

Lima, E. F. (2012). A comparative study of the perception of ITAs by native and nonnative undergraduate students. In J. Levis & K. LeVelle (Eds.). *Proceedings of the 3<sup>rd</sup> Pronunciation in Second Language Learning and Teaching Conference*, Sept. 2011. (pp. 54-64). Ames, IA: Iowa State University.

## **A COMPARATIVE STUDY OF THE PERCEPTION OF ITAS BY NATIVE AND NONNATIVE UNDERGRADUATE STUDENTS**

**Edna F. Lima, Iowa State University**

With the growing number of international teaching assistants (ITAs) at American universities, concerns have increased about the communication between these ITAs and their students (Damron, 2003). Research on native undergraduate students' reactions to ITAs has revealed that even international teaching assistants who have near native-like pronunciation may still be highly stigmatized by North American undergraduates (Rubin, 1992). When it comes to nonnative students' perception of ITAs, however, little research has been done (Lima, 2011). This study investigates the perception of ITAs by native and nonnative undergraduate students with focus on both language and social factors. Eighty-six students, 45 international and 41 Americans, enrolled in cross-cultural first-year composition classes watched a four-minute videotaped lecture under one of two guises related to the nationality of the speaker. The participants then rated the speaker based on six variables: accent, speed, comprehensibility, likeability, teaching ability, and teaching style. This paper discusses how the ratings differ between the two groups depending on what participants are told about the nationality of the speaker. It also looks into the relationship between the ratings for accent and comprehensibility assigned by each group. Findings show that the groups rated the speaker differently only on the variable *teaching style*; also, the attributed nationality of the speaker did not seem to have a large impact on either native or nonnative students' perceptions of the ITA.

### **INTRODUCTION**

“The foreign TA problem” (Bailey, 1984) has been an issue for decades. With the steady increase in the number of international teaching assistants (ITAs) at American universities, “this problem” is likely to become larger. Although native undergraduate students tend to blame ITAs for breakdowns in communication and poor teaching performance, recent research has suggested that the responsibility should not lie only with ITAs but also with students as they should act as “active, responsive, and empathic listeners” (Kang & Rubin, in press).

It is noteworthy that as the number of ITAs increases on American campuses, so does the number of international undergraduate students. According to the *Open Doors* (2011), an annual report published by the Institute of International Education (IIE) with support from the U.S. Department of State's Bureau of Educational and Cultural Affairs, the number of new international students enrolled in American colleges and universities in the academic year 2010/11 was 214,470; Out of this number, 84,543 were undergraduates, 89,505 were graduates, and 40,422 were non-degree students. The total international student enrollment for that academic year was 723,277. Thus, it is not uncommon for ITAs in America to have international undergraduate students in their classes even though native students may comprise the majority of most classes.

Research addressing native undergraduate students' perception of ITAs indicates that these students tend to react negatively to ITAs based on different factors. One of these factors is poor language proficiency or communicative competence (Lindemann, 2002; Rubin & Smith, 1990). However, other studies have shown that other factors may play a large role in American undergraduates' perception of ITAs. Country of origin (Brown, 1992), ethnicity (Rubin, 1992), and stereotypes (Gill, 1994; Kang & Rubin, 2009), for instance, are factors playing a role in this negative perception. Lindemann (2011) claims that "even in the absence of outright negative attitudes, expectations about a speaker may cause a listener to mishear specific details of their accent" (p. 225) and that "stigmatized pronunciations are more likely to be noticed if they are spoken by a stigmatized speaker, such as a non-native speaker of English" (p. 230). As a result, negative attitudes towards a certain group of speakers can play a role in the way ITAs are perceived by native undergraduates (Orth, 1982; Plakans, 1997; Rubin & Smith, 1990).

When it comes to nonnative undergraduate students' perception of ITAs, however, little research has been done. Lima (2011) had 55 international students from 11 different L1 backgrounds rate a lecture and its speaker based on three guises (American TA, Brazilian TA, and Egyptian TA). The eight variables analyzed were accent, speed, comprehensibility, level of interest in the lecture, usefulness of the lecture, likeability of the speaker, teaching ability of the speaker, and teaching style of the speaker. The results showed that the attributed nationality of the speaker only influenced participants in regards to likeability. The supposed Brazilian TA received more positive ratings than did the alleged American and Egyptian TAs. As for accent, results indicated that the actual degree of accentedness that participants perceived in the speaker's speech, not the nationality of the TA, influenced their ratings.

