The effect of accent strength in lecturers’ Dutch-English pronunciation on the speaker evaluations of Dutch students with different study backgrounds

Anne-Louise Dekker
Radboud University Nijmegen

There have been only a few studies on the effect of accent strength on evaluations of non-native English (NNE) accents by non-native listeners in an educational context. This study investigated the effect of accent strength on speaker evaluations in an educational context, and whether the educational background and degree of language sensitivity of the students had an effect on their evaluations of the speakers as well. 183 Dutch students filled in an online questionnaire in which they evaluated two fragments of a lecture in English, that were recorded by six male speakers and classified on degree of accentedness (moderate, slight and native) by expert judges. The moderately accented speakers were evaluated as less competent, less confident and less qualified teachers than the slightly accented and native instructors. There was no effect of accent strength on perceptions of comprehensibility and intelligibility. Arts students rated speakers higher on dependability and likeability than students of natural sciences. Students that scored high on language sensitivity rated the speakers higher on competence, likeability and intelligibility. Language sensitivity was shown to be a predictor of perceptions of likeability and intelligibility. In conclusion, degree of accentedness in English, study background and language sensitivity affect NNE listeners attitudinal evaluations.

Keywords: accentedness, English-medium instruction, accent strength, attitudes, teaching quality comprehensibility, intelligibility, study background, language sensitivity

Supervisor: B.C. Hendriks
Second assessor: W.F.J. van Meurs
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Introduction

These days, international interactions between individual people, organisations and governments are increasing. Often, the English language is used as a means of communication between people with different mother tongues. This phenomenon of English as a language of communication between multilingual people whose mother tongue is not English, is referred to as English as a lingua franca (ELF) (Smit, 2010). Due to globalisation and the Bologna process, ELF is also increasingly used in education (Björkman, 2011; Smit, 2010). The increasing use of English as the language of instruction is referred to as English as a medium of instruction (EMI). These days, the idea of Chinese, Dutch and Spanish students being lectured by a Swedish scholar speaking non-native English (NNE) is no longer unusual, as the use of ELF in academia is increasing rapidly.

EMI might be a challenge for NNE instructors (Hendriks, van Meurs & Hogervorst, 2016; Lehtonen & Lönnfors, 2001). Speakers of ELF may have difficulties with forming phrases and sentences and the internal structure of words. This non-standardness of morphosyntax can have different types, such as non-standard question formulation or not marking the plural on the noun (Björkman, 2011). However, Björkman (2011) states that this non-standardness of morphosyntax does not often result in miscommunication. Next to morphosyntactic difficulties, accentedness can also be a challenge for NNE instructors (Dalton-Puffer, Kaltenboeck & Smit, 1997). Previous studies have found that it is unlikely to acquire a native-like accent, unless someone learned a language at a young age (Gluszek & Dovidio, 2010). Therefore, it is likely that many non-native instructors of English have a non-native accent. Having an accent has certain effects. Next to the fact that accentedness of the speaker (wrongly) suggests that the speaker does not speak the language fluently (Gluszek & Dovidio, 2010), Mai and Hoffmann (2014) discuss three categories of accent effects. The first one, the social identity effect, means that people assign accented people to a certain (social) group. This categorization of people results in the discrimination of so-called ‘out-group’ speakers, that do not belong to the social group of the listener, and favoritism of in-group speakers. The second category is the activation of stereotypes effect. This effect describes how the accent of a speaker can evoke certain stereotypes the listener has, which affect his or her evaluation of the speaker. Thirdly, there is the processing of speech and the message effect: accentedness of the speaker can affect the process of communication, which can subsequently affect the speaker evaluations (Mai & Hoffmann, 2014).

With regard to academia, it has been found that native English (NE) accents are valued most positively (Buckingham, 2014; Jenkins, 2006). Dalton-Puffer et al. (1997, p.115) note that at Austrian universities, gaining a native accent is ‘the implicit aim of most pronunciation courses’. Similarly, Buckingham (2014) argues that within academic institutes, NE instructors are preferred. Although Jenkins (2006) also admits that in many countries the standard varieties of English (American and British) are valued most positively, she also notes that it might be hard to justify that NE accents are the only accents that are seen as ‘correct’, as there are probably more speakers with a NNE accent than
speakers with a NE accent to be found worldwide. An explanation for the fact that NE instructors are preferred in many countries might be that non-native pronunciation of teachers or instructors can affect listener evaluations and perceptions of comprehensibility (Dalton-Puffer et al., 1997; Hendriks et al., 2016; Lehtonen & Lönnfors, 2001). However, as Hendriks, van Meurs and Reimer (2017) pointed out, the question is whether non-native listeners do indeed still judge the accent of non-native English instructors against native norms. In the current study it is investigated to what extent NNE accentedness of instructors does affect the speaker evaluations of listeners.

Effects of accentedness on speaker evaluations
Previous studies have shown that a speakers’ accent can have an effect on the way the speaker is perceived by a listener (Buckingham, 2014; Dalton-Puffer et al., 1997; Nejjari, Gerritsen, Van der Haagen & Korzilius, 2012; Van Maastricht, Krahmer & Swerts, 2016). Generally, non-native accented speakers might be seen as less intelligent, less competent and as less proficient speakers of the language than native speakers, although they are sometimes rated higher on solidarity dimensions (Gluszek & Dovidio, 2010). Also, accented speakers are often perceived as less comprehensible and intelligible. However, the effect of accent strength on comprehensibility and intelligibility will be discussed later.

Within the field of EMI, it is shown that NNE students evaluate NNE instructors less positively than NE instructors (Buckingham, 2014; Butler, 2007; Dalton-Puffer et al., 1997; Kelch & Santana-Williamson, 2002). Dalton-Puffer et al. (1997) conducted a language attitude study amongst 132 Austrian NNE university students of English to investigate whether they preferred native accents or non-native accents. It was found participants had a more positive attitude towards NE accents than towards NNE accents. In the study of Dalton-Puffer et al. (1997) attitude consisted of the items likeable’, ‘intelligent’, ‘educated’, ‘generous’, ‘successful’, ‘sense of humour’, ‘kind’, ‘organized’, ‘courteous’, ‘determined’, ‘honest’ and ‘ambitious’. Similarly, in a study of Buckingham (2014) amongst 347 NNE Omani students, native British English instructors were evaluated most positively on use of English, status values and suitability as an instructor, in comparison with NNE instructors. Butler (2007) also investigated the effect of accent (Korean versus American English) on attitude and comprehensibility. The native American English accent was evaluated more positively on pronunciation, confidence and fluency than the Korean accent by the NNE Korean students. Lastly, Kelch and Santana-Williamson (2002) found that NE instructors were perceived as more likable, competent, emphatic, experienced and educated than NNE instructors. Their respondents were also NNE speakers of English.

