Klaver and Khadija Arib, Ajax-youngster Mohamed Ihattaren, and so on). All these second-generation Moroccan immigrants have gained success in their own distinctive areas and are famed, respected citizens of the Netherlands. Some, like Wahib, rapper Boef and Ihattaren, are young men who are generally associated with the Moroccan flavoured Dutch accent. This shows a level of acceptance which might also impact the attitudes that Dutch listeners hold towards speaker of Moroccan-Dutch and Moroccan flavoured Dutch regarding status, but also competence for example. So, even though limited linguistic evidence implies negative attitudes of Dutch listeners towards Moroccan flavoured Dutch speakers, which is supported by societal evidence as explained by Bouabid (2018), there is also an apparent increased acceptance of individuals generally associated with the concerned accent, which might positively impact its perception.

It is striking that such convincing differences in perceived understandability between Moroccan flavoured Dutch and Standard Dutch do not seem to be an assured prerequisite of similar differences in attitudinal evaluations. With only a significant difference in likeability, which still was much smaller than the significant differences in perceived intelligibility and comprehensibility (see Table 1 and Table 2), implicit attitudes of respondents seem less extreme than they might think themselves when looking at perceived understandability. Furthermore, this result suggests perceived understandability is not related to attitudes towards speakers. While relatively large differences were found in perceived understandability and much smaller differences were found in attitudes, it seems these two

components of speaker evaluations most certainly measure different aspects and do not impact one another. Further research should be carried out into the extent to which (perceived) understandability and attitudinal evaluations are unrelated to each other and into what could explain relatively positive attitudes towards accents which are (perceived to be) understood relatively poorly.

Predictive effect of personality

The second research question of this study (RQ2) set out to investigate whether and to what extent the understandability (perceived intelligibility, perceived comprehensibility) and attitudinal evaluations (status, competence, likeability, dynamism) of Moroccan flavoured Dutch and Standard Dutch speakers were predicted by the personality traits of Dutch listeners on the basis of the self-reported HEXACO-60 scale (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to Experience).

Results of the first regression analyses for the perceived understandability evaluations showed no significant predicting effect by any personality dimension for either perceived intelligibility or perceived comprehensibility (see Table 3). Because no research has previously studied whether personality traits of listeners predict or correlate with the understandability evaluations of (accented) speakers, it is hard the compare the results of these analyses. As mentioned in the expectations, assumed was that extraversion or openness of the listener could have an influence on the comprehensibility and possibly intelligibility ratings, as Yoon (2021) showed this effect on fluency ratings and a correlation between fluency ratings and comprehensibility has been proven in previous research (O'Brien, 2014; Suzuki & Kormos, 2020). Seravalle (2010) too showed suggestions that persons who were accepting of novel, foreign and unfamiliar situations (i.e., open to experience) could be more positive regarding comprehensibility. However, this was not the case in the present study.

What could explain the fact no significant results were found for the predictive effect of personality traits for perceived understandability is hard to say. Convincing significant differences were found in the understandability evaluations of Moroccan flavoured Dutch and Standard Dutch speakers, whereas no personality dimensions were identified as significant predictors. This suggests perceived intelligibility and comprehensibility are not rooted in an individual's personal traits. However, it could be that the relatively homogenous group of respondents had similar personality traits, which would mean personality was not connected to the scores. On the other hand, personality is not only determined by the age of a person,

but maybe more importantly by their upbringing, experiences and surroundings, which would debunk the idea that the respondents all had similar personalities. Research into the origin of speaker evaluations showed that the listener's perception of the ability of a speaker to speak a language with a non-standard accent changed based on perceived country of origin, gender or age (Brown, 1992; Strand, 1999; Hay et al., 2006). This, in combination with results of the present study, suggests that perceived understandability is only influenced by explicit external factors rather than internal factors like personality, meaning this suggests that the evaluation of a speaker's understandability is a conscious process. Yet, research should be conducted into the variability of personalities in age groups like students, to study whether a homogenous age group is also homogenous in personality, which would add to what we understand about the predictive effect of personality on speaker evaluations.