Given the substantial research available on the perception of ITAs by American undergraduate students and the lack of studies focusing on how nonnative students perceive ITAs, this study compares how both groups react to ITAs based on language and social factors. The variables analyzed were *accent*, *speed*, *comprehensibility*, *likeability of the speaker*, *teaching ability of the speaker*, and *teaching style of the speaker*. The first two features are defined as follows. Accent, or foreign-accented speech, "may be defined as non-pathological speech that differs in some noticeable respects from native speaker pronunciation norms" (Munro & Derwing, 1995, p. 290); comprehensibility refers to "listeners' perceptions of difficulty in understanding particular utterances" (Munro & Derwing, 1995, p. 291). In this study, accent and comprehensibility, along with the other four variables, were operationalized through a rating rubric (Post-video Questionnaire, Appendix A). The study seeks to address the following research questions:

- 1) On which variables, if any, will the two groups rate the speaker differently depending on the attributed nationality of the speaker?
- 2) What is the relationship between the ratings for *accent* and *comprehensibility* assigned by each group?

## METHODS

### Participants

The speaker, a female Serbian, was a Ph.D student in an Applied Linguistics and Technology program and a teaching assistant at the time the study was carried out. She was chosen based on three key aspects: 1) her near-native English proficiency; 2) her teaching experience; and 3) her physical characteristics. For the success of the study, it was essential that participants found the information provided to them about the speaker to be believable.

The raters were 86 first-year composition students (53 males, 33 females) enrolled in cross-cultural sections of English 150 (writing foundation for first-year undergraduate students) and English 250 (a writing course for second-year undergraduates). English 150 requires students to apply critical reading and thinking skills to topics of public and cultural relevance. English 250 has the goal to develop students' skills in written, oral, visual, and electronic communication. Both courses require students to show proficiency in written and spoken communication in English at both academic and cultural levels. Out of the 86 participants, 41 were Americans and 45 were international students.

There are three main reasons underlying the choice of participants for this study. First, given that several cross-cultural sections of English 150 and 250 are offered each semester, a sufficiently large number of participants could be recruited to partake in the study. Second, students enrolled in English 150 and 250 come from a wide range of fields of study; thus, they are likely to have had experience with ITAs from various first language and cultural backgrounds and under a variety of contexts (e.g., classrooms, lab sessions, office hours). Finally, the nonnative participants had a fairly high level of English proficiency given the courses they were taking, which are primarily designed for native speakers of English. Consequently, one would expect that these participants would be able to more accurately judge the comprehensibility of ITAs.

The participants were placed in two different treatment groups: a group that rated the speaker based on the information that she was an Egyptian TA and a group that rated the speaker as being a Brazilian TA. Each group was composed of 43 raters from 14 different L1 backgrounds. Given that the collection of data was conducted during regular class periods, it was unfeasible to randomly assign participants to the two treatment groups. Hence, running a comparative analysis of how groups of raters from L1 backgrounds other than English react to ITAs (e.g., native Chinese speakers as compared to native Spanish speakers) was impractical given the uneven distribution of nonnative listeners in the two groups. The demographic data of each group are shown in Table 1.

Table 1.

*Demographic data of the two treatment groups*

Groups	N	Gender	Average Age	L1
Egyptian TA	43	27 males 16 females	19.3	Arabic (2), Cantonese (1), Chinese (4), Chichewa (1), English (22), Indonesian (2), Korean (1), Malay (6), Spanish (3), Tamil (1)
Brazilian TA	43	26 males 17 females	19.1	Arabic (2), Chinese (10), English (19), Hindi (3), Indonesian (2), Japanese (1), Korean (2), Malay (1), Spanish (1), Taiwanese (1), Urdu (1)

## Materials

The data for this study were collected through *Moodle*, a course management system widely used by the English Department. Both the background questionnaire and the post-video questionnaire used in this study were created using the *questionnaire* feature in Moodle.

The demographic data were collected through a background questionnaire; the data elicited from the participants included age, gender, country of origin, native language, educational background, spoken languages other than English, major, length of residence in the U.S., and the number of ITAs that the participants had had class with prior to the time of the study.

The lecture used as stimulus in this study was about four minutes long and focused on "thesis statement," a topic related to the courses (English 150 and 250) that the participants were taking at the time of the study. The lecture was video-recorded, using a Canon XL1 DV Camcorder, to simulate a real classroom environment. The speaker was provided with a lecture script but was asked to apply her teaching style and maintain her usual teaching speed.