Accent strength
Another important aspect of accentedness is accent strength. According to Gluszek and Dovidio (2010), accent strength consists of two elements: 1) how much the native language of the speaker differs from the native language of the listener (e.g. Dutch differs more from Chinese than from
English) and 2) how much the accent someone has deviates from a native accent of that language (degree of accentedness). In the current study, only degree of accentedness (or ‘accent strength’) is taken into account. Accent strength differs per individual and is caused by different factors, such as the age at which someone started to learn a non-native language and the attitude that someone has towards the language (Gluszek & Dovidio, 2010).

Accent strength is a factor that affects the perceived attitude that listeners have of a speaker as well. Previous studies have all found that the stronger an accent is, the more negative the perceived attitude of a speaker is (Carlson & McHenry, 2006; Dragojevic, Giles, Beck, & Tatum, 2017; Gluszek & Dovidio, 2010; Hendriks, Van Meurs, & De Groot, 2015; Hendriks et al., 2016; Nejjari et al., 2012). For example, Carlson and McHenry (2006) found that accent strength affects employability. If the speakers’ accent was perceived as minimal, accent did not affect employability, whereas speakers with an accent that was perceived as more prominent, were rated lower on employability. Dragojevic et al. (2017) did two studies in which participants listened to speakers of English with a moderate or slight Mandarin or Punjabi accent. In both studies, the moderately accented speaker has been evaluated more negatively than the slightly accented speaker. Dragojevic et al. (2017) suggest that this is due to the difficulty that listeners had with processing the speech of the moderately accented speaker.

Accent strength of the speaker may also affect listeners’ perceptions of comprehensibility and intelligibility. Previous studies have pointed out that having an accent in itself normally does not disturb the process of communication, whereas low language competency might (Gluszek & Dovidio, 2010). However, it is important to note that there is a difference between the perceived comprehensibility and the objective (actual) comprehensibility, which is often called intelligibility. Munro and Derwing (1995) found that perceived comprehensibility is often rated lower than intelligibility. When listeners believe that an accent disturbs the comprehension, they will more easily think they do not understand an accented person, even if they do comprehend what is said (Gluszek & Dovidio, 2010). Therefore, both perceived comprehensibility and intelligibility will be measured in the current study.

With regard to perceptions of comprehensibility, there are mixed results. Various studies have pointed out that the stronger the accent of a speaker is, the less comprehensible he or she is (Carlson & McHenry, 2006; Hendriks et al., 2017; Hendriks et al., 2016; Stibbard & Lee, 2006). However, there are also studies that have not found an effect of accent strength on comprehensibility (Hendriks et al., 2015; Munro & Derwing, 1995).

With regard to the effect of accent strength on intelligibility, there are studies that seem to show that native speakers are more intelligible than non-native speakers for both native and non-native listeners, which is called the ‘native speech intelligibility benefit’ (Hendriks et al., 2016; Major, Fitzmaurice, Bunta & Balasubramanian, 2002). This would imply that Dutch listeners would better comprehend native English speakers than Dutch-accented speakers of English. On the other hand, there are also studies that have found evidence that for listeners that have the same mother tongue as a
speaker, non-native speakers are more intelligible than (or as intelligible as) a native speaker, which is called the ‘matched interlanguage speech intelligibility benefit’ (Butler, 2006; Stibbard & Lee, 2006). This would imply that Dutch listeners would better comprehend Dutch-accented speakers of English than native speakers of English. Nejjar et al. (2012) found that degree of accentedness did not affect how interpretable the speakers were at all. Native speakers of English were as comprehensible as moderately NNE accented and slightly NNE accented speakers. However, there was an effect on the perceptions of comprehensibility.

Within the context of EMI, there has been little research into the effect of accent strength. However, Hendriks et al. (2016) investigated the influence of accent strength in English on the perceived comprehensibility and attitude (consisting of competence, likeability and dependability) of NNE listeners. Instructors with different degrees of accentedness (moderate Dutch-English, slight Dutch-English, native British English) were rated by 163 Dutch students on comprehensibility and attitude. The findings of Hendriks et al. (2016) show that accent strength does affect the perceived comprehensibility and attitude in an EMI context. Instructors with a moderate accent were perceived as less comprehensible than the slightly accented and native instructors. There was no difference between the slightly accented and NE instructors. Regarding the attitudes towards the speakers, the slightly accented speakers were evaluated more positively than the moderately accented and not more negatively than the native instructors. Hendriks et al. (2017) also investigated the effect of accent strength on competence, likeability, teaching quality and intelligibility. It is important to note that they investigated the perceived intelligibility, not actual comprehensibility. In their experiment among 293 Dutch and 274 German students, they found that NNE lecturers with a moderate accent were evaluated more negatively by NNE listeners than NNE lecturers with a slight or native accent. The latter two lecturers were evaluated equally.

Educational background
Previous research has largely focused on the different attitudes that people have towards lecturers with different accents. To date, no studies seem to have investigated whether differences in educational background have an effect on these attitudes. It could well be the case that the attitude that students within one field of study have of a lecturer with a NNE accent is more positive than that of students within another field of study. Becher (1994, p.153) metaphorically states that ‘disciplinary groups can usefully be regarded as academic tribes, each with their own set of intellectual values and their own patch of cognitive territory’. Four disciplines are defined, namely abstract reflective (natural sciences), concrete reflective (humanities/social sciences), abstract active (science-based professions) and concrete active (social professions) (Becher, 1994). Students of social sciences and humanities might have a higher degree of language sensitivity and within their degree programme there also might be paid more attention to language. On the contrary, for students of natural sciences, language might be of minor importance. However, little is known about this topic, and it is therefore not possible to
predict to what extent differences in educational background will affect the perceived attitude and/or perceived comprehensibility towards accented speakers.

To date, no previous studies seem to have investigated the possible effect of field of study on accent effects. In the studies that were discussed earlier in this article, there were in the first place studies with participants that all had the same educational background. In the study of Dalton-Puffer et al. (1997), all of the participants were students of English, and 65% of them aimed to become an instructor of English. Hendriks et al. (2016) conducted their study amongst students in the field of business, communication, marketing, management or economics. The participants of Kelch and Santana-Williamson (2002) were foreign ESL (English as a second language) students. On the other hand, there have been studies with a broad variety of participants. The participants in the study of Buckingham (2014) were students enrolled in an English degree programme that was compulsory for students of all degrees. Similarly, in the study of Butler (2007), the participants were all Grade 6 students, which means they had not chosen a specific degree yet. As no previous studies have been found that compared participants with different study backgrounds, the goal of the current study is to investigate any possible effects of study background.