Results of the regression analyses for the attitudinal evaluations showed significant predicting effects of the dimension Honesty-Humility for status and likeability, as status and likeability increased when Honesty-Humility did. For these evaluations, no other dimensions were found to be significant predictors, while competence and dynamism were found to not be predicted by any personality dimension (see Table 4). These results do not concur with the tentative expectations that were formed. As DeWaele and McCloskey (2015) and Gaffney and Côté (2020) both found high extraversion and emotional stability to be predictors of more positive ratings for foreign accents and Li et al. (2016) and Şahin et al. (2014) suggested high openness and agreeableness and high openness and extraversion were related to higher cultural intelligence among listeners, it was expected that especially extraversion, emotional stability and openness could have potential to be significant predictors of attitudinal evaluations. However, none of those were. Honesty-Humility, the only personality dimension not to be tested in previous research as it is not part of the Big Five and HEXACO was not implemented yet, surprisingly showed the only significant results. This suggests Honesty-Humility is the sole personality trait that directly predicts listeners' evaluations regarding the status and likeability of a non-standard accented speaker. With only Seravalle (2010) suggesting a link between attitudinal evaluations (status and competence) and something similar to the openness to experience dimension, as mentioned before, it is hard to directly compare results of this analysis with previous research, but it does suggest that, unlike expectations drawn from DeWaele and McCloskey (2015), Gaffney and Côté (2020), Li et al. (2016) and Şahin et al. (2014), extraversion, emotional stability and openness are not significant predictors for status, competence, likeability or dynamism when comprehensively studied.

The results of the analysis for the predicting effects of personality dimensions for attitudinal evaluations might be explained similarly to the results for the understandability evaluations. It namely suggests that the attitudinal evaluations of speakers are largely not related to the personality of the listener, which would mean that they are determined by external factors and are not necessarily an unconscious decision. Where the motivation for the evaluations of speakers might come from if it is not an unconscious decision is again hard to determine. As Brown (1992), Strand (1999) and Hay et al. (2006) showed, differences in evaluations were observed when external factors regarding looks were included in the stimuli, which in pairing with current results suggests that there might be societal effects that influence the difference in evaluation if personality is not the predictor. It could be that society has conditioned individuals to downgrade people with a non-standard accent and foreign looks. This might come from the way media portray these people or general statistics that put these groups of people in a bad light (e.g., Moroccan individuals are almost 6 times more likely to be suspect in a crime in the Netherlands (Central Bureau of Statistics, 2020)). Yet, these are only assumptions and should be studied in future research to determine the effects of societal factors in the investigation of the motivation for attitudinal evaluations of speakers.

Practical implications

This study adds to the research about the Moroccan flavoured Dutch accent and its perception in Dutch society and is one of the first to study the predictive effect of personality on understandability and attitudinal evaluations this comprehensible. It shows the Moroccan flavoured Dutch accent is still perceived as less understandable, like earlier research by Grondelaers et al. (2015) suggested. This is not predicted by any personality traits and, except from likeability, Standard Dutch and Moroccan flavoured Dutch do not evoke different attitudes, even though status and likeability seem to be predicted by Honesty-Humility. This suggests that in general everyday life, as the stimuli were meant to represent everyday conversational topics, judgements of differences in understandability are not necessarily unconscious decisions caused by inherent preferences related to an individual's personality, but rather by external factors like for example perceived country of origin, age or gender, as shown in previous research (Brown, 1992; Strand, 1999; Hay, Warren & Drager, 2006). As status and likeability were predicted by Honesty-Humility, this would mean more honest, modest people would prescribe higher status and likeability to a speaker. These results