After watching the lecture, participants filled out the post-video questionnaire which prompted them to rate the speaker on six variables: accent, speed, and comprehensibility (language factors) likeability, teaching ability, and teaching style (social factors). The scale used (based on Munro & Derwing, 1995) ranged from 1 to 9, with 1 representing positive ratings (e.g., no accent; easy to understand; very likeable) and 9 representing negative ratings (e.g., very strong accent; very difficult to understand; not likeable).

## Procedures

The data collection took place over three days, when the English 150 and 250 classes met in a computer lab. Each data collection session lasted an average of 35 minutes. Participants were provided with headphones to avoid noise interference and used individual computers. First, they received step-by-step instructions on how the data collection process would proceed and on how to access the materials in Moodle. Then, they filled out the background questionnaire. After completing the questionnaire, they were given information about the speaker (orally and in written form in Moodle). It was crucial that participants kept the attributed nationality of the speaker (either Egyptian or Brazilian) in mind when watching the lecture and rating the speaker as this study seeks to investigate the influence of the nationality of the TA on native and nonnative undergraduate students. Participants watched the lecture once and proceeded to the post-video questionnaire. Upon completion of the questionnaire, participants were instructed to log out of the Moodle site.

## Data Analysis

Research Question 1, which aimed at comparing the ratings assigned by the two groups (i.e. native versus nonnative students), was answered through an ANOVA Type III; the software used was R version 2.13.1. The variables analyzed were accent, speed, comprehensibility, likeability of the speaker, teaching ability of the speaker, and teaching style of the speaker. As for Research Question 2, a Pearson Product-Moment Correlation Coefficient (Pearson's  $r$ ) was computed to assess the relationship between the ratings for *accent* and *comprehensibility* assigned by each group. For both the ANOVA test and Pearson Product Moment Correlation Coefficient, the  $p$  value was set at .05.

## RESULTS

The main purpose of this study was to compare how both native and nonnative undergraduate students perceived ITAs in terms of language and social factors. Thus, this section will focus on the differences and similarities of the ratings assigned to the speaker. The relationship between the variables *accent* and *comprehensibility* is also discussed.

### RQ 1: On which variables, if any, will the two groups rate the speaker differently?

In order to interpret the results, it is essential to keep in mind that the scale (Munro & Derwing, 1995) used in the questionnaire ranged from 1 to 9, with lower ratings indicating more positive ratings and higher ratings indicating more negative ratings. For instance, for the variable *teaching style*, the scale ranged from “very engaging” (1) to “not at all engaging” (9). Thus, lower mean scores represent a more positive perception of the ITA.

Table 2 displays the descriptive statistics obtained for the alleged Egyptian TA. The results show that the ratings assigned by native and nonnative undergraduate students were very close. Both groups perceived the supposed Egyptian TA to have a mild accent (4.45 and 4.14, respectively). The standard deviation found for the variable *accent* shows that the ratings assigned by the nonnative undergraduate students (1.93) varied a little more than did the ratings assigned by the native undergraduate group (1.56). However, this variation was not significant.

Table 2.

*Descriptive Statistics of the Ratings assigned to the alleged Egyptian TA*

Variables	Native		Nonnative	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Accent	<b>4.45</b>	1.56	<b>4.14</b>	1.93
Speed	<b>2.04</b>	1.21	<b>2.23</b>	1.58
Comprehensibility	<b>2.59</b>	1.53	<b>2.28</b>	1.27
Likeability	<b>3.68</b>	2.14	<b>4.00</b>	1.41
Teaching Ability	<b>4.04</b>	1.56	<b>3.76</b>	1.14
Teaching Style	<b>6.00</b>	1.83	<b>5.04</b>	1.80

When it comes to likeability of the speaker, the range of ratings assigned by the American students tended to vary more (*SD* 2.14) than those assigned by the international students (*SD* 1.41).

As for the Brazilian TA guise, Table 3 shows the same trend found for the Egyptian TA. That is, the ratings did not vary significantly between the two groups. It is noteworthy that the means for accent ratings for the Brazilian TA (4.15 and 4.20) were very similar to the means of the ratings assigned to the Egyptian TA (4.45 and 4.14). Considering that participants rated the same lecture, even though each group received different information about the speaker, it is not surprising that the ratings were similar. Native and nonnative students alike judged the accentedness of the speech to be moderate (average of 4.2 on a 9-point scale).

Table 3.