**Research question**

To the author’s knowledge, there has been no research to date that investigated the role of field of study with regard to accents effects on perceived comprehensibility and attitude. Therefore, the following research question has been formulated:

**RQ:** To what extent do Dutch NNE listeners with different educational backgrounds evaluate slightly NNE accented, moderately NNE accented and NE accented speakers differently on attitude, teaching quality, comprehensibility and intelligibility?

In this study, participants from two different fields of study were examined, namely students of the abstract reflective discipline (natural sciences) and student belonging to the concrete reflective discipline (humanities/arts). It might be expected that, compared to students of arts, the attitude that students of natural sciences have of a lecturer might be less affected by the lecturer’s accent. Students of natural sciences may process information without paying attention to the way it is presented (Van Sluis, 2003), whereas students of arts may assign more value to language, as it is related to their field of study (Becher, 1994). Furthermore, with regard to previous research it might be expected that the moderately NNE accented speaker will be evaluated less positively on comprehensibility and attitude than the slightly and NE accented speakers (Hendriks et al., 2016). Also, it is likely that there will be no difference between the evaluation of the slightly and NE accented speakers (Hendriks et al., 2016).

It is relevant to know more about the effect of field of study on the perceptions that students have of an instructor, because this information is useful for institutions of higher education. When an instructor with a slight/moderate accent is considered less comprehensible by one of the groups of students, the
An accent of an instructor might be taken into account when hiring a new instructor for that specific field of study. Also, when students of one of the investigated fields of study evaluate a Dutch-accented instructor as less intelligent, this might affect the overall image of the faculty/institution. As Jenkins (2006) already pointed to, instructors with a native English accent may be seen as most suitable, even though they might have less knowledge and/or teaching qualities than NNE instructors. The current study might contribute to this knowledge, by investigating the differences of accent effects for different degrees of accentedness and different fields of study.
Method

Materials
The variable accent strength consisted of three different degrees of accentedness: moderate Dutch-English, slight Dutch-English and native British English, as based on Hendriks et al. (2016). The materials of their study were re-used for the current study. In the study of Hendriks et al. (2016), 24 male speakers were selected, who all recorded two sound fragments; 18 of the speakers were native speakers of standard Dutch, whereas the other 6 speakers were native speakers of standard British English. All speakers were experienced instructors between 33 and 60 years old. The method of recording was similar for all speakers. The topic of both audio fragments was marketing-related and thus a neutral topic for both groups of participants. The fragments were based on a lecture by J.B. Steenkamp, a Dutch marketing expert, and an online YouTube tutorial on relationship marketing, which was published by the London School of Business and Finance. The text of both fragments can be found in Appendix A. Six expert judges evaluated the speech samples on speech rate, voice quality, pleasantness, naturalness and speaker confidence. Based on these evaluations, the 24 speakers were divided into the three categories of accentedness: native, moderate and slight. Of all three categories, the two speakers that were closest to the average ratings given by the expert judges. A more extensive method of selection can be found in Hendriks et al. (2016).

The variable field of study consisted of two different fields of study, namely natural sciences, mathematics and computer science (abstract reflective) versus arts (concrete reflective).

Subjects
In total, 183 Dutch participants took part in the experiment (age: \( M = 22.1, SD = 3.46 \); range 18-49; 52.4% male). Of the participants, 50.3% followed a degree programme within the faculty of natural sciences, mathematics and computer science, and 40.7% followed a degree programme within the faculty of arts. Most of the participants were currently studying (92.9%) and were university students (82.5%). The other 17.5% were HBO (university of applied sciences) students. The control variables age, gender, educational level, study abroad experiences and language sensitivity, were distributed equally among the three conditions of accent strength: age: \( F(2, 363) = 2.24, p = .109 \); gender \( (\chi^2 (2) = 1.52, p = .468) \); educational level \( F (2, 363) < 1, p = .738 \); study abroad experiences \( F (2, 363) < 1, p = .972 \); language sensitivity \( F (2, 363) < 1, p = .371 \). Interest in topic was not distributed equally among groups \( F (2, 363) = 3.75, p = .025 \). Participants who listened to the slightly accented speakers \( M = 5.24, SD = 2.12 \) were significantly more interested in the topic than participants who listened to the moderately accented speakers \( p = .020, \) Bonferroni-correction; \( M = 4.45, SD = 2.38 \). There were no differences between the native speakers \( M = 4.79, SD = 2.33 \) and the moderately \( (p = .756, \) Bonferroni-correction) and moderately accented speakers \( p = .368, \) Bonferroni-correction.

Participants that followed a degree programme within the faculty of arts \( M = 3.16, SD = 1.57 \) perceived their own accent as being more native-like than the participants belonging to the faculty of
natural sciences \((M = 2.67, SD = 1.27; t(181) = 2.35, p = .003)\). Also, the participants of the faculty of arts \((M = 5.8, SD = .62)\) scored higher on language sensitivity than the students of natural sciences \((M = 4.29, SD = .98; t(181) = 12.74, p < .001)\). The arts students \((M = 85.96, SD = 10.43)\) also scored higher on the LexTALE test than the students of natural sciences \((M = 81.98, SD = 11.59; t(180) = 2.44, p = .016)\).

**Design**

In this study, the effect of accent strength and field of study on listener evaluations of a speaker was measured. In order to measure these effects, Dutch students or recent graduates from two different fields of study were asked to evaluate two fragments of lectures. For this study, an experimental 3 (accent strength: native English, moderate Dutch-English and slight Dutch-English) x 2 (field of study: natural sciences versus arts) between-subject design was used. All participants evaluated two fragments with the same accent strength (e.g. two fragments recorded by different moderate Dutch-English accented speakers). All fragments and speakers were randomized.

**Instruments**

The dependent variables in this study were perceived comprehensibility, perceived attitude, intelligibility, teaching quality and origin of the speaker. An online questionnaire with several items was used to measure each dependent variable.