suggest that Dutch people might need to be educated more on discriminatory behaviour mainly related to the perceived understandability of non-standard accented speakers in the form of Moroccan flavoured Dutch speakers, as it apparently is for the most part not an inherent preference caused by personality, meaning something can be done about it. Furthermore, the results show that the general attitude towards Moroccan flavoured Dutch speakers is not necessarily more negative compared to Standard Dutch speakers among educated Dutch individuals. Though, likeability was lower for the non-standard accented speakers, which does concur with the negative sentiment towards people with a Muslim immigration background in Dutch society, as explained in the Introduction. Next to the education on these issues for listeners, speakers of Moroccan flavoured Dutch should be made aware of what their accent does to the perception of them, as it apparently in combination with other external factors makes them perceived as much less understandable and likeable than if they were to speak Standard Dutch. If they would want to be perceived more understandable, accent training to achieve a native Dutch accent would be advisable. However, as listeners seem to consciously evaluate these speakers rather than unconsciously because of their personality, it seems unfair for the speaker to have to change their ways while the listener is the one consciously discriminating.

Limitations & future research

This study has several limitations. Firstly, only male verbal-guise speakers were used in the experiment. This did make for consistency and necessary precautions were taken by ways of manipulation checks. However, the use of a matched-guise speakers would have been preferable, while the validity of the results would have been even larger as voice characteristics could not have been of influence. Nonetheless, the researcher did not have a matched-guise speaker at their disposal, which meant a verbal-guise technique was the only solution. An extensive pre-test did improve the chances of valid results, as it made it possible to pick speakers who had very similar voice characteristics and came close to a matched-guise. The fact only male speakers were used had to do with the stimuli sourced for the Moroccan flavoured Dutch accent. The recordings that the researcher received access to were all of males, so the Standard Dutch variants of the stimuli had to be recorded by male speakers too. This might have led to responses that typify responses to male speakers. On the other hand, Bouabid (2018) shows in an extensive analysis of the 'Moroccan panic' in the Netherlands that the negative stereotypes and stigmas consider Moroccan-Dutch male

adolescents, rather than females, which implies the Moroccan flavoured Dutch accent might be associated with men more than women. Moreover, previous language research shows that women, if offered equal educational opportunities to men, are more sensitive than men to the status norms of language (Xia, 2013) and are significantly more times identified as native speakers than men are (Polat & Mahalingappa, 2010). This would suggest women would have the tendency to take on standard accents more than men. For that reason, it seems fitting that only male speakers were used in the verbal-guise stimuli, as it seems to be an accurate representation of the people generally assumed to be Moroccan flavoured Dutch speakers.

Secondly, the nature of questionnaire used for the experiment caused issues with response collection. As it consisted of a filler sample and four stimuli in addition to over 100 questions/statements for each respondent, the survey was considered rather long by respondents and made for many unfinished responses that were not usable. This caused time issues as well, which meant that during collection the choice was made to also collect responses from middle-aged Dutch individuals, in addition to (recently graduated) students. This made for a response sample with a mean age higher than initially intended and with a relatively limited number of respondents. Yet, these choices were made to ensure proper research practices, accurate data collection and to adhere to the intended design of the study as much as possible. Despite the limited number of respondents, the models of the study still worked. No significant confounding variables were found, the analyses were valid and the measurements reliable.

A third limitation might be the difference between the conditions found in educational level, while no (ex-)MBO-students were in the Moroccan flavoured Dutch condition, and a few were in the Standard Dutch condition. However, also for this no striking cases were identified during analysis.

Lastly, there is the case of the Moroccan flavoured Dutch accent being quite ambiguous. There is no exact norm for what it should sound like or which interjections are used, as it is shown to be an accent seemingly characterized by conscious manipulation of the matrix language (Nortier & Dorleijn, 2008), meaning it could even differ between individuals. Urban variations too have been identified and found to be evaluated differently (Grondelaers et al., 2015; Grondelaers & Van Gent, 2019), which means the accent is rather ambiguous and hard to define.