*Descriptive Statistics of the Ratings assigned to the supposed Brazilian TA*

Variables	Native		Nonnative	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Accent	<b>4.15</b>	1.25	<b>4.20</b>	1.66
Speed	<b>2.16</b>	1.12	<b>2.54</b>	1.69
Comprehensibility	<b>2.53</b>	1.35	<b>2.45</b>	1.84
Likeability	<b>3.57</b>	1.71	<b>3.21</b>	1.50
Teaching Ability	<b>4.26</b>	1.66	<b>3.54</b>	1.79
Teaching Style	<b>5.46</b>	1.84	<b>4.25</b>	1.77

Surprisingly, the ratings for likeability for the Brazilian TA did not vary as much as they did for the Egyptian TA. It can be seen that, comparing the standard deviation for likeability found for the Egyptian TA (2.14 and 1.41) and for the Brazilian TA (1.71 and 1.50) by each group, participants seemed to agree on the likeability factor of the Brazilian TA. However, this finding was not significant.

When it comes to *teaching style*, the means show that both groups rated the speaker more negatively than they did for any other variable. Native undergraduate students assigned more negative ratings to both Egyptian (6.00) and Brazilian TAs (5.46) as compared to nonnative students (5.04 and 4.25). The difference seemed large enough to be statistically significant; hence, an ANOVA type III was conducted for teaching style and for all the other five variables.

As seen in Table 4, the only statistically significant difference was found for the variable teaching style ( $p= 0.00$ ). The results show that the international students favored the teaching style of the speaker over American students.

Table 4.

*ANOVA Type III results for Research Question 1*

Variable	<i>P</i> value (set at $p<.05$ )
Accent	0.50
Speed	0.59
Comprehensibility	0.31
Likability	0.72
Teaching Ability	0.15
Teaching Style	<b>0.00*</b>

## **RQ2: What is the relationship between the ratings for *accent* and *comprehensibility* assigned by each group?**

In order to assess the relationship between the variables *accent* and *comprehensibility*, a Pearson Product-Moment Correlation Coefficient was computed. Overall, there was a positive correlation between the ratings for *accent* and *comprehensibility* assigned by the native students group ( $r = 0.377$ ,  $p = .001$ ) and by the nonnative students group ( $r = 0.509$ ,  $p = .000$ ). The results displayed in Table 5 show a stronger correlation between those two variables for nonnative students (0.509) as compared to the relationship between the *accent* and *comprehensibility* ratings assigned by the native students (0.377). Thus, for international students the *accent* perceived in the speaker's speech had an impact on the perceived *comprehensibility* of the lecture. As for American students, even though they perceived a mild foreign *accent*, it did not seem to affect their perception of the *comprehensibility* of the lecture as much. This finding is in line with previous research on *accent* and *comprehensibility* (Derwing & Munro, 1997), which shows that even when *accent* is perceived as strong, it may not hinder *comprehensibility*.

Table 5.

*Pearson Product-Moment Correlation Coefficients for Research Question 2*

	Native students	Nonnative students
Accent and comprehensibility	$r = 0.377$	$r = 0.509$
<i>P</i> value	.001*	.000*

\* $p < .05$

## **DISCUSSION AND CONCLUSION**

Findings in this study show little discrepancy between the perception of ITAs by native and nonnative undergraduate students. Except for the variable *teaching style*, no statistically significant differences were found for the other five variables (*accent*, *speed*, *comprehensibility*, *likeability*, and *teaching ability*) investigated in this study. Given that this study did not gather qualitative data to explain why the participants assigned the ratings they did, one can only speculate as to possible reasons for the significant difference found for the variable *teaching style*. One possible factor that may have played a role in the negative perception of the speaker's *teaching style* by native undergraduate students was the lack of interactivity of the lecture. The speaker delivered a lecture to the camera; faking interaction with absent students is a difficult task. It may be possible that the international students were a little more lenient regarding the *teaching style* of the speaker because they may have been more focused on trying to comprehend the lecture as English is not their first language.

There is a lack of research focusing on how nonnative undergraduate students react to ITAs regarding language and nonlanguage factors. As mentioned previously, Lima (2011) found that the nationality of the TA does not seem to affect how international students perceive ITAs and that the actual degree of accentedness, not nationality, influence their perception of ITAs. It seemed to also be the case for the native undergraduate students taking part in this study.

It is true that the speaker in this study has a near-native proficiency in English and that the nationalities (Egyptian and Brazilian) chosen for the two guises may not have had as large of an impact on participants as would other nationalities. A possible explanation could be the lack of listener familiarity with the accent of speakers of either nationality or with the cultural background of either country. This lack of familiarity may have led to the absence of preconceptions; consequently, nonlinguistic factors may not have played a significant role in raters' perception of the ITA. Also, this study only gathered quantitative data, which do not allow for a more precise interpretation of why undergraduate students react to ITAs in the way they do.

Another point to be made is that the nonnative students taking part in this study were highly proficient in English as they were enrolled in first-year composition courses. That is to say, compared to a group of participants composed of intensive English program students, for instance, one would expect nonnative students taking English 150 and 250 to be able to provide a more accurate judgment of the comprehensibility of ITAs. Also, this study was conducted at a very diverse university; native and nonnative students alike are often exposed to other languages, cultures, and people. For instance, out of the 86 participants taking part in the study, only 11 had had no contact with ITAs. Fifteen participants had had a class with one ITA, 23 with two ITAs, 15 with three ITAs, 11 with four ITAs, one with 5 ITAs, and 10 participants had had class with more than five ITAs. Figure 1 shows a breakdown of the number of previous ITAs for native and nonnative students. It is possible that being exposed to so many foreign teaching assistants and to international people on and off campus on a regular basis led to a higher tolerance to foreign-accented speech and to different teaching styles.

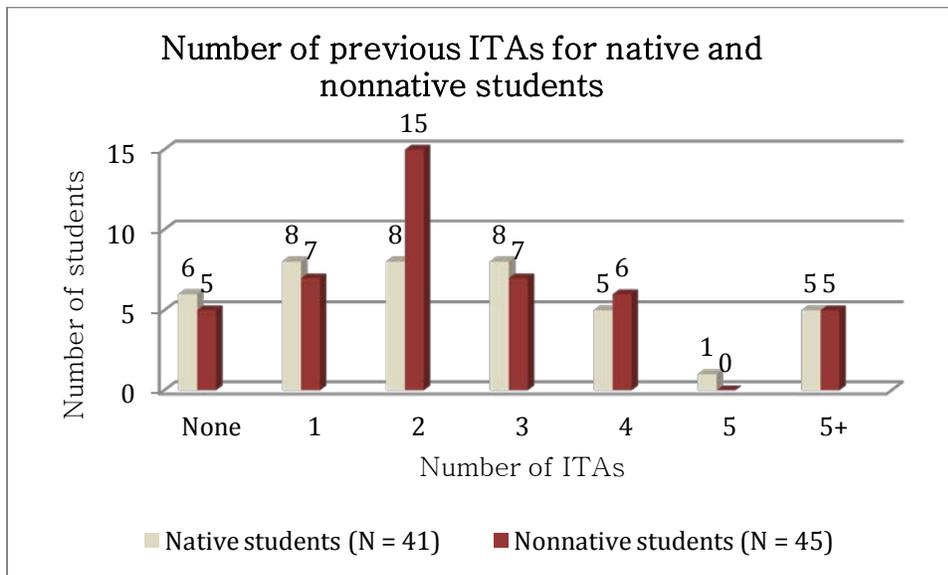


Figure 1. Breakdown of the number of previous ITAs for native and nonnative students

Research available on the perceptions of ITAs by American students has shown that they tend to react negatively to ITAs, even when the ITAs are intelligible and comprehensible; however, many of these studies fail to explain, from the listeners' point of view, the reasons underlying

this negative perception. This study should be replicated with the inclusion of a qualitative component (focus groups) and an assessment component (a listening comprehension test) to gather more concrete evidence as to why native and nonnative undergraduate students react to ITAs in the way they do.

Given that the communication process between ITAs and students is a shared responsibility (Pae, 2001), more recent research needs to be conducted on the perception of ITAs by both native and nonnative undergraduate students. Although “there are numerous instances in which ITAs possess such marginal oral proficiency in English that it undermines their instructional competence” (Kang & Rubin, in press), previous research has revealed that even ITAs that have near-native English proficiency are highly stigmatized. It is then clear that it may be helpful for undergraduate students to be (re)educated so that they be active participants in making the teaching/learning process an easier and more successful task for them as well as for instructors no matter their cultural background, first language or country of origin.

### ABOUT THE AUTHOR

Edna Lima is a fourth-year Ph.D student in the Applied Linguistics and Technology program and a teaching assistant at Iowa State University. She teaches First-Year Composition courses to undergraduate students and ESL courses to undergraduate and graduate students. Edna has taught EFL/ESL for 16 years. Recently, she developed a face-to-face ESL academic writing course to be taught at Lanzhou University, China. Her research interests include CALL, language testing, material design, and pronunciation instruction. Email: [ednaflima23@gmail.com](mailto:ednaflima23@gmail.com)

### REFERENCES

- Bailey, K. (1984). The “foreign TA problem.” In K. Baley, F. Pialorsi, & J. Zukowski/Faust (Eds.), *Foreign teaching assistants in U.S. universities* (pp. 3-15). Washington, D.C.: National Association for Foreign Student Affairs.
- Brown, K. (1992). American college student attitudes toward non-native instructors. *Multilingua*, 11, 249-265.
- Damron, J. (2003). What’s the problem? A new perspective on ITA communication. *The Journal of Graduate Teaching Assistant Development*, 9 (2), 81-86.
- Derwing, T. & Munro, M. (1997). Accent, intelligibility, and comprehensibility: evidence from four L1s. *Studies in Second Language Acquisition*, 20, 1-16.
- Gill, M. (1994). Accent and stereotypes: their effect on perceptions of teachers and lecture comprehension. *Journal of Applied Communication Research*, 22, 348-361.
- Kang, O. & Rubin, D. (in press). Inter-group contact exercises as a tool for mitigating undergraduates’ attitudes toward ITAs. *Journal of Excellence in College Teaching*.
- Kang, O. & Rubin, D. (2009). Reverse linguistic stereotyping: Measuring the effect of listener expectations on speech evaluation. *Journal of Language and Social Psychology*, 28 (4), 441-456.

- Lima, E. F. (2011). Language and nonlanguage factors affecting nonnative undergraduate students' reactions to ITAs. In J. Levis & K. LeVelle (Eds.). *Proceedings of the 2nd Pronunciation in Second Language Learning and Teaching Conference*, Sept. 2010. (pp. 43-55), Ames, IA: Iowa State University.
- Lindemann, S. (2002). Listening with an attitude: A model of native-speaker comprehension of non-native speakers in the United States. *Language in Society*, 31, 419-441.
- Lindemann, S. (2011). Who's "unintelligible"? The perceiver's role. *Issues in Applied Linguistics*, 18 (2), 223-232.
- Munro, M. & Derwing, T. (1995). Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. *Language and Speech*, 38 (3), 289-306.
- Open Doors (2011). Institute of International Education [On-line]: Available: <http://www.iie.org>.
- Orth, J. L. (1982). University undergraduates' evaluational reactions to the speech of international teaching assistants. Unpublished doctoral dissertation, University of Texas.
- Pae, T. (2001). International teaching assistant programs and world Englishes perspectives. *The Journal of Graduate Teaching Assistant Development*, 8 (2), 71-77.
- Plakans, B. (1997). Undergraduates' experiences with and attitudes toward international teaching assistants. *TESOL Quarterly*, 31 (1), 95-119.
- Rubin, D. (1992). Nonlanguage factors affecting undergraduates' judgments of nonnative English-speaking teaching assistants. *Research in Higher Education*, 33 (4), 511-531.
- Rubin, D. & Smith, K. (1990). Effects of accent, ethnicity, and lecture topic on undergraduates' perceptions of nonnative English-speaking teaching assistants. *International Journal of Intercultural Relations*, 14, 337-353.

## Appendix A. Post-video Questionnaire

### Rating the speaker

Now that you have carefully watched and listened to the lecture, please rate the speaker according to the aspects below. Note that the scale ranges from 1 to 9, being 1 positive rating and 9 negative rating.

1. Do you know the speaker from before? Yes or no? If yes, please explain.

2. Accent

No accent	1	2	3	4	5	6	7	8	9	Very strong accent
-----------	---	---	---	---	---	---	---	---	---	--------------------

3. Speed

Appropriate speed	1	2	3	4	5	6	7	8	9	Very fast
-------------------	---	---	---	---	---	---	---	---	---	-----------

4. Comprehensibility

Easy to understand	1	2	3	4	5	6	7	8	9	Very difficult to understand
--------------------	---	---	---	---	---	---	---	---	---	------------------------------

5. Likeability of the speaker

Very likeable	1	2	3	4	5	6	7	8	9	Not likeable
---------------	---	---	---	---	---	---	---	---	---	--------------

6. Teaching ability of the speaker

Very good teacher	1	2	3	4	5	6	7	8	9	Not a good teacher
-------------------	---	---	---	---	---	---	---	---	---	--------------------

7. Teaching style of the speaker

Very engaging	1	2	3	4	5	6	7	8	9	Not engaging
---------------	---	---	---	---	---	---	---	---	---	--------------