Perceived comprehensibility was measured with seven 7-point Likert scales. The Likert scales were introduced by the statements ‘I have to listen very carefully to be able to understand the lecturer’; ‘The lecturer speaks clearly’; ‘The lecturer is barely intelligible’; ‘The lecturer was difficult to comprehend’; ‘I have problems understanding what the lecturer is talking about’; ‘I have no problems comprehending the lecturer’; ‘I don’t understand what the lecturer means’. All these statements were anchored by ‘totally disagree – totally agree’ (based on Dalle & Inglis, 1989). The reliability of ‘perceived comprehensibility’ comprising seven items was good: \(\alpha = .84\)

Attitude towards the speaker was measured with sixteen 7-point Likert scales. The Likert scales were introduced by the statement ‘The lecturer sounds’ and anchored by ‘totally disagree – totally agree’ (based on Hendriks, van Meurs & Hogervorst, 2016). The sixteen items were: reliable, intelligent, professional, self-confident, convincing, cultured, successful, hardworking, considerate, cooperative, loyal, not knowledgeable, incompetent, unhelpful, unfriendly, unkind. A principal component analysis with oblimin rotation revealed a four-factor solution, explaining 68.07% of the variance. The four factors were competence, dependability, likeability, and confidence (see Table 1).

Competence consisted of the items intelligent, professional, competent, cultured, knowledgeable, and reliable \((\alpha = .87)\). Dependability consisted of the items loyal, cooperative, considerate, and hardworking \((\alpha = .77)\). Likeability consisted of the items kind, friendly, and helpful \((\alpha = .84)\). Confidence consisted of the items convincing, and self-confident \((\alpha = .80)\).
Table 1. Factor loadings and communalities based on a principle components analysis with oblimin rotation for items measuring attitudes towards the speaker

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Factor Loadings</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligent.</td>
<td>.84</td>
<td>.76</td>
</tr>
<tr>
<td>Professional.</td>
<td>.83</td>
<td>.76</td>
</tr>
<tr>
<td>Competent.</td>
<td>.81</td>
<td>.65</td>
</tr>
<tr>
<td>Cultured.</td>
<td>.78</td>
<td>.71</td>
</tr>
<tr>
<td>Knowledgeable.</td>
<td>.78</td>
<td>.60</td>
</tr>
<tr>
<td>Reliable.</td>
<td>.53</td>
<td>.38</td>
</tr>
<tr>
<td>Loyal.</td>
<td>.79</td>
<td>.64</td>
</tr>
<tr>
<td>Cooperative.</td>
<td>.78</td>
<td>.68</td>
</tr>
<tr>
<td>Considerate.</td>
<td>.70</td>
<td>.64</td>
</tr>
<tr>
<td>Hardworking.</td>
<td>.68</td>
<td>.57</td>
</tr>
<tr>
<td>Kind.</td>
<td>.96</td>
<td>.90</td>
</tr>
<tr>
<td>Friendly.</td>
<td>.96</td>
<td>.90</td>
</tr>
<tr>
<td>Helpful.</td>
<td>.60</td>
<td>.56</td>
</tr>
<tr>
<td>Convincing.</td>
<td>.91</td>
<td>.81</td>
</tr>
<tr>
<td>Self-confident.</td>
<td>.87</td>
<td>.78</td>
</tr>
</tbody>
</table>

*Note.* Factor loadings <.4 are suppressed.

Intelligibility was measured based on a method used by Nejari et al. (2012). The respondents were asked to listen again to the first two sentences of the audio sample. After that, these sentences with six missing keywords were shown to them and they were asked to fill in the gaps. Intelligibility was measured by counting the number of keywords that were filled in correctly. Misspelled words or words replaced by another word were not counted as correct. When words were slightly misspelled, e.g. ‘profitible’ instead of ‘profitable’ or ‘developing’ instead of ‘developing’, were counted as correct. The keywords that were decided on for the first two sentences of lecture 1 were: (1) retailers (2) developing (3) private labels (4) copy (5) products (6) National Brands. For lecture 2, the following keywords were chosen: (1) relationship marketing (2) customers (3) maintaining (4) profitable (5) importance (6) overemphasized.

Teaching quality was measured with six 7-point Likert scales. The Likert scales were introduced by the statements: ‘This speaker’s subject knowledge is excellent’, ‘The speaker can clearly communicate the content of the lecture’, ‘I think this speaker is a good instructor’, ‘This speaker’s English is excellent’, ‘I think this speaker contributes positively to the reputation of the college’, ‘I think this instructor has excellent didactic abilities’, as based on (Hendriks et al., 2017). The Likert scales were anchored by ‘totally disagree- totally agree’. The reliability of ‘teaching quality’ comprising six items was good: \( \alpha = .81 \)

Origin of the speaker was measured by asking the respondents to write down the origin of the speaker.
Accent strength was measured with two 7-point Likert scales, following the statements: ‘This speaker sounds like a native speaker of English’ and ‘This speaker speaks English with a foreign accent’, anchored by ‘totally disagree – totally agree’. The reliability of ‘accent strength’ comprising two items was good: $\alpha = .83$.

Language sensitivity was measured with eight 7-point Likert scales. The Likert scales were introduced by the statements ‘I like reading’; ‘I am language sensitive’; ‘I hate it if people make grammatical mistakes’; ‘I like to be concerned with language-related topics’; ‘At high school, I preferred learning new languages over mathematics, physics and chemistry’; ‘I like learning a new language’; ‘I hate it when people have a strong accent when speaking a foreign language’; ‘I think English is a nice language’. All these statements were anchored by ‘totally disagree – totally agree’. The reliability of ‘language sensitivity’ comprising eight items was good: $\alpha = .80$.

In addition, the respondents were asked to indicate how interesting they found both lectures on a scale of one to ten.

Perceived own accent strength was measured with measure two seven-point Likert scales were used, anchored by ‘totally disagree – totally agree’. The Likert scales were introduced by the statements ‘I speak like a native speaker when speaking English’ and ‘I have a Dutch accent when speaking English’. The reliability of ‘perceived own accent strength’ comprising two items was good: $\alpha = .85$.

Respondents’ actual proficiency in English was measured by a LexTALE test. The LexTALE test measures the English vocabulary knowledge and generally predicts the English proficiency (Lemhöfer & Broersma, 2012).

Lastly, some personal questions were asked to the respondents: age, gender, nationality, place of birth, current place of residence, mother tongue, educational level, degree programme, study abroad experiences and whether or not they received any English education.

**Procedure**

The online survey tool ‘Qualtrics’ was used to distribute the questionnaire. Respondents were recruited mostly online, via social media or e-mail. Students of English Language and Culture as well as Communication and Information Sciences were excluded from the experiment, because there is much focus on English language and accentedness within these degree programmes and the students might be used to this type of research. The respondents were not informed about the actual aim of the experiment beforehand and were asked to fill in a consent form before taking part in the experiment. The respondents could win a €25,- gift voucher by filling in the questionnaire.