Regarding the assessment of understandability, perceived intelligibility and comprehensibility were measured with relatively few items, even though they produced useful findings. There was not much room for respondents to express how understandable

they found the speakers, while it might be too intricate to capture in a few statements. Yet, this technique was used because it proved effective in the past and was short. In the future, studies should measure perceived and actual understandability more extensively in combination with the predictive effect of personality traits, to identify more clearly how understandability works and where the differences in intelligibility and comprehensibility between accents and/or languages exactly lie. Moreover, as mentioned earlier, further research should be conducted into the difference between perceived and actual understandability, to better understand how they relate and where the motivations for the difference between these come from. For attitudinal evaluations, increasingly more studies like Dekker et al. (2021) make use of Implicit Association Tests instead of explicit evaluations like status, likeability, competence and dynamism. Future research might benefit from the incorporation of both implicit and explicit attitudinal evaluations in accentedness research. As shown in the present study, relatively positive attitudes towards accents can concur with relatively poor understandability. Future research should investigate the extent to which these concepts are (un)related to each other and what could explain the occurrence of positive attitudes to accents that are perceived to be poorly understood. In addition, further research should be carried out into the phonetic, phonological and interjecting characteristics of Moroccan flavoured Dutch and all its variations, to be able to create some norms that can then be applied in research again. Moreover, as Gaffney and Côté (2020) suggested too, it might be that degree of accentedness impacts the role of personality in motivations for speaker evaluations. When the accent is properly defined, future research should study whether degree of accentedness in Moroccan flavoured Dutch and other understudied non-standard accents makes a difference for the interplay of personality, as degree of accentedness has already proven to influence the harshness of speaker evaluations in the past (Hendriks, Van Meurs & De Groot, 2017; Hendriks et al., 2016). It could be valuable to add professional context as independent variable to study whether the context of the accent might influence its perception, as well as, replicating the present study with larger homogenous and heterogenous samples to examine the effects of sample size and sample characteristics. Finally, the present study showed great differences regarding understandability between the Standard Dutch accent and the non-standard accent, which suggests this also be the case for other non-standard Dutch accents, like for example the accents from Polish labour immigrants.

ACKNOWLEDGEMENTS

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APPENDIX

Scripts audio stimuli

Recording	*Script*
Dutch Speaker 2, filler	Laatst hadden ze mij een brief gestuurd – dat was in de vakantie, meivakantie – daar stond in van uh: "Ja, Sams gedrag tolereren we niet meer en uh hij wordt nu geschorst enzo." Maar uh ja, ik ben nooit… Ik ben altijd heel rustig en ze hebben gewoon een fout gemaakt. Dus ik zei het tegen mijn vader… Zegt 'ie tegen mij uh: "Wat is dit?" enzo. Ik zeg tegen hem: "Jongen, dat hebben ze fout. Komt goed.", zeg ik altijd. Hij zegt tegen mij: "Jongen, ik weet niet wat je daar doet op die school." "Als je mij niet gelooft dan zeg ik tegen de leraar dat 'ie jou wel belt." Dus ik ben die dag naar school gegaan – die maandag daarop. Ik zeg tegen hem: "Meneer uh, wat is dit allemaal met die brief enzo?" Hij zegt: "Ja, is zo." Ik zeg tegen hem: "Meneer, dat is gewoon niet zo. Dat weet u zelf ook wel."
Moroccan Speaker 1, stimulus 1	Ze g-, zat met andere boys te flirten en dit, en dat, en-. Eerste keer kwam ik erachter; door de vingers gezien. Tweede keer kwam ik erachter; werd ik echt *parra*. Ging het zo uit, toen werd het weer goed. Derde keer flikt ze het weer. Nou, dan denk ik: "Jij bent gek in je hoofd. Klaar." En sindsdien… Ja, ik weet niet, dan blijf je-, je blijft, je blijft alert, je weet toch.