**Statistical treatment**

To determine whether gender, age and other control variables were distributed equally among groups, a Chi-square test and ANOVA’s were done. To indicate the reliability of the used scales for comprehensibility and attitude, Cronbach’s $\alpha$ were calculated. A one-way ANOVA was used to check
if the participants identified the three levels of accentedness of the speakers and a Chi-square test was used to check if the participants identified the speakers’ accents correctly. Two-way MANOVA’s were done to measure the effect of accent strength, study background and language sensitivity on the dependent variables. Simple regression analyses were done to indicate if language sensitivity was a predictor of the dependent variables.
Results

3.1 Identification of accent – manipulation check

A one-way analysis of variance showed that respondents identified the three levels of accentedness of the speakers ($F(2, 180) = 130.98, p < .001$). As can be seen in table 2, participants perceived the moderately Dutch-accented speakers ($M = 2.06, SD = 1.02$) as having a stronger accent than the slightly Dutch-accented ($p < .001$, Bonferroni-correction; $M = 4.51, SD = 1.60$) and the native speakers ($p < .001$, Bonferroni-correction; $M = 5.62, SD = 1.03$). The slightly Dutch-accented speakers also scored higher on accent strength than the native speakers ($p < .001$, Bonferroni-correction).

Table 2. Means and standard deviations for the perceived accent strength of the speakers (1 = very high accent strength, 7 = very low accent strength)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Dutch-English</td>
<td>2.06</td>
<td>1.02</td>
</tr>
<tr>
<td>n = 62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slight Dutch-English</td>
<td>4.61</td>
<td>1.03</td>
</tr>
<tr>
<td>n = 62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native English</td>
<td>5.62</td>
<td>4.61</td>
</tr>
<tr>
<td>n = 59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to determine whether participants recognized the accent of the speaker correctly, a Chi-square test was conducted (see Table 3). The Chi-square test showed a significant relation between origin and accent ($\chi^2 (4) = 99.15, p < .001$). Most of the participants correctly recognized the accents of the moderately Dutch-accented speakers (98.4%) and native English speakers (74.6%). However, the speakers in the slightly Dutch-accented fragments were correctly identified by only 40.3% of the participants. The slightly accented speakers were perceived as being native by 40.3% of the participants, while the rest of the participants (14.5%) thought they had a different origin (e.g. American or German) or had no idea where the speakers were from. A Chi-square test showed no significant relation between study background and origin of speaker ($\chi^2 (1) = 3.05, p = .081$), which means that there was no difference between participants with different backgrounds with regard to identifying the accent of the speakers.
Table 3. Observed count and column percentages for the identification of speakers’ origin in function of accentedness version (moderate Dutch-English, slight Dutch-English and native English)

<table>
<thead>
<tr>
<th>Accent</th>
<th>Origin speaker</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dutch</td>
<td>Native</td>
<td>English</td>
<td>Other/</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>no idea</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Moderate Dutch-English</td>
<td>61</td>
<td>98.4</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Slight Dutch-English</td>
<td>25</td>
<td>40.3</td>
<td>28</td>
<td>45.2</td>
<td>9</td>
<td>14.5</td>
</tr>
<tr>
<td>Native English</td>
<td>6</td>
<td>10.2</td>
<td>44</td>
<td>74.6</td>
<td>9</td>
<td>15.3</td>
</tr>
</tbody>
</table>

3.2 Effects of accent strength and study background

A two-way multivariate analysis for comprehensibility, competence, dependability, likeability, confidence, intelligibility and teaching quality, with accent strength and study background as factors, found a significant multivariate effect of accent strength ($F(14, 708) = 6.46, p < .001$) and study background ($F(7, 354) = 2.66, p = .011$) (see Table 4). There was no significant interaction effect of accent strength and study background ($F(14,708) = .86, p = .600$).

The univariate analyses showed an effect of accent strength on competence ($F(2, 360) = 26.28, p < .001$), confidence ($F(2, 360) = 8.34, p < .001$) and teaching quality ($F(2, 360) = 21.69, p < .001$).

The moderately accented speakers scored lower on competence ($M = 4.85, SD = 1.06$) than the slightly accented speakers ($p < .001$, Bonferroni-correction; $M = 5.54, SD = .74$) and the native speakers ($p < .001$, Bonferroni-correction; $M = 5.55, SD = .75$).

The moderately accented speakers scored lower on confidence ($M = 4.96, SD = 1.15$) than the slightly accented speakers ($p = .02$, Bonferroni-correction; $M = 5.26, SD = .76$) and the native speakers ($p < .001$, Bonferroni-correction; $M = 5.50, SD = .93$).

The moderately accented speakers scored lower on teaching quality ($M = 4.64, SD = .96$) than the slightly accented speakers ($p < .001$, Bonferroni-correction; $M = 5.33, SD = 1.08$) and the native speakers ($p < .001$, Bonferroni-correction; $M = 5.30, SD = .89$).

There were no differences between the perceived competence, confidence teaching quality of slightly accented and native speakers (competence: $p = 1.00$, Bonferroni-correction; confidence: $p = $
The univariate analyses showed an effect of study background on dependability \((F(1, 360) = 3.92, p = .020)\) and likeability \((F(1, 360) = 7.56, p = .005)\). Students enrolled in an arts degree programme rated native speakers higher on dependability \((M = 4.74, SD = .88)\) and likeability \((M = 5.79, SD = .96)\) than students enrolled in a natural sciences degree programme \(\text{dependability: } M = 4.53, SD = .82; \text{likeability: } M = 5.50; SD = .97\).

Table 4. Means and standard deviations (between brackets) for the perceived comprehensibility, competence, dependability, likeability, confidence, intelligibility and teaching quality of the lecturers in function of accent strength of the speakers and degree programme of the participants \((1 = \text{very negative judgement}, 7 = \text{very positive judgement})\).

<table>
<thead>
<tr>
<th>Accent strength</th>
<th>Degree programme</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate</td>
<td>Slight</td>
<td>Native</td>
<td>Arts</td>
<td>Natural sciences</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 62</td>
<td>n = 62</td>
<td>n = 59</td>
<td>n = 91</td>
<td>n = 92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
<td>(M \ (SD))</td>
</tr>
<tr>
<td>Comprehensibility</td>
<td>5.22 (.10)</td>
<td>5.45 (.93)</td>
<td>5.36 (1.20)</td>
<td>5.36 (1.07)</td>
<td>5.32 (1.09)</td>
<td>5.34 (1.08)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>4.85 (1.06)</td>
<td>5.54 (.74)</td>
<td>5.55 (.75)</td>
<td>5.32 (1.01)</td>
<td>5.31 (.84)</td>
<td>5.31 (.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependability</td>
<td>4.71 (.84)</td>
<td>4.64 (.85)</td>
<td>4.45 (.80)</td>
<td>4.74 (.88)</td>
<td>4.53 (.82)</td>
<td>4.64 (.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likeability</td>
<td>5.69 (.98)</td>
<td>5.74 (.92)</td>
<td>5.50 (1.02)</td>
<td>5.79 (.96)</td>
<td>5.50 (.97)</td>
<td>5.65 (.98)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>4.96 (1.15)</td>
<td>5.33 (1.08)</td>
<td>5.50 (.93)</td>
<td>5.28 (1.13)</td>
<td>5.23 (1.02)</td>
<td>5.26 (1.08)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligibility</td>
<td>5.79 (.51)</td>
<td>5.69 (.73)</td>
<td>5.69 (.95)</td>
<td>5.78 (.49)</td>
<td>5.67 (.76)</td>
<td>5.72 (.64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching quality</td>
<td>4.64 (.96)</td>
<td>5.26 (.76)</td>
<td>5.30 (.89)</td>
<td>5.01 (.97)</td>
<td>5.11 (.87)</td>
<td>5.06 (.92)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.3 Language sensitivity

An interaction effect between accent strength and study background was expected. However, there was no interaction effect between these two factors. This could possibly be because of variance between the two groups of participants: there might be a lot of students that follow a degree programme within the faculty of arts that do not score high on language sensitivity and students that follow a degree programme within the faculty of natural sciences that do score high on language sensitivity. A median split into three groups was performed for language sensitivity. A one-way analysis of variance showed that there were significant differences between the three groups \( F(2, 363) = 865.28, p < .001 \).

A two-way multivariate analysis for comprehensibility, competence, dependability, likeability, confidence, intelligibility and teaching quality, with accent strength and language sensitivity as factors, found a significant multivariate effect of accent strength \( F(14, 702) = 6.49, p < .001 \) and language sensitivity \( F(14, 702) = 3.13, p < .001 \) (see Table 5). No significant interaction effect between accent strength and language sensitivity has been found \( F(28, 1266.97) = 1.18, p = .220 \).

The univariate analyses showed an effect of language sensitivity on competence \( F(2, 357) = 4.01, p = .019 \), likeability \( F(2, 357) = 7.63, p = .001 \) and intelligibility \( F(2, 357) = 6.96, p = .002 \).

Students that scored high on language sensitivity rated the speakers significantly higher on competence \( M = 5.44, SD = .90 \) than students with a medium language sensitivity \( p = .04, \) Bonferroni-correction; \( M = 5.12, SD = 1.03 \). Students with a low language sensitivity did not rate the speakers differently on competence than highly \( p = 1.00, \) Bonferroni-correction and medium language sensitive students \( p = .37, \) Bonferroni-correction).

Students that scored high on language sensitivity rated the speakers significantly higher on likeability \( M = 5.92, SD = .85 \) than students with a medium \( p = .02, \) Bonferroni-correction; \( M = 5.58, SD = .98 \) and low language sensitivity \( p < .001, \) Bonferroni-correction; \( M = 5.45, SD = 1.01 \). There was no difference between the perceived likeability of students with a medium and low language sensitivity \( p = .86, \) Bonferroni-correction).

Students with a low language sensitivity \( M = 5.55, SD = .87 \) rated the speakers significantly lower on intelligibility than the medium language sensitive \( p = .02, \) Bonferroni-correction; \( M = 5.77, SD = .51 \) and high language sensitive students \( p < .002, \) Bonferroni-correction; \( M = 5.85, SD = .40 \). There was no difference between the perceived likeability of students with a medium and low language sensitivity \( p = 1.00, \) Bonferroni-correction).
Table 5. Means and standard deviations (between brackets) for the perceived comprehensibility, competence, dependability, likeability, confidence, intelligibility and teaching quality of the lecturers in function of accent strength of the speakers and the degree of language sensitivity of the participants (1 = very negative judgement, 7 = very positive judgement)

<table>
<thead>
<tr>
<th></th>
<th>Low $M$ $(SD)$</th>
<th>Medium $M$ $(SD)$</th>
<th>High $M$ $(SD)$</th>
<th>Total $M$ $(SD)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensibility</td>
<td>5.17 (1.13)</td>
<td>5.44 (1.09)</td>
<td>5.43 (1.12)</td>
<td>5.34 (1.08)</td>
</tr>
<tr>
<td>Competence</td>
<td>5.33 (.82)</td>
<td>5.12 (1.03)</td>
<td>5.44 (.90)</td>
<td>5.31 (.92)</td>
</tr>
<tr>
<td>Dependability</td>
<td>4.54 (.89)</td>
<td>4.59 (.80)</td>
<td>4.78 (.85)</td>
<td>4.64 (.85)</td>
</tr>
<tr>
<td>Likeability</td>
<td>5.45 (1.05)</td>
<td>5.58 (.98)</td>
<td>5.92 (.85)</td>
<td>5.65 (.98)</td>
</tr>
<tr>
<td>Confidence</td>
<td>5.22 (1.01)</td>
<td>5.19 (1.20)</td>
<td>5.37 (1.01)</td>
<td>5.26 (1.08)</td>
</tr>
<tr>
<td>Intelligibility</td>
<td>5.55 (.87)</td>
<td>5.77 (.51)</td>
<td>5.85 (.40)</td>
<td>5.72 (.64)</td>
</tr>
<tr>
<td>Teaching quality</td>
<td>5.12 (.87)</td>
<td>4.97 (.94)</td>
<td>5.09 (.95)</td>
<td>5.06 (.92)</td>
</tr>
</tbody>
</table>

It was shown that language sensitivity was a predictor of the perceived likeability and intelligibility of the speaker, but not of the perceived competence of the speaker (see Table 6).

A simple regression analysis showed that language sensitivity did not significantly explain any of the variance in perceived competence of the speaker ($F(1,364)= .770, p = .381$).

A simple regression analysis showed that language sensitivity explained 3.5% of the variance in perceived likeability of the speaker ($F(1,364)= 14.32, p < .001$). Language sensitivity was shown to be a significant predictor of perceived likeability of the speaker ($β = .20, p < .001$).

A simple regression analysis showed that language sensitivity explained 3.4% of the variance in perceived intelligibility of the speaker ($F(1,364)= 13.91, p < .001$). Language sensitivity was shown to be a significant predictor of perceived intelligibility of the speaker ($β = .19, p < .001$).
### Table 6
Regression analysis for language sensitivity as predictor of perceived competence, likeability and intelligibility of the speaker (N = 366)

<table>
<thead>
<tr>
<th>variable</th>
<th>competence</th>
<th>likeability</th>
<th>intelligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>intercept</td>
<td>5.21</td>
<td>.13</td>
<td>5.18</td>
</tr>
<tr>
<td>language sensitivity</td>
<td>.05</td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>-.00</td>
<td>.035</td>
<td>.034</td>
</tr>
<tr>
<td>$F$</td>
<td>.77</td>
<td>14.32***</td>
<td>13.91***</td>
</tr>
</tbody>
</table>

*** p < .001

### 3.5 Speakers

As there were two speakers per condition, a three-way multivariate analysis for comprehensibility, competence, dependability, likeability, confidence, intelligibility and teaching quality, with speaker, accent strength and study background as factors, found no significant effect of speaker ($F(7, 348) = .89, p = .514$), no significant interaction effect between speaker and study background ($F(7, 348) = .89, p = .518$) and no significant interaction effect between speaker, study background and accent strength ($F(14, 698) = .48, p = .944$) However, there was a significant interaction effect between speaker and accent strength ($F(14, 696) = 1.72, p = .048$).

The univariate analyses only showed a significant interaction effect between speaker and accent strength on the perceived dependability of the speaker ($F(2, 354) = 4.36, p = .013$). The difference between the two speakers was only found for the native speaker group ($F(1, 116) = 10.33, p = .002$), but not for the moderately accented speakers ($F(1, 122) = .88, p = .349$) or the slightly accented speakers ($F(1, 122) = 1.11, p = .294$). One of the native speakers (M = 4.81, SD = .11) was evaluated as significantly more dependable than the other native speaker (M = 4.32, SD = .11).

The univariate analyses showed no significant interaction effect between speaker and accent strength on the perceived comprehensibility ($F(2, 354) = 1.53, p = .218$), competence ($F(2, 354) = .48, p = .622$), likeability ($F(2, 354) = 1.86, p = .157$), confidence ($F(2, 354) = 1.03, p = .359$), intelligibility ($F(2, 354) = .98, p = .376$) and teaching quality ($F(2, 354) = 78, p = .460$) of the speaker.
Conclusion and discussion

The purpose of this study was to investigate to what extent Dutch NNE listeners with different educational background evaluate Dutch instructors with different accents strengths (slight NNE, moderate NNE and native English) differently on attitude, teaching quality, comprehensibility and intelligibility.

The findings of the current study suggest that there is an effect of accent strength on attitude (consisting of competence, dependability, likeability and confidence) and teaching quality. It was found that Dutch NNE listeners rate moderately Dutch-accented speakers less positively on competence, confidence and teaching quality than the slightly accented and native speakers. There were no differences between the slightly accented and native speakers. Also, there was no effect of accent strength on perceived dependability and likeability of the speakers.

With regard to comprehensibility and intelligibility, there was not found an effect of accent strength.

Findings indicate that study background of the NNE listeners affects the attitude that listeners have towards a speaker. Students of arts rated the speakers significantly higher on dependability and likeability than students of natural sciences. There was no effect of study background on competence, confidence, teaching quality, comprehensibility and intelligibility.

It was expected that arts students might have a more negative attitude towards the speakers with a moderate accent than students of natural sciences. However, there was no interaction effect between accent strength and study background, which means that students of arts did not evaluate the different speakers differently than students of natural sciences. It was checked if this could be explained by variance within the two groups (not all arts students score high and not all students of natural sciences score low on language sensitivity).

It was found that language sensitivity does affect attitude and intelligibility. Dutch NNE listeners that score high on language sensitivity rated the speakers higher on competence and likeability than medium language sensitive listeners. Low language sensitive listeners did not rate the speakers differently than high and medium language sensitive listeners. Language sensitivity turned out not to be a predictor of perceived competence of the speaker.

Dutch NNE listeners with a high language sensitivity rated the speakers higher on likeability than listeners with a medium or low language sensitivity. Low language sensitive listeners did not rate the speakers differently than medium language sensitive listeners. Findings indicate that language sensitivity is a predictor of perceived likeability of the speaker: the higher listeners score on language sensitivity, the more positive they evaluate a speaker on likeability.

Findings seem to show that language sensitivity also is a predictor of intelligibility. Dutch NNE listeners that scored high and medium on language sensitivity were better at filling in the gap words than listeners that scored low on language sensitivity. There were no differences between
listeners that scored medium and high on language sensitivity.

Overall, it can be concluded that there was an effect of accent strength on attitude and teaching quality in the first place. Moderately accented speakers were evaluated less positively on competence, confidence and teaching quality than the slightly accented and native speakers. Secondly, there was an effect of study background on dependability and likeability: students of art rated speakers higher on dependability and likeability than students of natural sciences. Lastly, findings indicate that language sensitivity affects competence, likeability and intelligibility. Language sensitivity was shown to be a predictor of likeability and intelligibility.

The finding that Dutch NNE listeners rate Dutch NNE accented instructors lower on competence, confidence and teaching quality is in line with previous research (Buckingham, 2014; Butler, 2007), who found that NE instructors were evaluated more positively on status values and teaching qualities than NNE instructors.

The finding that Dutch NNE listeners rate Dutch NNE accented instructors lower on competence and confidence, but that there was no effect of accent strength on dependability and likeability, concurs with Gluszek and Dovidio (2012), who state that non-native accented speakers sometimes score high on solidarity dimensions (such as dependability and likeability), whereas they are generally seen as less intelligent, competent and proficient. However, there are also studies with conflicting results (Dalton-Puffer et al., 1997; Kelch & Santana-Williamson, 2002). Kelch & Santana-Williamson (2002) found that NE instructors were perceived as more likeable and emphatic, which are also solidarity dimensions.

The finding that there was no difference in the attitudes of Dutch NNE listeners towards slightly Dutch accented speakers and native speakers, is partly in line with previous research (Hendriks et al., 2015; Hendriks et al., 2016; Hendriks et al., 2017). Hendriks et al. (2015) found that there were no differences between the evaluations of slightly accented and native English speakers regarding competence, status and likeability.

In the current study, there was found no effect of accent strength on comprehensibility. This finding is in line with previous studies that stated or showed that having an accent does not disturb the process of communication (Gluszek et Dovidio, 2010; Hendriks et al., 2015). However, other studies suggest that the stronger the accent of a speaker is, the less he is perceived as comprehensible (Carlson & McHenry, 2006; Hendriks et al., 2016; Hendriks et al., 2017; Stibbard & Lee, 2006).

The finding that accent strength does not affect intelligibility concurs with Nejjari et al. (2012), who found that native speakers were as interpretable as moderately and slightly accented speakers. The result that there is no effect of accent strength on intelligibility provides evidence against both the matched interlanguage speech intelligibility benefit (non-native listeners find it easier to understand non-native speakers with the same L1 than native speakers) and the native speech intelligibility benefit (native speakers are easier to understand than non-native speakers).

The finding that the slightly accented and native accented instructors were often evaluated
equally in the present study, can be explained by the fact that the slight accent was often identified as native. Hendriks et al. (2016), whose materials were re-used in the present study, also found that the slight accented was perceived as near-native. However, they found that there were no differences between instructors with a slight accent who were identified as such and instructors with a slight accented who were identified as native speakers of English. In the present study, there was also no difference between these two groups (all $p$’s > .08), suggesting that slightly accented speakers are evaluated equally positive as native accented speakers, with regard to attitude. This finding might be explained by the similarity-attraction paradigm. This paradigm implies that people feel attracted to others that are similar to themselves, e.g. to people that speak the same language as themselves. Therefore, Dutch NNE listeners might not mind the slight Dutch NNE accent of the speakers.

However, Dalton-Puffer et al. (1997) showed that advanced Austrian learners display negative attitudes towards their own NNE accent, which is contrary to the findings in the current study.

The present study is the first study to investigate the effect of study background on accent effects. It was expected that arts students would be more critical towards accented speakers and therefore evaluate them more negatively on attitude, teaching quality and comprehensibility than students of natural sciences. However, it was shown that there was no interaction effect between study background and accent strength on attitude, teaching quality, comprehensibility and intelligibility. This means that the two groups of participants (students that followed an arts degree programme and students that followed a natural sciences degree programme) did not differ in their evaluations of the moderately accented, slightly accented and native instructors. This implies that the accent of instructors is equally important for students of arts as students of natural sciences.

The present study is also first to investigate the effect of language sensitivity on accent effects. It was shown that there was no interaction effect between language sensitivity and accent strength on attitude, teaching quality, comprehensibility and intelligibility. This finding implies that people that are very language sensitive do not evaluate speakers with a strong NNE accent differently than people that are not language sensitive. However, it should be noted that in the current study only the perceived language sensitivity was measured. The actual language sensitivity was not measured.

Furthermore, the current study has added to knowledge about the effect of accent strength. It has confirmed again that accent strength affects speaker evaluations in terms of attitude (at least for competence and confidence) and teaching quality. However, it also shows that Dutch NNE listeners do not evaluate a slightly Dutch accented speaker more negatively than a native speaker. This implies that instructors do not necessarily have to strive for a native-like accent in order to be evaluated as positively as possible, as long as their accent is slight. The effects of accentedness, such as the social identity effect (people assign accented speakers to a certain group, which can result in discrimination or favoritism) and the activation of stereotypes effect (Mai & Hoffmann, 2014) only apply for moderately accented NNE speakers, not for slightly accented NNE speakers. This is good news for non-native speakers of English, as it is very unlikely to speak English without a non-native accent.
(Gluszek and Dovidio, 2010). Also, it has been shown that in terms of comprehensibility and intelligibility, native speakers of English do not score better than moderately and slightly Dutch accented speakers of English. Although NE instructors are still valued most positively (Buckingham, 2014; Jenkins, 2006), it might concluded that students do not judge NNE instructors against native norms anymore, as Hendriks et al. (2017) already pointed at.

The results of the present study are limited in a few ways. In the first place, students from only two fields of study were selected. Although the students within the faculty of arts scored higher on language sensitivity than the students within the faculty of natural sciences, there turned out to be no interaction effect between study background as well as language sensitivity and accent strength on the speaker evaluations. Further studies could investigate more fields of study, like law, medicine or social studies.

Furthermore, as Hendriks et al. (2016) also mentioned in their study, the accents of the speakers in the current study were categorized by expert judges. When the participants were asked to identify the speakers’ accent, many of them identified the slightly accented speakers as being native speakers of English. This identification could, as Hendriks et al. (2016) mention, ‘be an evaluation in itself (“native = good”?) or lead to a different evaluation of speaker characteristics based on origin rather than accent features.”. In order to find this out, future research should investigate a wider range of slightly accented NNE speakers.

Furthermore, the author was e-mailed by a student who, when she clicked on the sound fragment to listen it, her computer gave a notification which included the version of the accent that she was about to hear (e.g. ‘do you want to listen to sp1slight?’). This gave away that the speaker had a slight accent. The author checked this on different computers and none of them gave such a notification. However, it cannot be ruled out that more people have seen the accentedness version and this might have affected the results.

Lastly, instructors of students from the faculties of arts and science were e-mailed and asked if they could forward the questionnaire to their students. In that e-mail, the purpose of the study was explained. One of the instructors e-mailed the author that he had forwarded the whole e-mail, which means that the participants knew the purpose of the study beforehand. It is not known how many of the participants filled in the questionnaire via this link, but it might have affected the results.
References


Appendix A

Lecture 1 — English
Retailers have started developing so called copy-cat private labels. This means that retailers copy popular products of National Brands as exactly as possible. To this end, retailers have laboratories at their disposal which examine how the original product has been made. This is not about product innovation, but about maintaining product quality. The benefit of this strategy is that products do not have to be marketed anymore. The consumer is already familiar with the product through the National Brand, which created the product, produced it and successfully launched it. By keeping down marketing expenditure, retailers are able to launch their private label products for a much lower price than National Brands. In other words, retailers offer consumers an alternative to products of National Brands by creating their own private label products. This explains the ‘unique selling point’ of these private labels: the same quality for a lower price.

Lecture 2 — English
In its most basic sense, relationship marketing is all about attracting customers and building and maintaining long term profitable relationships between the company and its customers. The importance of relationship marketing cannot be overemphasized. In fact, there are many benefits that organizations can gain by trying to forge and maintain long term relationships with their customers. For example, it is said that it is seven times cheaper to maintain your existing customers than attract new ones. Your existing customers or your loyal customers, tend to spend more money, tend to be insensitive to price, and they can even act as brand advocates by recommending the brand to other people or actually defending the brand in public without the organizations knowledge. Another very important reason to practice relationship marketing is the fact that 80% of a company’s profit comes from 20% of their customers.