Dutch Speaker 1, stimulus 1	Ze was met andere jongens aan het flirten enzo. En de eerste keer kwam ik erachter. Heb ik door de vingers gezien. Tweede keer kwam ik erachter. Toen werd ik echt boos. Ging het uit, werd het weer goed. De derde keer flikt ze het gewoon weer. Nou, dan denk ik: "Jij bent gek in je hoofd. Klaar." En sindsdien… Ja, ik weet het niet, je-, je blijft alert.
Moroccan Speaker 1, stimulus 2	*-inaudible-* zulke dingen moeten wel van twee kanten komen, weet je. Het kan niet alleen maar van een kant… een, een k-, een-, een kant blijven geven en geven en geven en geven. Want dan wat gaat die andere kant dan denken op een gegeven moment? Van: "*Kifesh*?"
Dutch Speaker 1, stimulus 2	Dus zulke dingen moeten wel van twee kanten komen, toch? Je kan niet alleen maar van een kant… een kant blijven geven en geven en geven en geven. Want dan gaat die andere kant denken op een gegeven moment, van: "Waarom?"
Moroccan Speaker 2, stimulus 3	Volgende keer als je komt moet je… *-inaudible-* …moet je gewoon kijken… Op dinsdag, donderdag, zaterdag, zondag werk ik altijd. Moet je gewoon wachten op mij en krijg je korting he. Die shit is duur *a sahbi*.
Dutch Speaker 2, stimulus 3	Volgende keer als je komt moet je, moet je gewoon kijken… Op dinsdag, donderdag, zaterdag en zondag werk ik altijd. Dan moet je gewoon wachten op mij en krijg je korting he. Het is daar duur vriend.
Moroccan Speaker 2, stimulus 4	Hij werkt daar al vier jaar, vijf jaar ofzo. Bezorgt pas vanaf z'n achttiende, hè. Toen 'ie daar vijf-… Hij we-,

	hij werkte daar toen 'ie vijftien was ofzo. Toen uh, stond 'ie gewoon binnen, pizza's maken enzo. Ennuh, n-, nou-, toen uh… Toen op z'n achttiende kreeg tie dinges… Hij kreeg pas op z'n achttiende rijbewijs. Hij had geen certificaat.
Dutch Speaker 2, stimulus 4	Hij werkt daar al vier of vijf jaar ofzo. Bezorgt pas vanaf z'n achttiende, hè. Toen 'ie daar vijf-… Hij werkte daar toen 'ie vijftien was ofzo. Toen uh, stond 'ie gewoon binnen, pizza's uh, pizza's maken enzo. Enne, uh… Toen 'ie op z'n achttiende uh kreeg tie uh… Hij kreeg pas op z'n achttiende z'n rijbewijs. Hij had geen certificaat.

Master version questionnaire

Consent form

Filler sample (both conditions)

- Manipulation check
    - o Accent authenticity (multiple choice)
    - o Accent strength (1 Likert scale)
    - o Voice characteristics (4 Likert scales)
- Attitudinal evaluations
    - o Status (5 Likert scales)
    - o Competence (5 Likert scales)
    - o Likeability (8 Likert scales)
    - o Dynamism (3 Likert scales)

Condition Moroccan flavoured Dutch (4 stimuli) / Condition Standard Dutch (4 stimuli)

Per stimulus:

- Manipulation check (see Filler sample)
- Perceived understandability
    - o Perceived intelligibility (5 semantic differential scales)

- o Perceived comprehensibility (6 Likert scales)
- Attitudinal evaluations (see Filler sample)

HEXACO-60 for all respondents

- 6x10 Likert scales relating to Honesty-Humility, Emotional Stability, Extraversion, Conscientiousness and Openness to Experience [3]

Demographics

- Age
- Gender
- Educational level
- Suspected purpose of the experiment

End

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[3] https://hexaco.org/hexaco-inventory

Declaration on plagiarism and fraud

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The undersigned
[first name, surname and student number],

Teun Fransen, s1021776

Master's student at the Radboud University Faculty of Arts,

declares that the assessed thesis is entirely original and was written exclusively by himself/herself. The undersigned indicated explicitly and in detail where all the information and ideas derived from other sources can be found. The research data presented in this thesis was collected by the undersigned himself/herself using the methods described in this thesis.

Place and date:

24 August 2022

Signature: